Medicine Lies Greed & Death

MEDICINE
THE LIES, THE GREED & THE DEATH

COVID19 THE UN-TOLD STORY

THE EFFECTS OF THE MEDICAL TRADE & PHARMA INDUSTRY ON YOUR HEALTH

Medicine

The Lies, The Greed
&
The Death

The Effects of The Medical Trade,
&
The Pharma Industry
On Your Health

The circle with the Cross
These make for the sign that all thou hast heard is fulfilled in Him

Hospitallers Order of the Good News

The Lord He Is God

Trust in Him who Is the Way

Keep thy faith in Him, that All will be and is right!

And make thy life, thy activities in accord with same!

The Corona Vaccine: Is A Vaccine In Search Of A Disease 2007

"In 1999 the World Health Organization (WHO) listed the veterinary Vaccine adjuvant as having a Carcinogensis rating of 4 which is high.

That was mostly due to the Aluminum Hydroxide.

Too many vets don't know they are ignorant and haven't even ever thought of what they are doing (not 2 % of the populations of vets that do inject Vaccines have a clue as to what is on the MSDS sheet about that Vaccine and could even answer a multiple question test about the contents, safety factors and long term carcinogenic studies done).

Kennel Cough is Not A Vaccinable Disease, realize this and stop the boarding kennels from making the dogs sick.

In people, cows, dogs, cats, horses, birds etc., the respiratory disease complex is also not a Vaccinable disease.

Stress, Diet, Crowding, Ventilation: all play a part in who gets what and how bad they get it.

Anytime you inject anything into a patient you have the potential of killing them.

Corona Vaccine Is A Vaccine In Search Of A Disease.

Don't use the Vaccine.

For 15 years there was one Feline Leukemia Vaccine out there on the market that was used in thousands and thousands of cats and yet was no more effective of inducing immunity against "Feline Leukemia virus" than salt water!

The Vaccine was able to induce an anti-body reaction and this is the only requirement for a Vaccine to get licensing.

In other words, they don't have to work!

Coronavirus Vaccine was never licensed in Europe, Why?

Because they knew it never worked.

In the US we have the FDA, we have conflict research, we have conflict interrelationships, bribes.

We have a system you can not trust.

Vets out of school 10 years or longer have had little to no immunology, and no Vaccinology.

Don't expect them to have a clue on what they are doing when Vaccinating.

In the case of genetic damage over time and cancer production, it never is fully realized and certainly never acknowledged.

Rabies is the only regulated Vaccine.

Rabies is also the vaccine most likely to lead to an Adverse Event.

Veterinarians that are administering Rabies yearly for the sake of

Vaccinating yearly are committing malpractice, and should be prosecuted.

Dr Schultz used to look to the medical profession for guidance on the application of Vaccine protocols but understands that what is going on in human medicine is Obscene.

He states that if the Vaccine protocol doesn't kill the child, it will render them unable to think!" - in "Summary of a Presentation by Dr Ron Schultz", Journal of the American Holistic Veterinary Medical Association, **October - December 2007.**

Book Title : Medicine The Lies, The Greed & The Death, The Effects of The Medical Trade, & The Pharma Industry On Your Health

 Without Him to lead, and the Team to help, this and all other Books, that have been published by the Order, could have not been written, in a speedy way, that they have been. For the task at hand, is enormous, and the days and nights, I have denied myself, this in and for the benefit of others. For the help, of he who is in need of it. And also that man may know that He, indeed, is mindful of each one of you. Seek Him, and Glorify Him, for He Is Thy God and Saviour.

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In Gratitude To

This Book is dedicated to the following:

To the God of Abraham: Who Is The God of Humankind, Our One and Only Lord and Saviour The Christ.

We Dedicate this Book: To all those who have perished at the hands of ignorant men; To all those Wise Men who understood the difference between what is right and what is wrong; To those wise ones, who are ever present and let not fall civilization.

"The Lord He Is God"

Has in the Oneness of the Living God the Christ Our Lord and Saviours, so it is in the oneness of comprehension and understanding in which those points of truth these authors all conclude and agree upon.

And as a result on which they all agreement this book is produced and given as a testimony that: "The Lord He is God", and the Lord walks with us everyday, even if you do not see Him, He is with us, He is with those who ask for Him for the Lord Is God of Humankind.

These are not vain words, but are those words from those who know The Lord, His Ways, His Coming.

And many others whose names do not appear here but they know who they are.

To all physicians, whose convictions regarding the soundness of principles set forth in this work, and whose fearless advocacy of therapy based on these principles have been a constant source of encouragement and inspiration to many, this book is also dedicated.

Acknowledgements

The collective knowledge generated from academic research summarized in various references has been critical in the creation of this published work, which is best viewed as a comprehensive compilation and collection of published information by many authors throughout the ages, as well as personal and clinical experience in the treatment of self and others. This work was possible only by the guidance and Light of Christ who Is God. A special thanks also to those who work with Him and help all of us. May each individual be able, to find this eternal truth, while on earth.

Credits and References

Although all credits and references where given to the best of our knowledge and information contained in the central archives of the Hospitallers Order of the Good News. If there is any errors or mistakes we kindly ask the reader to allow the knowledge of such items in order to rectify same in future editions of the present Book.

Health and Therapeutic Journals and Books

The present work rests upon the foundations of those civilization luminaries, men and woman of exceptional talent, intuition, and detailed observation. Furthermore it was a privilege to us, for them to have the dedication and time to write and publish their clinical findings. There is then a vast amount of Journals and Books devoted to the Health and Therapeutics. Of these printed records those from 1850 to 1950 in this one hundred year period we specially encounter that the majority of what is to be known concerning disease its origin and its treatment and cure, where in fact correctly identified. These records, in their collective, contain timeless observations of which many remain permanent truths. These pearls are hidden from plain sight, only the adept or the initiated can identify them and pick one by one, from the surrounding confusion.

Sources

This book is a Record of the clinical findings of many great Health Practitioners, their findings remain the same throughout the centuries. All share the same conclusion. The Truth is in plain site. Apart from the Archives of the Hospitallers Order of the Good News Library, we are also very grateful to all libraries, who have kept books for the last 200 years, those of which by their keeping allowed the information on those books to survive, and be upon their withdrawn from their keeping available to purchase by the Order, and kept in its Archives and Library. The Hospitallers Order of the Good News, has therefore obtained many of this rare Books, many of which are not available, nor found in libraries, for this we thank The Lord who Is God, for having placed the same in keeping of the Order.

Errors & Omissions

Although the editor, publisher have made every effort to ensure that the information in this book was correct at press time, the editor, publisher do not assume and hereby disclaim any liability to any party, for any loss, damage, or disruption caused by errors or omissions, whether such errors or omissions result from negligence, accident, or any other cause. Much care was taken to avoid any errors or omissions, if any do exist, please let us know, in order to correct same in any future editions.

Dedication

"To the victims, past and present, rich and poor, of Adulterated Food, Patent Medicines, Compulsory Vaccination, Abuse of Surgery, booze-guzzling, industrial diseases, autocracy of dress, false modesty, sex ignorance, and conventional hypocrisy; to those, who never had a real opportunity to learn the truth, being kept in ignorance through the vicarious and popular channels of misinformation. To those, whose nerves, muscles, bones, marrow, and blood have been converted into dollars and cents under, the iron heel of commercial greed, in the name of health, science, and benevolence; to those, whose inner and better selves remain crushed and stifled as a result of monotonous, loveless lives, tyrannical and fanatic parents, and uninspiring surroundings in general; to the patient "sons of toil," who constantly undermine their health and risk their lives, making it possible for us to appreciate art, music, literature, culture, and invention that the genius of human brain has brought forth, yet have for themselves little in return, save fatigue, malnutrition, soul-starvation, anxiety, fear, filth and premature death. To all these victims of our seething, restless, debauching, artificial, and health-wrecking era, impudently labelled "civilized". I affectionately and hopefully dedicate this book." - Dr Simon Louis Katzoff, MD, in "Timely Truths on Human Health", 1921.

"The present work is written for the double purpose of correcting error, and imparting truth. Its purpose is not to attack men, nor systems, but simply to state facts by which their pretensions may be judged." *- Dr. Frederick Hollick, MD in "Neuropathy, or The true principles of the art of healing the sick" 1847.*

To all the Clinicians that have taken their time to record the information here given. And To Him, To Whom Health is Wealth, This Book is Dedicated.

Disclaimer

"The content of this Book is based on research conducted by the Members of the Hospitallers Order of the Good News, unless otherwise noted.

The information is presented for educational purposes only and is not intended to diagnose or prescribe for any so-called "medical" or "psychological" "condition", nor to prevent, treat, mitigate or cure such "conditions".

The information contained herein is not intended to replace a one-on-one relationship with a qualified healthcare professional. This information is not intended as "medical" advice, but rather a sharing of knowledge and information based on research and experience.

All articles given by the CDC, NHS, AMA, in general all Medical Trade Affiliated Organisations, should be by the reader understood as being false, deceitful and misleading.

The Medical Trade suffers from Compulsive Lying Syndrome (CLS).

The Hospitallers Order of the Good News encourages the reader to make your own health Care decisions based on your judgment and research in partnership with a qualified Health Care Professional.

These statements have not been evaluated by the Food and Drug Administration, in the USA.

The information on this Book is not intended to diagnose, treat, cure or prevent any disease."

As sad it may be, that one is forced to place such a disclaimer, just serves to illustrate the state where the present civilization is at the moment.

A civilization founded on lies has no future, a civilization based on false or fake pretences has no future, a civilization that follows political correctness is fake by proxy. To sustain the present civilization is to sustain a lie.

Thus the solution is to establish a new civilization, this if Humankind will ever have a chance to develop on Earth.

In that the End of Times and the Beginning of a New Era, 2020

CONTENTS

Chapter 4

The Creation of The Rockefeller Institute for Medical Research

Chapter 5

Nutrition and Diet Factor

Chapter 6

Chapter 7

Chapter 8

Chapter 9

Chapter 10

Chapter 11

Chapter 12

Chapter 13

Chapter 14

Chapter 15

Chapter 16

Chapter 17

Chapter 18

Chapter 19

Chapter 20

Chapter 21

Chapter 22

Chapter 23

Chapter 24

Chapter 25

Chapter 26

Chapter 27

Chapter 28

Appendix

1**. Deaths in Utah who've Taken at Least One Dose of Covid-19 Vaccine**

2. Package leaflet: Information for the recipient, COVID-19 Vaccine AstraZeneca solution for injection, COVID-19 Vaccine

4. Vaccine Injury, KC's COVID Facts, 29 November 2022.

https://ladycasey.substack.com/p/vaccine-injury

3. Scientific Studies on Vaccine Injuries: You want Science? Here's your f*cking Science, KC's COVID Facts, 22 July 2024.

https://ladycasey.substack.com/p/scientific-studies-on-vaccine-injuries

4. Dr Anthony Fauci, MD, NIAID Director wins Canada Gairdner Global Health Award

Chapter 1

The Cure Found

*"**Research: Specially the sinister industry called "Cancer Research", signifies devising continually "Improved Means to Unimproved Ends.**" - Dr Ulric Williams, MD, "Hospitals and Hooey or Health?", 1941.*

*"**Technical guidance and proclamations is as prolific and useful as the ordinary variety of garden weed.** Practically, **it is entirely foolhardy to argue a point with the recipient of an appropriate degree.** In the final analysis it can be said with complete impunity that **the popular citizen of today is the one who has long ago abandoned common sense** for sententiousness, **the one who has learned to accept formal qualifications in lieu of what a man has to say accordingly**, while I might safely utter sheer drivel on any legal topic of my choice, having both a diploma and a license to counterbalance the gibberish, I could be Phi Beta Kappa material on some unrelated subject and still be dangerously exposed during any foray into such a field." - Evelyn Barkins in "Are these our Doctors", 1952.*

***"There is no cure. Medicines can help manage some of the symptoms, but cannot slow down or stop the disease."** - NIH, U.S. National Library of Medicine, 2019.*

***"The tainted, industry-biased research, continues to cause significant harm to patients, with side effects of medications one of the leading causes of death. If 93% of medical research is of questionable reliability, and not relevant to patients it's going to lead to bad outcomes**."- Dr Aseem Malhotra, MD in "Inews", 4 December 2019.*

***"It is forbidden to treat cancer in any natural way."** - Rui Alexandre Gabirro, Emunctologist*

***"Take heed that no man deceive you."** - Matthew 24:4*

"Within the short space of 5 years, several hundred persons have come forward, and announced having discovered a cure for Pulmonary Tuberculosis.

These announcements were like a pebble thrown into the sea, the waters were disturbed for the nonce, and then that was the last of it.

It is such a common thing to read that, so and so has discovered the cure for Consumption, that the public merely smiles when such announcements are made and published.

This being the fact, how hardly can anybody get the ear of the profession?

John D. Rockefeller has given US$ 7,000,000 for one hospital to be located in Chicago, and a Mr. Phipps US$ 1,500,000 for another in Philadelphia, the purposes of which are to find a cure for Tuberculosis.

Must we wait until this is done?

I trow not *(archaic for "I think not")*.

But can outsiders hope to get a chance of demonstrating what they can do at these hospitals, when the physicians in charge, jealous and zealous for the victory themselves, will not grant an audience?

I wrote to Dr Flick, who is to have charge of the Phipps Hospital, stating what I could do, and begged that he make the test. I never as much as received a reply.

And thus, you see, there is no earthly chance for any outside physician to poke his nose inside of said hospitals until the doctors in charge can announce to the world that "I" have found the "cure."

If a man says he has a cure, and does not wish to violate the code by advertising in the press, the press shuts the door in his face; and if he paid for the Statement under the head of advertisement matter, the profession would dub him a quack, and the public would cry aloud, "humbug, lie, fake!"

As the way is barricaded to prove asserted facts, the only rational way out of the dilemma is to have a public test made in such manner that the profession, and public can be made to feel a deep interest in the problem, and then the claim, if true and successfully proven, will be firmly and deeply rooted in the minds and hearts of an anxious, afflicted world, waiting in hope for the cure, and the physician, himself, be covered with honour, and crowned with glory, ever and ever, Amen.**I have discovered a cure for all uncomplicated curable cases of Consumption.** What do I mean by curable cases? **The whole Medical Fraternity unanimously declares with vehemence and emphasis that no cure has ever been found,** hence no curable cases. Those cases that got well (and they are numbered by the thousands), says the Doctor: **"Were due to natural causes, but not to medical interference."** Now, how are we to reconcile these statements? One contradicts the other.

There are curable cases, but **because physicians can not cure by any particular mode of treatment**, and can not lay down a line to hew *(chop or cut)* by, **they are deaf to the claims of all others.** This is wrong, and savours of bigotry.

There are men dead, and others alive, possessed of secrets which, if made known, would startle the world.

And why not? Because people to whom they appealed for help to prove their claims were incredulous, and turned a deaf ear, and, becoming disheartened and discouraged, allowed the secret to die with them. This fact alone is sufficient to lead me to withhold the secret." - Dr J. Zachary Taylor, MD in "The Medical Brief", 1903.

"Systematic studies suggest that many stories about new medicines tend to overstate benefits, understate risks and costs, and fail to disclose relevant financial ties."
What's more, ***"overly rosy coverage of drugs may also result from the direct and indirect relations between Journalists and Drug Companies",*** *that is,* ***the financial ties between the Reporters and Big Pharma with all its perks.***
"Another conflict of interest for editors relates to advertising, a major source of income for many journals.
Most of the advertising comes from Pharmaceutical Companies." *- Dr Michael Greger, MD,* ***19 September 2019.***

"Everywhere, today, this is the unfortunate vogue.

Again and again, the pages of current magazines and newspapers are high-lighted and filled with therapeutic Tales of Passion: garbled versions and **exaggerated claims of medical miracles in print, that are made to sound more thrilling and fantastic than current science fiction.**

Editorial hallucinations, indeed, guaranteed the boost national circulations at the expense of public morale.

On the radio in the newspapers, all sorts of pseudo discoveries are spread in regular, deceptive detail.

But I read it with my own eyes as if ladies magazines where published under oat.

Every day brings more and more people into Doctors Offices who have been victimized by lay literature into expecting Medical Remedies for illnesses that no living doctor in all the world knows how to produce.

It is apparently beyond the willingness of patients either to believe or understand any more that." - Evelyn Barkins in "Are These Our Doctors", 1952.

The Deceptive Art

"All chronic diseases, and a very large proportion of those which are acute, might be prevented.

Scarcely any subject can be presented to the community in which they take so little interest as that which immediately concerns their health, until they are overtaken with disease.

Scarcely any subject is more unwelcome than this, especially to those who love their appetites more than health.

They create a very large majority of their diseases by ignorance of their own organic laws, inform themselves on every subject but this, treat health as a matter of no account till destroyed, charge their sufferings to Providence, and Drug Themselves to Death.

By Removing Causes

Unless the original cause of any given disease be removed, there is no successful way of obtaining a permanent cure; and by the removal of the original cause, perhaps in more than 9 cases out of 10, Nature will remove the difficulty without the aid of any kind of medicine.

It is the most consummate quackery to prescribe medicine to cure a disease, while the cause that produced it is not abandoned." - Dr L. B. Coles, MD in "Philosophy of Health", 1854.

Chapter 2

Bad Cholesterol: The Myth and The Fraud

"We in the medical profession, totally oblivious of the **vital roles of cholesterol in the body**, have been duped into thinking that it is this substance that causes arterial disease of the heart and the brain.

The Pharmaceutical Industry has capitalized on the slogan of "Bad Cholesterol", and has produced toxic-to-the-body chemicals that minimally lower the level of cholesterol in the body and in the process cause liver damage to thousands of people, some who die as a result of using the medication.

It is surprising that none of the frequently quoted and media-popularized doctors has reflected on the fact that cholesterol levels are measured from blood taken from the veins, yet nowhere in medical literature is there a single case of cholesterol having caused obstruction of the veins.

Venous blood moves far slower than arterial blood and thus would be more inclined to have cholesterol deposits if the assumption of "Bad Cholesterol" were accurate.

This mistake by us in **the Medical Community, and its capitalization by the Pharmaceutical Industry, has caused an ongoing fraud against society.**

In truth, the so-called "bad" cholesterol is actually far more beneficial than is appreciated.

The reason for its rise in the body is because of complications caused by chronic unintentional dehydration and insufficient urine production.

Dehydration produces concentrated, acidic blood that becomes even more dehydrated during its passage through the lungs before reaching the heart - because of evaporation of water in the lungs during breathing.

The membranes of the blood vessels of the heart and main arteries going up to the brain become vulnerable to the shearing pressure produced by the thicker, acidic blood. This shearing force of **Toxic Blood causes abrasions and minute tears in the lining of the arteries that can peel off and cause embolisms of the brain, kidneys and other organs.**

To prevent the damaged blood vessel walls from peeling, low-density (so-called "bad") cholesterol coats and covers up the abrasions and protects the underlying tissue like a waterproof bandage until the tissue heals.

Thus, **the vital, life-saving role of low-density cholesterol proves this substance is of utmost importance in saving the lives of those who do not adequately hydrate their bodies so that their blood can flow easily through the blood vessels without causing damage. Cholesterol is an element from which many of our hormones are made.**

Vitamin D is made by the body from cholesterol in our skin that is exposed to sunlight.

Cholesterol is used in the insulating membranes that cover our nerve systems.

There is no such a thing as bad cholesterol.

If all the primary ingredients are available for its normal functions, the human body does not engage in making things that are bad for its survival. **Until now we did not know water was a vital nutrient that the body needed at all times, and in sufficient quantity.**

Water itself is a better cholesterol-lowering medication than any chemical on the market. It is absolutely safe and is not harmful to the body like the dangerous medications now used." - Dr Fereydoon Batmanghelidj, MD.

> ***"Cholesterol is an essential component of both the peripheral nervous system and central nervous system (CNS) of mammals. The brain is the most cholesterol-rich organ in the body and contains almost 25% of the total amount."*** *- in "HDL and cholesterol handling in the brain", Cardiovascular Research, 1 August 2014.*

Its Not Cholesterol It Is Inflammation

"Dr Beverly Teter studies how different kinds of fat in food affect our health she says scientists wrongly blamed cholesterol for Heart Disease when they saw high levels of it in damaged blood vessels.

Dr Teter believes, **the body put the cholesterol there to fix the problem which was actually caused by something else inflammation.**

> ***"It's the inflammation in the vessels that start the lesion, the body then sends the cholesterol like a scab to cover over and protect the blood system and the vessel wall from further damage.*** *I come from a family that has my mother's side had naturally high cholesterol her cholesterol was between 380 and 420 when I started watching her medical records and she died at 97, so I don't think that cholesterol was too bad for." - Dr Beverly Teter, Lipid Biochemist, University Maryland .*

Research also shows cholesterol can protect against Respiratory and Gastrointestinal problems, helps create Vitamin D.

People with high cholesterol tend to live longer.

It's also especially important in the brain which contains more cholesterol than any other organ and needs cholesterol in order for brain cells to pass messages to each other so when it comes to food choices Dr Teter says don't worry if it raises your cholesterol focus your attention on reducing inflammation." - Lorie Johnson in "Forget Cholesterol, Inflammation's the Real Enemy", CBN, 2013.

> *For more information on Cholesterol please see: Chapter 24, of the Book "Medicine & Poisonous Pharma".*

Chapter 3

The Germ Theory

"But of all the delusive guides in practice, a False Theory of Disease is the most to be dreaded." *- Dr George Johnson, MD, FRCP, Professor of Medicine Kings College in "The Lancet", 12 August 1871.*

"I have no hesitation in stating that disease comes from within, and not from without. *It is not my purpose to deliberate on the germ theory, but I do state, as a proven fact, that although germs are a decided factor in disease,* ***they are not an actual causative factor. Where there is filth there are germs, and wherever morbid accumulations are stored up in the tissues and organs of the body there germs are inevitably to be found."*** *- Dr Eric Frederick William Powell, DO, in "Water Treatments", 1929.*

"We cannot think of the various Theories in Medicine, since the days of John Hunter, without the most painful distrust in all modes of practice." - Dr. Francis Adams, MD translator of Greek Medical works of Hippocrates.

"For centuries, physicians have been breathing the miasmic odour of biologic decay in the dismal swamp of pathology. ***We are more proficient in the detection of biologic decay than we are in the recognition of biologic health. In other words, we are like the institutional psychiatrist who rarely contacts a normal person, and, when he does, he at once attempts to distort normality into abnormality. When we emancipate our minds from the therapeutic aspects of pathology, enlarge our etiological horizon beyond the boundaries of Pasteurian***

pastures populated with microorganisms, which we have blamed for most of mankind's miseries, and become concerned with where good or bad food and animals are grown, then we shall begin to realize that Nature has provided us with an ecologic pattern that is self-sufficient for the survival of all species." *- Dr N. Philip Norman, MD in "American Journal of Orthodontics and Oral Surgery", Vol. 33, Issue 11, Nov. 1947.*

"The absence of germs (bacteria) is a risk factor for disease." *- Dr Sarkis Mazmanian, Professor of Microbiology, California Institute of Technology in "Interconnected", 2018.*

A Germ Alone is Inefficient as a Grain of Wheat is Ungerminative Without Sunlight, Air and Moisture

"In considering the subject of pulmonary tuberculosis, and in endeavouring to support a theory deduced from etiologic facts, which tends to show that the almost universally accepted **germ cause of this disease is quite secondary in its influence, it must be admitted that, while it is evident to my mind the ground taken is not irrelevant, much opposition is to be expected. Most physicians recognize, in certain individuals, a pre-tubercular condition; meaning by this term that in such persons who subsequently develop tuberculosis an abnormal condition exists,** which, while symptomatic or suggestive of consumption, does not give that evidence of the disease which renders the diagnosis absolute; i. e., the demonstration of tubercle bacilli. It can not be denied that the tubercle bacillus plays an important part in the phenomenal expression, if not in the etiology of tuberculosis, **but facts are daily being brought to light which tend to prove that the bacillus alone is as inefficient as a grain of wheat is ungerminative without sunlight, air**

and moisture. When one considers the impunity with which colonies of tubercle bacilli are probably taken into the system of the majority of persons, **we must fall back on the certainty of a pre-existing condition, which, when present, offers favourable influence for the development of the bacilli, on which the latter depend for support, and without which the germ is rendered inert, even though it may exist in the blood.**

Hardly an autopsy is made wherein it is not seen that some time during the life of the subject, tubercles had been present in the lung, or in other tissues of the body, which tubercles had resolved or had been discharged as evidenced by cicatricial repair.

It must be rationally argued that the favourable medium for one kind of bacillus may not be identical with that of another, and hence, various forms of germs may appear in different diseases, not because the germs are specific, except as diagnostic phenomena, but because they develop and multiply in different media.

The question whether pulmonary tuberculosis may be communicated by contagion, or infection, does not rest with the proving that a specific germ is found in this disease, for **we must know that unless a favourable medium is presented, such germ will not develop, and that to obtain this medium there must be a previous condition to be recognized as pathological."** - Dr Frank S. Parsons, MD, read at the 46th Annual Meeting of the American Medical Association, Baltimore, Md, 7-10 May 1895, in "JAMA", 1 June 1895.

"Dr Frank Billings, MD in "Focal Infection", 1916, defines a focus of infection as a circumscribed area of tissue infected with pathogenic organisms, usually located in tissues communicating with a mucous or cutaneous surface, and well supplied with blood vessels and lymph channels.

The focus is not only the point of entrance of the bacteria or their toxins, but also the place where the organisms acquire the peculiar property necessary to infect.

It has been proved that the colon bacillus only becomes pathogenic in the intestinal tract, where there is a break in the continuity of the mucous membrane and in the presence of mixed infection. The number of bacteria, however, in some acute lesions, is sometimes so small as to be difficult to isolate, and suggests that the specific lesion is due in part to the formation of Toxins." - Dr Harry Goldman, MD in "The Rectal Tract as a Source of Focal Infection", New York Medical Journal, 15 June 1921.

> ***"The vital energies of a perfectly healthy person are more than able to nullify the morbid power which these germs possess,*** *even when they find an environment which is suitable to their peculiar requirements, and pabulum which,* ***in circumstances favourable to their growth, they could utilize, and thus be enabled to exert their power for evil. In whatever way we view the subject, it becomes a case of the survival of the strongest, and this important fact should be impressed upon everyone."*** *- Dr Robert Bell, MD in "How to fight Influenza and Allied Diseases", 1899.*

The Pasteurian Theory

"It is true that Pasteur possessed neither Medical qualifications nor training, and that his Theory has never been scientifically substantiated in any particular instance; nevertheless, **so short is the life of most Medical Theories** which prove fashionable for a time and are forgotten, that it must be considered a great achievement that his teachings have dominated medical thought ever since, **in spite of the weight of evidence that the patient investigations of multitudes of bacteriologists, much against their better feelings we may be sure, have felt obliged to record in its disfavour." - in "Hearings Before the Subcommittee, Public Health, Hospitals and Charities, Committee on the District of Columbia, House of Representatives, January 1938.**

The Common Cold and Influenza

"Infections, can be separated into infections from within, and infections from without.

In man, particularly, the former arise through the activity of the mutation forms of the bacillus coli communis, and the latter in part from the sub-form into which some of these micro-organisms have developed, and in part from bacteria which began their parasitic career in the intestinal tract of animals. **Nearly all the manifestations of disease come in the first place under the heading of infections from within; but they arise indirectly rather than directly as a result of bacterial action.**

The Common Cold, for example, is the result of the precipitation in the vessels of the nasal mucous membrane and submucosa, of protein particles, hydrated by the activity of Friedlainder's bacillus residing in the large intestine, which it does not leave.

The common cold is not the direct result of bacterial action, and therefore, strictly speaking, it is not an "infection" in the sense in which this word is generally used.

The same argument can be applied to most of the manifestations of disease affecting the respiratory system.

Therefore, of the 3 systems in which the aetiological agents of the common cold and influenza might be expected to be found, the intestinal tract would be the first, and the respiratory the last, wherein to look, and yet the latter is the only one in which an organised search has been instituted. A few clinicians have definitely associated the common cold with influenza, and the more attention they have paid, particularly to the latter, the more all-embracing they have found this manifestation to be.

Not so the bacteriologists, who, forced to neglect clinical medicine, through work in the laboratory being divorced from that at the bedside, sought in the respiratory tract the micro-organisms they expected to be the causative agents of the common cold and influenza.

They were largely influenced in their search by the micro-organisms which happened to be fashionable at the time, and at no period were they more sanguine than after the birth of the ultra-microscopic virus era.

Once this assumption had been made, no alternative remained but to discover 2 ultra-microscopic viruses, and although 1 isolated has already been discarded.

The number of micro-organisms isolated from the nose and held to be, at the time, the cause of the common cold, is legion, and yet the position of not 1 of them is secure today." - Dr J. E. R. McDonagh, FRCS, in "The Common Cold and Influenza", 1936.

Causes of Cholera

"It seems exceedingly desirable that the public should become acquainted with the nature and sanitary treatment of this disease.

When it is seen that cleanliness, and municipal and personal hygiene can speedily limit and stamp out the epidemic, it loses its old terrors, and all will lend a cheerful and willing assistance to do whatever is necessary for the public good. Cholera belongs to a class of diseases sometimes significantly called "filth diseases."

They are extremely destructive to human life.

As the name "filth disease" indicates, they are the product of filthy, overcrowded, and unsanitary conditions of life, and are perpetuated, fostered and extended by such conditions.

> ***Then too it must always be remembered that diseases of the infectious type, the class ever caused, it is claimed, by germs, must take their origin either from pre-existing cases or flagrant violations of sanitary law.***

This follows as a natural corollary of the fact that human life could not exist if man were so out of harmony with his surroundings that infectious plagues could spring up

spontaneously in every day life without violence having been done to the ordinary laws of health.

There is, at this moment, in the air you are breathing, an infinite multitude of living germs.

These are awaiting a proper soil in which to develop.

When they alight on it, they will increase and multiply in the prodigious manner which I have related.

They are not only in the air we breathe, but in the food we eat, and in the water, milk, or, in fact, most liquids which we drink. Fortunately the disease germs are not ordinarily thus present around us. **The great mass of these little every day neighbours of ours is composed of the bacteria which produce decomposition.**

These can find no food or affinity in healthy, living tissues, but as soon as Death has seized any living thing, these, his acolytes, begin their function.

All the putrefactive changes which occur in the dead are due to their action. When Dr Koch arrived in Egypt, he acted as the director of a commission appointed by the German government to investigate the cause of cholera, and at once set to work, with his assistants, to make post-mortem examinations of bodies of deceased cholera patients.

Notwithstanding the most careful examinations, neither in the blood nor tissues of the body, could bacteria be found that would account for the disease. The discharges and intestinal contents were next examined.

"Certain bacteria which his experienced eye", to quote the words of one of his enthusiastic admirers, "at once recognized as a species characterized by a form and behaviour differing from those of any known to him, always re-appeared in the contents of the bowels and the discharges of cholera patients." On "investigating the mortality records and the reports sent to him by physicians that had enjoyed a great experience in cholera epidemics, Dr Koch, MD found," quoting Prof. Engel; **"that not a single individual in the possession of a healthy stomach had ever been attacked by cholera. The moral is: Beware of intemperance and unhealthy food."** - Dr W. O. Stillman, AM, MD, in "Cholera, its cause, history, prevention and cure", 1885.

False Premises Will Never Lead to a Truth

"In order to understand fully the reasons why symptoms of impaired health develop, whether they be of an acute or a chronic nature, it is necessary to have a foundation upon which to build a substantial structure, a simple law or truth standing out from the field of purely speculative assumption.

Authorities in the field of medicine following the lead of Sir James Mackenzie have set about to investigate and explore the field for such a truth.

A false premise will never lead to a truth by any process of reasoning. Dr Mackenzie wrote very clearly of the shortcomings of his profession in "Oxford Medicine", Chapter II, Vol. I, 1918:

> *"Moreover, the germ theory of disease has thrown such a flood of light upon many disease that the impression has been made, almost universally, that it is only by laboratory methods that progress in medicine towards a science can be made. As generation after generation is brought up under the guidance of the laboratory worker, the belief becomes established that on these lines alone can medical research be advanced, and other lines of investigation are neglected. Underlying all this seemingly reasonable belief,* ***there lies a fallacy. Laboratory workers now get a limited view of disease,*** *and we must recognize that their opportunities permit them to see but a very small part of the field of medicine.*
>
> *The effect of disease is rarely limited to one organ; in many cases the change in one organ is secondary to conditions elsewhere. The specialist whose horizon is restricted to his particular subject is incapable of recognizing the remote causes and effects. Suppose a physician directs these researches, the very fact that he has to call in the help of the others implies that he is not able to detect the phenomena produced by disease, and if he is*

not capable of doing this, how can he be qualified to assess their value? As a matter of fact, ***the profession have not yet recognized the importance of this feature, the assessing of the value of symptoms, while in the practice of medicine they have not employed the appropriate methods by which the knowledge can be acquired.*** *The onset of disease in the body is invariably insidious and causes little disturbance to the economy and no visible sign of its presence. The cause of the disease may be a matter of days or of many years, but the general characteristics are the same. Doctors detect the beginning of disease by the presence of symptoms. Hitherto in clinical medicine, the chief progress has been made in the minute study of disease after it has produced a physical sign or after the patient has died: that is to say after the tissues have been damaged. We see, therefore, that disease, when it has reached an advanced stage or after it has killed the patient has been thoroughly studied." - Dr George S. Weger, MD, Weger Health School, California, in "The Genesis and Control of Disease", 1931.*

The False but Convenient "Truths" of the Medical Trade

"The medical trade science, is based on false but convenient "truths", and one among the many of such false but convenient "truths", is the Germ Theory of disease.

The Germ Theory of disease states that:

"For every disease there is a germ."

It's well known that germs where the very first forms of life, and are already naturally present in the environment and in the body.

Germs are in their majority beneficial, being just a small amount of germs pathologic, even so the pathologic type need to be in great amount in order to cause any significant harm, without germ life forms on earth cannot exist, in fact we have more germs in our bodies than cells.

Thus, it is only when toxicity from metabolic waste, is allowed to accumulate in the body in great amounts, that's when the germs of the pathologic kind, start to multiply in excess (germs of the pathologic type thrive in human waste), and the waste from their metabolism, aids in the acceleration, creation and establishment of the symptoms of what we call disease.

If the body is kept clean, both internally and externally the pathologic type of germs cannot multiply in excess, and their metabolic waste can be easily removed from the system by the Emunctories.

The more waste from metabolism of the wrong kind that our bodies produce, the greater is the fertile field for germs of the pathologic kind to multiply." - Rui Alexandre Gabirro, Emunctologist

> ***"We are continually in the presence of disease germs; almost daily we are exposed to contagious or infectious diseases, yet the body in health is able to protect itself and ward off the casual agents of disease.*** *The first general biological law or general attribute of living matter is that of self preservation.* ***The first biological acts of living protoplasm are, therefore, nutritional. For perfect health there must be appropriation, assimilation and elimination."*** *- Dr. Charles Clyde Sutter, MD in "Natural Defenses of the Body Against Disease", New York Medical Journal, 21 February 1914.*

Germ Theory

"In the late nineteenth century, Louis Pasteur's "germ theory" became the medical paradigm, the controlling medical idea, for the Western world. I**n its simplest form, the germ theory proposes that the body is sterile and that germs from the air cause disease.**

The medical community started to look for the right pill to kill off the germ.

This concept became ingrained into medicine and medical research. Most research goes to looking for the right pill for a specific disease." - Nancy Appleton, Ph.D., in "Theory of Germs Was Pasteur wrong?"

> ***"Germs seek their natural habitat - diseased tissue - rather than being the cause of diseased tissue."*** *- Bieler, p 40*

"As a cause of disease, bacteria do not "invade" the body, for they are already present in the digestive tract.

As needed bacteria are brought into the circulatory system to aid in the process of purging the physiology of accumulated wastes.

When the body creates a highly localised toxic condition in the system, as occurs during inflammation, the body absorbs bacteria from the intestines and, or other body cavities and transports them to where the accumulated poisons have been concentrated.

During the inflammatory process, pus is formed from the aggregate of dead cells and from the healing, white blood cell activity that takes place; and bacteria proliferate to feast on and process this material which makes it easier for the body to expel.

In this way, bacteria symbiotically assist in breaking down these toxic materials for elimination.

In the process, however, the excreta of bacteria generated therein is toxic.

The bacteria's own excretion reflects the morbidity of the toxins they consume, in that these wastes are also highly virulent. If not eliminated from the body, these

accumulate to such an extent that the body initiates a cleansing healing crisis. **Bacteria do not cause the death of the organic matter** on which they act, however, as **they are a part of the result of disease, not its cause.**

Humans are always "infected" with bacteria and "viruses" as they are present in the body at all times—therefore, one cannot say they "invade" the host. Diseases are not infections; rather, they are body purification processes and are not created by bacteria or "viruses".

Neither "viruses" nor bacteria can cause the illness crisis.

The real culprit is the biologically incorrect lifestyle of the sufferer.

When there are no further toxic accumulations, and the need for the body to generate the disease process will cease to exist.

Drugs Are Counterproductive.

To kill off bacteria and viruses to enable the body a chance to recover, Doctors of Medicine believe that they must administer drugs.

They also believe that medicine assists in healing.

Drugs indeed kill off bacteria, but they are just as deadly to all forms of metabolic life including human cells." - Arthur M. Baker in "Bacteria, Germs and Viruses Do Not Cause Disease" 1994.

> *"Much prominence has, of late years, been rightly given to what is known as the "germ-theory" of disease.* ***Anyone who has bad much practical experience in morbid anatomy must have been struck with the almost constant presence of caseous material in some part of the body in cases of tuberculosis.***
> *Many authors have called attention to this fact, but the exact relationship between the two sets of phenomena does not appear to have been definitely settled. Are they related to each other as cause and effect, or are they merely conjoint effects of some ulterior cause or causes, and so independent of any true causal relationship?*

Again, are the caseous glands originally dependent on the same specific germ that subsequently attacked other parts of the organism? If so, is it a case of auto-infection due to subsequent dissemination of the germ, which may have been dormant in the gland until some accidental circumstance set it free to circulate in the organism and infect distant parts?" - Dr Wayland C. Chaffey, MD, in ***"Lymph-Stasis, or, Retardation of Lymph as an Element in the Causation of Disease",*** *1889.*

The Role of Bacteria

Their Useful Symbiotic Role in the Body

"Bacteria are our symbiotic partners in life and are completely normal to the body.

They work symbiotically with the host organism by assisting in the breakdown and removal of toxic materials and in creating nutrients that are vital to our welfare.

Lactobacillus acidophilus, Lactobacillus bifidus and coli bacteria are normally present in the human digestive tract and are sometimes called **"friendly, beneficial or symbiotic intestinal flora." They are necessary within the body for the proper absorption and utilisation of food particles; for aiding in cellular nourishment; for stimulating peristalsis; for detoxifying and creating soft, smooth stools; and for keeping down pathogenic germs.**

Antibiotics destroy these forms of useful bacteria.

Bacteria and micro-organisms also form a vital part in the world's food chain. When organic matter within plants and animals decomposes throughout nature, bacteria and moulds of the Monera family disorganise the highly complex organic molecules into simple inorganic wastes: whose elements are excreted back into the soil to be taken up once again as food by plants, and reorganised via the process of photosynthesis into widely diverse forms of vegetable matter, including food for humans, such as fruits, nuts, and seeds.

As intestinal flora, for instance, bacteria are a much needed symbiotic partner in life, responsible for synthesising vitamin B 12 and vitamin K within our body." - Arthur M. Baker, in "Bacteria, Germs and Viruses Do Not Cause Disease", 1994.

> *"Antibiotic-Resistant Bacteria kill 23,000 people every year in the United States, and the United Nations estimates that by 2050 more people will die from antibiotic-resistant infections than currently die from cancer. "**We are definitely in a post-antibiotic era it's getting worse and worse. It's very difficult to kill bacteria and not kill you".** - Professor Vincent A. Fischetti, PhD." - in "The Virus That Kills Drug-Resistant Superbugs", 7 December 2017.*

Gut Bacteria By-Product Protects Against Salmonella

"Researchers at the Stanford University School of Medicine have identified a molecule that serves as natural protection against one of the most common intestinal pathogens. Propionate, **a by-product of metabolism by a group of bacteria** called the Bacteroides, **inhibits the growth of Salmonella in the intestinal tract of mice.**" - Kimber Price, "Stanford School of Medicine", 26 July 2018.

Salmonellosis: The Guilt is From Your Intestinal Flora

When propionate concentrations are high in the intestine, 'Salmonella' can not carry out the cellular functions necessary for its growth.

The findings could also influence treatment strategies.

Treating Salmonella infections sometimes require the use of **antibiotics, which may make Salmonella-induced illness or food poisoning worse since they also kill off the "good" bacteria that keep the intestine healthy.**

"The Intestinal Microbiota provides colonization resistance against pathogens, limiting pathogen expansion and transmission.

These microbiota-mediated mechanisms were previously identified by observing loss of colonization resistance after **antibiotic treatment or dietary changes, which severely disrupt microbiota communities.**

We identify a microbiota-mediated mechanism of colonization resistance against Salmonella enterica serovar Typhimurium (S. Typhimurium) by comparing high-complexity commensal communities with different levels of colonization resistance.

Using inbred mouse strains with different infection dynamics and S. Typhimurium intestinal burdens, we demonstrate that Bacteroides species mediate colonization resistance against S. Typhimurium by producing the short-chain fatty acid propionate.

Propionate directly inhibits pathogen growth in vitro by disrupting intracellular pH homeostasis, and chemically increasing intestinal propionate levels protects mice from S. Typhimurium.

In addition, administering susceptible mice Bacteroides, but not a propionate production mutant, confers resistance to S. Typhimurium.

This work provides mechanistic understanding into the role of individualized microbial communities in host to host variability of pathogen transmission." - Amanda Jacobson in "Cell Host and Microbe", 26 July 2018.

The Primary Cause of Disease is not Germs

"As a practising physician for over 50 years, I have reached 3 basic conclusions as to the Cause & Cure of Disease.

1. The Primary Cause of Disease is not germs.
Rather that disease is caused by a Toxemia which results, in cellular impairment and breakdown, thus paying the way for the multiplication and onslaught of germs.

2. In almost all cases the use of Drugs in treating patients is Harmful. Drugs often cause serious side effects, and sometimes even create new Diseases. The dubious benefits they afford the patient are at best temporary. Yet the number of drugs on the market increases geometrically every year as each chemical firm develops its own variation of the compounds.

3. Disease can be cured through the proper use of correct Foods.

This statement may sound deceptively simple, but I have arrived at it only after intensive study of a highly complex subject: colloid and endocrine chemistry.
I have sought to prescribe to my patients illnesses antidotes which Nature has placed at their disposal." - Dr Henry G. Bieler, MD in **"Food is your best medicine", 1965.**

Micro-Organisms of Disease are Universal, But Disease is not Universal

"I would impress (upon the readers) the fact that the part played by the microbe in the production of disease has been grossly, exaggerated by the laboratory men and their uncritical medical disciples.

The micro-organisms of disease are universal, but disease is not universal.

Our bodies were made to resist disease germs, and the healthy body usually resists them successfully.

Disease, therefore, is caused in reality, not so much by certain microorganisms identified by the bacteriologist with microscope and culture tube, as by the weakening of our tissues and organs consequent upon our faulty methods of living.

Unfortunately **the laboratory has swallowed up the medical man, the art and science of medicine and medical experience, logic and common sense.**

That eminent scientific researcher and physician, Sir James Mackenzie, FRS, FRCP, wrote despairingly in "Diseases of the Heart", 1925:

> *"To obtain a knowledge of disease, the circumstances which favour or induce its onset, the earliest symptoms of its presence, the modification of these symptoms as it progresses, with all the variations which occur till its termination in death or recovery, must be studied.* ***It is manifestly impossible to combat disease effectively without this kind of knowledge,*** *and it can be obtained only by those who have the opportunity of watching individual patients through the course of an illness.* ***It is manifest that this is beyond the range of the so-called "scientific departments".***

Notwithstanding the widespread interest taken in medical research and the enormous amount of labour spent upon it, the most obvious of all problems, whose solution is necessary for the rational practice of medicine, remains practically untouched.

Notwithstanding the great number of people engaged in research and the energy with which it is pursued, the phenomena of disease are still so little known that the need for a better concept to guide research becomes urgent.

For the intelligent practice of medicine and the understanding of disease the simplification of medicine is necessary. **So long as medicine requires an increasing number of specialists to interpret the phenomena of disease it may be taken for granted that the subject, though becoming ever more and more complex, is not necessarily making progress.**

The detection of a microbe which provokes the ill-health throws no light upon the conditions which made the man ill and which may lead to death.

If there is any department of medicine whose progress is hampered more than another by the lack of a proper conception of vital activity, that department is therapeutics (remedial treatment).

The taunt that has been so long levelled against the doctor is as true today as when it was first uttered, that he gives drugs whose actions he does not understand for conditions of which he is ignorant.

There is every prospect of the state implied in this taunt continuing so long as the attitude towards medicine which is dominant today persists. Sir James Mackenzie, FRS, FRCP in "The Future of Medicine", 1919, bitterly complained:

> *"For the study of disease after the patient has died, we find institutions magnificently equipped, presided over by men of great experience and training ; for patients suffering from the advanced stages of disease, we have great hospitals, with staffs of skilled physicians, surgeons and specialists. While men undergo a long and special training to enable them to recognize the*

appearance of disease after the patient has died, and other men undergo equally careful training to enable them to recognize disease after it has damaged the tissues, ***few or no attempts are made to train men for the detection of the disease when there is a hope of cure."*** *- J. Ellis Barker in "Chronic Constipation", 1927.*

Scientific Bluff

"Dr M. L. Leverson, MD an American physician, discovered some of Professor Béchamp's writings in New York and immediately realized that they anticipated Pasteur in certain important points.

He went to France, met Professor Béchamp, and heard the story of the plagiarism from him, after which he did a great deal to bring Béchamp's work to public attention.

He was one of the first in the United States to recognize Béchamp's priority in regard to most of the discoveries generally credited to Pasteur, and in a lecture entitled Pasteur, the Plagiarist, delivered at Claridges Hotel, London, on 25 May 1911, outlined briefly Béchamp's claim to priority, and added the charge that Pasteur had deliberately faked an important paper!

He said in part:

"Pasteur's plagiarisms of the discoveries of Béchamp, and of Béchamp's collaborators, run through the whole of Pasteur's life and work, except as to crystallography, which may or may not have been his own. I have not investigated that part of his career, nor do I feel any interest in it. ***The tracings of some of these plagiarisms, though they can be clearly demonstrated****, are yet somewhat intricate, too much so for this paper; but* ***there is one involving the claim by Pasteur to have discovered the cause of one of the diseased conditions which assail the silkworm, which can be verified by anyone able to read the French language.*** *It is the following..."*

After then describing some of the material we have covered in Chapter 5, he continues:

> *"But I have a still graver and more startling charge to bring against Pasteur as a supposed man of science.* ***Finding how readily the "men of science" of his day accepted his fairy tales****, in a voluminous memoir of no value, published in the "Annales de Chimie et de Physique", 3rd series, Vol. LVIII, is to be found on page 381 a section entitled: "Production of Yeast in a Medium Formed of Sugar, of a Salt of Ammonia and of Phosphates".*

The real, though not confessed, object of the paper was to cause it to be believed that he, and not Béchamp, was the first to produce a ferment in a fermentative medium without albuminoid matter.

However, **the alleged experiment described in the memoir was a fake; purely and simply a fake.**

Yeast cannot be produced under the conditions of that section! **If those of my hearers or any other physician having some knowledge of physiological chemistry will take the pains to read this section of Pasteur's memoir with attention, he will see for himself that yeast cannot be so produced,** and he can prove it by reproducing the experiment as described.

Now mark what, supposing I am right in this, this memoir does prove. **It proves that Pasteur was so ignorant of physiological chemistry that he believed yeast could be so produced, or else he was so confident of the ignorant confidence of the medical profession in himself, that he believed he could bluff it through.** In this last belief, he was correct for a time. I can only hope that the exposure I am making **of Pasteur's ignorance and dishonesty will lead to a serious overhauling of all his work.** It was Béchamp who discovered and expounded the theory of antisepsis which Pasteur permitted to be ascribed to himself. In his Studies on Fermentation, Pasteur published a letter from Lord Lister, then Mr Surgeon Lister, in which he claims that he learned the principles of antisepsis from Pasteur.

I do not doubt this statement of the noble Lord, for besides accepting Mr. Lister as a gentleman of veracity, I will give you an additional reason for accepting that statement." - R. B. Pearson, in "Pasteur, Plagiarist, Impostor! The Germ Theory Exploded!"

> ***"Western medicine", in contrast, is not usually required to justify its status as a "scientific" procedure – it is implicitly thought of as such, even if, as explored in James Bradley's essay on Hydropathy and orthodoxy, the basis on which the claim to scientificity is established may not be as solidly "objective" and "scientific" as it appears to western imagination. We may well have come to see pure, perfect and pristinely delineated medical "systems" and categories as inherently "ideological constructs" that need to be used with caution.*** *Their legacy, however, still lingers on even as we turn attention to medical "encounters" or "exchanges" or "interactions" between – well, one medical "system" or category and another. The language of pluralism still tends to reflect the very same static and discrete meanings and perceptions that many writers, aim to challenge and expose as products of restricted and restrictive imaginations and ideologies." - Waltraud Ernst, in "Plural Medicine, Tradition and Modernity, 1800-2000".*

Disease Germs

"Disease Germs": are mostly man's friend.
Their main mission in life is destruction of filth.
They are produced by and bred in disease.
If you don't want their presence or help, Keep your bodies from Gathering filth, and live on live foods.
Most Acute Illnesses are Nature's (God's) method of ridding our systems of waste, which would otherwise cause disease.
They are "house-cleanings", "healing crises", preventing collection of dangerous dirt.

They are Nature's protecting reactions against existing disease.

But for Acute Illnesses, the human race would have ceased to exist long ages ago.

Suppression of such protective reactions, however seemingly adroit, is usually the height of unwisdom.

A big proportion of chronic disease is a direct result of suppression of Acute Illnesses.

Yet the one really impressive achievement of modern Medical Trade "Science", is the increasingly effective suppression of acute illnesses. Believing these Illnesses caused by the "germs", Medicine kills millions of germs, and almost as many men.

Abolishing symptoms which are Nature's warnings, or (worse still) evidences of her efforts to heal, without adequate measures to deal with their cause, is merely preventing Nature from achieving her beneficent purpose of protecting us from the consequences of error or sin.

To employ to this end (as the Medical Trade does), means almost invariably destructive and disease, producing in themselves, is surely to plumb the last depths of human ignorance." - Dr Ulric Williams, M.B., Ch.B. in "Hospitals and Hooey or Health?" 1941.

The Germ Disease Theory

"The body has the innate power of removing disease.

What, is disease?

Disease is a crisis in which the status quo is changed into discomfort.

The cause of the change usually is the gradual accumulation of the toxin of metabolism.

The past Medical Trade Hypotheses have given many causes of disease; they have all been tried and found wanting. The present "Germs Cause Disease" is passing to oblivion. The therapeutics of today is a conglomeration of all the leftover misfit therapies of all the past half-baked hypotheses of ancient and modern times.

The brains of every generation have been sorely taxed to add its cure, therapeutics, to the fast changing kaleidoscopic aetiology.

This age has become so discouraged with fitting cures that it has turned to surgery, and resolved to treat disease as a Hydra, with 400 more or less heads, and as fast as a head shows up, chop it off and cauterize the wound with indignation, a late discovery, guaranteed to prevent a return.

Pasteur introduced germs as the cause of disease.

The profession was ready for a change, and the germ theory was taken up and developed into a universal cause and cure-all.

Today the profession would like the germ theory to be supplanted by an aetiological hypothesis that would prove more satisfactory in curing disease, but commercialism, invested capital, private and public interests, are too great.

Vis Medicatrix Naturae

Truth must hibernate for a few generations more.

This was a laudable ambition, but such an hypothesis will not be forthcoming so long as the profession insists on a rider carrying the old pets of the profession: namely, that disease is an entity, and a cure must be an entity that will kill the disease-entity without injuring the patient. **There is no such thing as cure except "Vis Medicatrix Naturae".**

People Generally are Awed by Anything they do not Understand

Another commercialized requirement will be that the hypothesis must be sufficiently enigmatical to keep laymen from knowing anything about the supposed cause and cure.

People generally are awed by anything they do not understand, familiarity breeds contempt.

If a layman is told how to get well and how to stay well, the knowledge is too simple to be true; he must have a long

drawn-out examination with plenty of mystery, "Mumbo Jumbo", then a cure he cannot comprehend, and this is supposed to be an enlightened age.

The germ theory of disease was accepted by the profession with acclamation; and, inasmuch as the theory became the goat on which to place the burden of all of man's shortcomings, took the blame for all the diseases man brought upon himself by his licentious manner of living, the populace joined the profession in its acclamations; and, inasmuch as the "vox populi is the vox Dei" (the voice of the people (is) the voice of God), the voice of the people is authoritative.

Man, by the aid of science and "vox Dei", has assumed carte blanche to do as he likes with the people.

Hence, **for several generations average human beings have lived recklessly, indulging appetites and passions without restraint, being taught by scientific doctors that germs are the sole cause of disease.**

> ***"Eat, drink, and be merry, have a good time, be careful not to eat or drink germs."***

When people get sick from abuse of natural privileges, and the Doctors of Medicine who have encouraged them in breaking health laws cannot cure them, a few consult me.

I correct their physical and mental habits, and nature cares them; then I teach them how to live to stay well:

No drugs,

No serums,

No undertakers are needed.

The profession clings to the old superstition, however, that **disease can be cured.**

So long as this belief is practiced and taught, treating disease will be jungled science as it always has been." - Dr John Henry Tilden, MD (1851–1940).

Every Grain of Sand is a Metropolis for Bacteria

A single sand grain harbours up to 100,000 microorganisms from thousands of species.

"Between 10,000 and 100,000 microorganisms live on each single grain of sand, as revealed in a study by researchers from the Max Planck Institute for Marine Microbiology in Bremen. However, the diversity of the bacteria, and not just their numbers, is impressive. "We found thousands of different species of bacteria on each individual grain of sand", says Probandt." - Max-Planck-Gesellschaft, 5 December 2017.

Goodbye to Germ Theory

"Goodbye to germ theory!
Can we really maintain the childish illusion that there are a handful of identified "bad germs" out there trying to kill us?" - *Dr Kelly Brogan MD, 3 January 2018.*

"We didn't even understand the existence of microbes, *not that long ago right we only recently were able to flip a telescope around backwards and start looking at very very small things and we were shocked to find that our world was inhabited by microbes living out their own lives irrespective of us, and that led us to a whole new theory of disease, that these microbes when they're pathogenic get into our bodies, we catch them, they get on us, and they lead to illness." - Daniel Vitalis, in "Remedy; The Quest For Lost Medicine", Docuseries 2018.*

"The interesting discovery of this century is that most of us, is not us." - *David Wolfe, in "Remedy; The Quest For Lost Medicine", Docuseries 2018.*

"If you're new to the word microbiome a lot of us are, this is a fascinating and relatively new understanding, that is all the rage in the world of human health these days. The microbiome in essence is the colony of microorganisms that live on the inside, and outside of our bodies, there are literally trillions of these bacteria, fungi, protozoa and others, living right now within your system and they have been co-inhabiting the bodies of human beings for millions of years. Now it may seem counterintuitive, but our health isn't only about, "us as individuals", ***our very lives depend upon the well-being of these vast colonies of microorganisms in our immune system. It's almost impossible to figure out where your immune system ends, and when your microbiome begins. Lifting the lid on a fascinating and paradigm-shifting realm of human health.*** *I'm talking about the human microbiome and for many of us this is a completely new concept. Did you know that there are trillions of tiny organisms that work inside your body."- Nick Polizzi, in "Remedy; The Quest For Lost Medicine", Docuseries, 2018.*

"We know that the microbiome is a part of us, it's not an addition, it's not in addition to us those bacteria in our gut, are essential for our function. Now we know that they program your immune system, now we know that you're the cells and near of your immune system that line, your gut need those bacteria to function properly and how do they know that, well it's pretty easy to do a study with animals where you deprive them of all bacteria, you can either grow them that way, or you clean out their bacteria with antibiotics and those animals will not develop a proper immune system, so ***the Microbiome is really critical for Digestion, but it's also critical for Immune Function. There's a number of different ways that the microbiome can affect your psyche, one is that some bacteria can actually make neurotransmitters, that's a fairly new development so***

they can either make the transmitter directly or they can make substances that influence cells in your gut, influence neurons in your gut and put a little pressure on them to make Neurotransmitters.
There's a huge nerve in the body called the Vagus Nerve, that goes from the Brain all the way down to the Gut, and we used to think that the main role of the Vagus Nerve is to basically calm things down, Parasympathetic Nervous System there's a lot of new data now that says it's actually a two-way transmission. *Then if you influence the Vagus Nerve on the level of the gut their signals that go back into the brain and that could be a good thing or a bad thing if you've got a lot of bacteria that are producing say Gamma-Aminobutyric Acid (GABA) or stimulating cells to make GABA, and I want to be clear we don't exactly know which is which right now, we don't know other bacteria actually making this or cells in the gut making the GABA, but we know that bacteria influence GABA production, which is that GABA is a calming Neurotransmitter drugs like valium, work on the GABA receptor, so maybe we're making our own valium in our gut, and maybe the GABA that we're making in our Gut and then tracks up the Vagus Nerve or other nerves and goes into the Brain and calms us down.*
It's pretty clear based on some research done on probiotics which are healthy bacteria, that there are certain healthy bacteria that can influence mood, that can improve depression, that can improve anxiety.
I think that's really quite profound." *- Dr. Robert Rowntree, MD in "Remedy; The Quest For Lost Medicine", Docuseries 2018.*

Inoculations

"After discussing the practice of medicine in the past and saying that since Jenner's and Pasteur's days the modern effort is to make the sick well, he says of inoculations:

> *"When a drug is administered by the mouth, as was beautifully pointed out by Dr J. Garth Wilkinson, in proceeding along the alimentary canal it encounters along its whole line a series of chemical laboratories, wherein it is analysed, synthesized, and deleterious matter prepared for excretion, and finally excreted, or it may be ejected from the stomach, or overcome by an antidote.* ***But when nature's coat of mail, the skin, is violated, and the drug inserted beneath the skin, nature's line of defence is outflanked, and rarely can anything be done to hinder or prevent the action of the drug, no matter how injurious – or even fatal – it may be. All the physicians of the world are incompetent either to foresee its action or to hinder it. Even pure water has been known to act as a violent and foudroyant poison when injected into the blood stream. How much more dangerous is it, then, to inject poisons known to be such, whether modified in the fanciful manner at present fashionable among vivisectionists or in any other manner.*** *These simple considerations show that inoculation should be regarded as malpractice to be tolerated only in case of extreme danger where the educated physician sees no other chance of saving life.* ***The entire fabric of the germ theory of disease rests upon assumptions which not only have not been proved, but which are incapable of proof, and many of them can be proved to be the reverse of truth. The basic one of these unproven assumptions, the credit for which in its present form is wholly due to Pasteur, is the hypothesis that all the so-called infectious and contagious disorders are caused by germs, each disease having its own specific germ.***

These germs having existed in the air from the beginning of things, and that though the body is closed to these pathogens' germs when in good health, ***when the vitality is lowered the body becomes susceptible to their inroads."*** *- Dr M. L. Leverson, an American physician, a lecture entitled "Pasteur, the Plagiarist", delivered at London, 25 May 1911.*

"It is now over 30 years since Dr Leverson expressed the hope that ***his exposure would lead to a serious overhauling of Pasteur's work, and it should be done by someone who understands physiological chemistry.*** *I feel as he seems to – that* ***the medical mind is hardly to be trusted with such important work!"*** *- Ethel Douglas Hume in "Béchamp or Pasteur: A Lost Chapter in the History of Biology", 1923.*

Germs

If the germ theory were founded on facts, there would be no one to read what is written.

Quoting Dr Rudolf Ludwig Carl Virchow, MD (1821–1902) the father of the germ theory, who saw the light at last:

"If I could live my life over again I would devote it to proving that germs seek natural habitat: diseased tissue, rather than being the cause of the diseased tissue; e.g., mosquitoes seek the stagnant water, but do not cause the pool to become stagnant." *– in "Journal of the American Podiatry Association", 1920.*

"Pasteur set the profession wild by declaring that disease was caused by germs. The entire medical profession fell, and fell hard, for this delusion, and its members have been working on that hypothesis since.

The state of mind of the medical profession has been more or less of a frenzy since it took up the subject of germs.

Those who wish to be victimized by false reasoning and sophistry, and who wish to pin their faith to the Germ Theory and treatment of disease, may do so, of course; but there is a drugless, serumless, and surgeryless plan that means less sickness, fewer deformities and mutilations, and decidedly fewer deaths.

Germs furnish the ferment necessary to further elimination; but this is a friendly, rather than a hostile, act." - Dr John Tilden, MD

Germs as a Cause of Disease is a Dying Fallacy

"The germ (organized ferment) as it does the enzyme (unorganized ferment). Both are necessary to health.

What more can be asked by any doctor than a philosophy of cause that gives a perfect understanding of the cause of all so-called diseases?

To know cause supplies even the layman with a dependable cure and an immunization that immunizes rationally.

Dependable knowledge is man's salvation; and when it can be had with as little effort as that required for a thorough understanding of the Philosophy of Toxaemia there is little excuse for any man, lay or professional, to hazard ignorance of it.

Toxin: the designating poison in Toxaemia; is a product of metabolism. It is a constant, being constantly generated; and when the nerve-energy is normal, it is as constantly eliminated as fast as produced.

The body is strong or weak, as the case may be, depending entirely on whether the nerve-energy is strong or weak.

And it should be remembered that the functions of the body are carried on well or badly according to the amount of energy generated." - Dr. John H. Tilden, MD in "Toxaemia Explained, The True Interpretation Of The Cause Of Disease", 1926.

Why We Believe Germs do Not Cause Disease

"There is a popular impression among the misinformed, that the medical profession is unanimous in its acceptance of the germ theory of disease; that is, the theory that all infectious and most other diseases are due to the entrance of living micro-organisms into the bodies of those affected.

This impression is grossly erroneous.

Many of the most advanced thinkers in the medical profession, both in this country and abroad, **are frank in the expression of their convictions that the germ theory has no scientific basis upon which to rest its claims.**

It is a mere fantasy of fussy microscopists who know little or nothing of the real nature of disease.

Moreover, many investigators who were at one time identified with the germ theory are now on record as having abandoned it as untenable. For instance, at the 13th triennial session of the International Medical Congress, Paris 1903, Dr Rudolph Virchow, who is conceded to be the world's leading authority on this subject, frankly said:

> ***"Microbes are always found where there is disease. They are also found where there is no appreciable disease, and may be the result, and not the cause of disease."***

This statement coming from one who was formerly a leading advocate of the germ theory, is significant indeed.

It is safe to assert that no sensible physician believes one-half of what the germ faddists say about the alleged ravages of the minute organisms called disease germs.

The experiments performed on their own persons a few years ago by Professors Pettenkoffer and Emmrich of Munich, Germany, gave the germ theory a blow from which it has never recovered.

At one dose Prof. Pettenkoffer swallowed several millions of the comma bacilli (germs of Asiatic cholera).

Prof. Emmrich repeated the experiment a few days later

by swallowing a culture containing many millions of cholera germs. **For more than a week these professors had in their alimentary canals countless millions of the real cholera germs,** the lineal descendants of the comma bacilli, taken from the intestines of persons who had died of Asiatic cholera in Hamburg, **still neither of these physicians suffered from anything like cholera; neither did either of them experience any appreciable effect from the large quantities of active cholera germs swallowed.**

The ludicrous aspect of these experiments was emphasized by the fact that while North and South America were in a state of hysterical panic through fear that the comma bacilli might gain entrance into this country, and while a number of eminent physicians were kept busy explaining to the frightened public the fearful results that would surely follow from the presence of these "germs," two eminent German professors were walking about attending to their duties while harbouring within their bodies countless millions of the "deadly" cholera germs.

When the germ doctors are pressed for an explanation of such occurrences as these they will tell you that the professors were insusceptible; that disease germs will not "take hold" of a healthy person.

If this is so, **how can the germs be the cause of disease?**

If it is necessary that a person be in poor health before the germs can "take hold" of him, may not the germs be the result or an incident of the disease?

If germs are the cause of disease, isn't it a little strange that anybody should have lived long enough to die of old age before this wonderful discovery was made?

We agree with those members of our profession, and intelligent persons out of the profession, who hold that **germs do not cause disease.**

We hold that disease causes germs.

Further, **we feel that there is more harm from fear of germs than from germs themselves.**

The specific germ is only the symptom or result of broken-down cell structure instead of the cause.

In other words, **the disease is primary (brought on by lack of: sufficient air, sunshine, abnormal living), and the germ is secondary, an after effect.**

Disease germs are everywhere.

The air is full of "contagion."

And **if the present-day notions concerning the extreme importance of disease germs and their destructiveness were true, the human race could not exist for 1 hour.**

If germs do cause disease, what causes germs?

Where does brother germ come from?

Why do they not affect all alike?

And lastly, have we less illness in the world today, since the germ theory of disease had made its debut?

Why not look the thing squarely in the face and realize that if the people had better economic conditions and were allowed to learn the importance and beauty of natural living, such as; **eating for efficiency, having plenty of fresh air, sunshine, clean water, wearing suitable clothes, taking systematic exercise, bathing properly, using the nose for breathing** instead of retaining it as an ornament as for powdering purposes.

And thus building clean blood, good vitality and will power (the trinity of resisting agencies toward any abnormal manifestation, we commonly term disease), if only humans would do this, they could look a germ squarely in the eye and "kill it with a smile."

To those who are really interested in the study of the microzyma (microbe) we suggest and urge the book:

"The Blood and Its Third Anatomical Element", 1911 by Dr Antoine Bechamp, formerly Professor in the Medical Faculty of Montpellier, France, Corresponding Member of the Academy of Medicine, etc." - Dr Simon Louis Katzoff, MD, in "Timely Truths on Human Health", 1921.

"Many strains of Balantidium coli are protective in 4 particulars:

1. They inhibit the growth of typhoid bacilli, as Hashimoto has demonstrated with 96 strains;

2. They render many poisonous products inert, as shown by Loew, changing irritating ammonia products into harmless proteins;

3. They aid in the digestion of various types of food substances,

4. With the enzymes generated. B. coli in large numbers can inhibit putrefactive bacteria, mostly anaerobes, and put out, as shown and named by Cowracti, thermostable and thermolabile substances." - Dr F. H. Redewill, MD, Dr J. E. Potter, MD Lieutenant Commander, Medical Corps, U.S. Navy, Dr Harry A. Garrison, MD Captain, Medical Corps, U.S. Navy Washingon, D.C., in "JAMA", 8 March 1930.

The First Commercial Antibiotic

"Gerhard Johannes Paul Domagk, a pathologist and bacteriologist. Credited with the discovery of Sulfonamidochrysoidine (KI-730), **the first commercially available antibiotic and marketed under the brand name Prontosil, for which he received the 1939 Nobel Prize in Physiology or Medicine.** Sulfanilamide was first prepared in 1908 by the Austrian chemist Paul Josef Jakob Gelmo, and patented in 1909.

Gerhard Domagk, directed the testing of the prodrug Prontosil in 1935, and Jacques, Thérèse Tréfouël, along with Federico Nitti and Daniel Bovet in the laboratory of Ernest Fourneau at the Pasteur Institute, determined sulfanilamide as the active form, are credited with the discovery of sulfanilamide as a Chemotherapeutic Agent.

Domagk was awarded the Nobel Prize. In 1937 Elixir sulfanilamide, a product formulation with diethylene glycol, poisoned and killed more than 100 people as a

result of acute kidney failure, urging new US regulation for drug testing. In 1938, the Food, Drug and Cosmetic Act was passed." - in wikipedia.org, 2019.

Sulfanilamide Poisoning

"With the increasing use of new therapeutic agents in recent years, the toxic effects of some of the drugs on the cellular elements of the blood have come into prominence.

In the case of sulfanilamide, poisoning or idiosyncrasy has been reported to produce, in order of frequency, moderate anemia, excessive leucocytosis, acute hemolytic anemia, neutropenia, and auto-agglutination.

Of these, the most serious appears to be neutropenia.

Kracke listed 13 cases, only 3 of which recovered.

One fatal case has been reported in this Bulletin." - Dr John T. Bennett, MD, Dr Robert L. Ware, MD, in "Acute Hemolytic Anemia", United States Naval Medical Bulletin, Vol. 39, 1941.

Cognitive Impairment by Antibiotic-induced Gut Dysbiosis

"We conclude that circulating metabolites and the cerebral neuropeptide Y system play an important role in the cognitive impairment and dysregulation of cerebral signalling molecules due to antibiotic-induced gut dysbiosis.

Emerging evidence indicates that disruption of the gut microbial community (dysbiosis) impairs Mental Health.

Taking all data together, we show that treatment with an antibiotic mixture disrupts the bacterial community in the colon, specifically impairs novel object recognition memory and causes distinct alterations in circulating metabolite levels and in the expression of molecules relevant to cerebral function.

Profound alterations in the metabolite profile of the colon and circulation may be relevant to the communication between gut and brain. Our findings add to the understanding of the Microbiota-Gut-Brain Axis and highlight the potential and limitation of antibiotic-induced gut dysbiosis as model system to probe causality in the interaction between gut microbiota and brain." - in "Brain, Behavior, and Immunity", 2016.

Microbiome Restoration Diet Improves Digestion, Cognition and Physical and Emotional Wellbeing

"The intestines of an average human contain trillions of gut bacteria.

The diversity and strains of these bacteria vary dramatically between individuals.

Research has shown that sub-optimal gut bacteria can have a profound impact on health.

Manipulating gut bacteria in the microbiome, through the use of probiotics and prebiotics, has been found to have an influence on both physical and emotional well-being. A study using a dietary manipulation called:

"The Gut Makeover" designed to elicit positive changes to the gut bacteria within the microbiome from 21 healthy participants.

Results: Adverse medical symptoms related to digestion, cognition and physical and emotional wellbeing, were also significantly reduced during the course of the dietary intervention.

The intervention, designed to manipulate gut bacteria, had a significant impact on digestion, reducing Irritable Bowel Syndrome (IBS) type symptoms in this non-clinical population.

There was also a striking reduction in negative symptoms related to cognition, memory and emotional well-being, including symptoms of anxiety and depression.

Dietary gut microbiome manipulations may have the power to exert positive physical and psychological health benefits, of a similar nature to those reported in studies using pre and probiotics.

This dietary microbiome intervention has the potential to improve physical and emotional well-being in the general population but also to be investigated as a treatment option for individuals with conditions as diverse as IBS, anxiety, depression and Alzheimer's disease.

Within the clinician debrief, **a range of gastro-intestinal improvements were reported by participants and included: reduction or cessation of chronic bloating, acid reflux, wind, erratic stool movements (either loose or constipation, or chronic alternation between the two).**

Also noted were self-reported improvements in mood, energy and quality of sleep.

Total medical symptoms scores were submitted to a paired-sample T-test.

Total scores at time 1 (before dietary intervention) and time 2 (after the four week dietary intervention) were entered as the paired variables.

There was a significant effect of dietary intervention on medical symptoms. Without exception, all participants saw a drop in their total medical symptoms scores from before the intervention to post-intervention." - Lawrence K, Hyde J, in "Microbiome restoration diet improves digestion, cognition and physical and emotional wellbeing", 2017.

> ***"When man learns to cooperate with the natural invisible friends of his own body, it is possible that ill health may never again afflict humanity."*** *- Sir Arbuthnot Lane, MD, Physician to the King of England in "Invisible Friends of The Body", 1944.*

Note - Further information on this subject may be obtained by reading the book **"Bechamp or Pasteur: A Lost Chapter in the History of Biology", 1932.**

Prions: Reassessment of the Germ Theory of Disease

"In 1982, Prusiner identified a protein that was associated with transmission of a degenerative neurologic illness of sheep and goats that is known as scrapie, a condition in which the affected animal would try to "scrape" its wool coat off on a fence post or fixed object.

This infectious agent was a protein only and did not have any nucleic acid associated with it.

Administration of the protein resulted in transmission of the disease to the naïve host, and infection could even be transmitted across species.

A fascinating feature of the protein was that it did not generate any antibody response within the newly "infected" host.

Prusiner labelled this protein a prion, a term derived from Protein Infection Only, for which he received the Nobel Prize in 1997.

Furthermore, cross-species transmission with prions has now been documented to occur to man from cattle (eg, mad cow disease).

Abnormal protein configurations that result in relentless dementia could lead to speculation for such an aetiology in Alzheimer's disease.

Prions and other configurational abnormalities of neuroproteins could be far more important in human disease than have been appreciated.

It should be appreciated that microbes are not a requirement for transmissible diseases." - Dr Donald E. Fry, MD, FACS, in "Journal of the American College of Surgeons", Vol.211, 2010.

Antibiotics Effects at the Organ Level

"In addition to shifts in cell populations and signaling pathways, antibiotics treatment has been seen to affect organ morphology more broadly, both in the gastrointestinal tract as well as in extra-intestinal organs.

As the bulk of commensals reside in the gastrointestinal tract where they assist with digestion and interact closely with epithelial cells, **it is not surprising that many changes are seen in intestinal physiology after microbial depletion.**

The length of the whole intestine or the colon is not affected, but the caecum becomes dramatically larger, transit time increases, and faecal pellet frequency and consistency can be altered." - Megan T. Baldridge, in "Comparing Germ-Free Mice and Antibiotics Treatment as Tools for Modifying Gut Bacteria", Frontiers in Physiology 2018.

The Influence of the Gut Microbiota on Brain and Behaviour

"From the inception of studies using germ-free animals to today, we have garnered a significant body of knowledge with respect to bacterial-host communication in wellness and disease.

Through the examination of germ-free animals both before and after introduction of bacteria, whether single-strain or as a bacterial community, **we now know that host-bacterial communication is necessary for the optimal function of virtually all physiological processes in the organism.**

Bacteria are necessary for the healthy functioning of the immune, respiratory, gastrointestinal, metabolic, endocrine, and nervous systems of the organism, and this has led many researchers to now consider humans (and most other organisms) as holistic functioning units working together with their bacterial counterparts.

Moving forward, experiments using a variety of approaches **to manipulate intestinal bacteria will be used to complement those carried out in the germ-free model and will provide us with a better understanding of the communication that occurs between the host and its bacterial residents, as well as how this communication works to improve overall health."** - John F. Cryan, PhD in "Growing up in a Bubble: Using Germ-Free Animals to Assess the Influence of the Gut Microbiota on Brain and Behavior", Internation Journal Neuropsychopharmacology, August 2016.

> ***"Bottom Line: More Bugs; Less Drugs!"*** *- Dr. Robynne Chutkan, MD, "Microbiome Forum", Milken Institute, 29 October 2019.*

Germ Theory of Pasteur	**Microzymian (Multicellular Organisms) Theory of Bechamp**
I The body must be maintained sterile	I Germs co-exist naturally in the body
II Disease arises from germs which are external from the body	II Disease may arise from germs within the body
III The body must always be defended from germs	III The majority of germs work and assist in the daily organic metabolic processes of the body
IV The function of germs is constant	IV The function of germs changes to assist in the catabolic (disintegration) processes of the host organism when that organism dies or is injured, which may be chemical as well as mechanical
V The shapes and colours of germs are constant	V Germs are pleomorphic (having many forms): they change their shapes and colours to reflect the condition of the host
VI Diseases are associated with germs	VI Each disease can be associated with specific state of the body
VII Germs are the primary causal agents (the main factor) of disease	VII According to the state of the host, disease ensues; from both the type and amount of germs, leading to an increased toxicity, from the metabolic waste of these microbes. Hence, the metabolic state, on the host organism

	is the primary causal agent
VIII Disease can afflict anyone randomly	VIII Disease, comes to fruition by unhealthy metabolic conditions in the body
IX To prevent disease the body must maintain protective defences	IX In order to prevent disease from taking hold into the body, a state of health, must be maintained

"1. The microzymas of the animal organism proceed from the vitellin microzymas, which are autonomous anatomical elements in the vitellus.

2. The number of anatomical species of microzymas is enormous.

3. The essential biological characters of the microzymas are to be creators of cellules by synthesis and of vibrioniens by evolution.

4. The physiological and chemical characters of microzymas are to produce the zymases and to be themselves ferments having a determined form." - Dr Antoine Bechamp, MD in "The Blood and its Third Anatomical Element", 1912.

Today the Microbiome is a testament to the Principles and Foundations, laid down by Antoine Béchamp.

The Terrain Theory

The Terrain Theory an explanation on the causation of disease proposed by Dr Antoine Béchamp, stating that a diseased body (the "terrain"), **will attract germs to come as scavengers of the weakened, or poorly defended tissue.**

Béchamp clinically observed that the pH of the bloodstream in the body is of crucial importance, and indicated that a greater acidic pH state of the blood, will allow for a greater amount of germs to exist, and multiply, and that an alkaline pH in the blood will inhibit the types and amounts of germs in same.

> ***"In all future studies of disease we must, therefore, always begin with the soil. This must be got into good heart first of all and then the reaction of the soil, the plant, animal, and man observed. Many diseases will then automatically disappear. Soil fertility is the basis of the public health system of the future, and of the efficiency of our greatest possession; ourselves."*** *- Sir Albert Howard, MA, FLS, Imperial Economic Botanist, to the Government of India, in "The Soil and Health", 1939.*

> ***"The Germ Theory is convenient because it provides what every simplistic view of a problem seeks before all else: a culprit, an invisible hare for the hounds to chase in their costly research labs, universities, hospitals, and drug factories.*** *The fact that the hare can never be caught is the perfect guarantee that their race will never finish, their demands for funding will never cease,* ***and their ability to generate profits for the drug and chemical corporations will continue to grow. There is no single cause of disease."*** *- Editors Preface to "The Blood and its Third Anatomical Element", 1952.*

Chapter 4

The Creation of The Rockefeller Institute For Medical Research

J.D. Rockefeller Involvement with the Medical Trade

"During this month of July, with the aid of a medical dictionary, a copy of Osler's Text-book was being read word for word by a layman passing his summer in the Catskill Highlands, an event of far greater importance to medicine and of greater biographical importance than the mere happenings of Osler's own summer vacation in New Brunswick.

This gentleman happened to be the member of **John D. Rockefeller's philanthropic staff who was successful in directing his interests towards Medical Research,** and as Osler's volume was an essential link in this process, the story deserves telling here in his own words, though five years elapsed before Osier knew of the incident.

"In the early summer of 1897 my interest in medicine was awakened by a Minneapolis boy who in his loneliness in New York used often to spend his weekends with us in Montclair.

His deceased father had been a homeopathic physician but he himself was studying in the regular school.

I determined as a result of my talks with this enthusiastic young student to make myself more intelligent on the whole subject of medicine, and at his suggestion I bought a copy of Dr Osler's "Principles and Practice of Medicine".

I read the whole book without skipping any of it. I speak of this not to commemorate my industry or intelligence but to testify to Osler's charm, for it is one of the very few scientific books that are possessed of high literary quality.

There was a fascination about the style itself that led me on, and having once started I found a hook in my nose that pulled me from page to page, and chapter to chapter, until the whole of about a thousand large and closely printed pages brought me to the end.

But there were other things besides its style that attracted and intensified my interest to the layman student, like me, demanding cures, and specifics, he had no word of comfort whatever.

In fact, I saw clearly from the work of this thoroughly enlightened, able and honest man, perhaps the foremost practitioner in the world, that medicine had "with the few exceptions above mentioned" no cures, and that about all that medicine up to 1897 could do was to suggest some measure of relief, how to nurse the sick, and to alleviate in some degree the suffering.

Beyond this, medicine as a cure had not progressed.

I found further that a large number of the most common diseases, especially of the young and middle-aged, were infectious or contagious, caused by infinitesimal germs that are breathed in with the atmosphere, or are imparted by contact or are taken in with the food or drink or communicated by the incision of insects in the skin.

I learned that of these germs, only a very few had been identified and isolated.

I made a list "and it was a very long one at that time, much longer than it is now" of the germs which we might reasonably hope to discover but which as yet had **never been, with certainty, identified;** and **I made a longer list of the infectious or contagious diseases for which there had been as yet no cure at all discovered.**

When I laid down this book **I had begun to realize how woefully neglected in all civilized countries and perhaps most of all in this country, had been the scientific study of medicine. It became clear to me that medicine could hardly hope to become a science** until it should be endowed, and qualified men could give themselves to uninterrupted study and investigation, on ample salary, entirely independent of practice.

Here was an opportunity for Mr Rockefeller to become a pioneer.

This idea took possession of me.

The more I thought of it the more interested I became.

I knew nothing of the cost of research; I did not realize its enormous difficulty; the only thing I saw was the overwhelming and universal need and the infinite promise, world-wide, universal, eternal.

Filled with these thoughts and enthusiasms, I returned from my vacation on 24th July.

I brought my Osler into the office at No. 26 Broadway, and there I dictated for Mr Rockefeller's eye a memorandum in which I aimed to show to him the actual condition of medicine in the United States and the world as disclosed by Dr Osler's book. I enumerated the infectious diseases and pointed out how few of the germs had yet been discovered and how great the field of discovery; how few specifics had yet been found and how appalling was the unremedied suffering, I pointed to the Koch Institute in Paris. I pointed out the fact, first stated by Huxley, I think, that the results in dollars or francs of Pasteur's discoveries about anthrax and on the diseases of fermentation and of the silkworm had saved for the French nation a sum far in excess of the entire cost of the Franco-German War.

I remember insisting in this or some subsequent memoranda that even if the proposed institute should fail to discover anything, the mere fact that he, **Mr Rockefeller, had established such an institute of research, if he were to consent to do so, would result in other institutes of a similar kind, or at least other funds for research being established, until research in this country would be conducted on a great scale; and that out of the multitudes of workers we might be sure in the end of abundant rewards, even though those rewards did not come directly from the institute which he might found.**

These considerations took root in the mind of Mr Rockefeller and, later, of his son.

Eminent physicians were consulted as to the feasibility of the project, a competent agent was employed to secure the counsel of specialists on research, and out of wide consultation the Rockefeller Institute of Medical Research came into being.

It had its origin in Dr Osler's perfectly frank disclosure of the very narrow limitations of ascertained truth in medicine as it existed in 1897 (From unpublished archives which deal with the early history of the Rockefeller Institute, through the kindness of Mr F. T. Gates)." - Harvey Cushing's in "The Life of Sir William Osler", 1940.

Rockefeller Foundation Funding And Medical Education In Toronto, Montreal, And Halifax

"Between 1920 and 1935 the Rockefeller Foundation gave Canadian medical schools more than $5 Million. Explaining this magnanimous gift, John D. Rockefeller on 18 December, 1919, wrote to the Board of the Rockefeller Foundation:

> *"**My attention has been called to the needs of some of the Medical Schools in Canada.** The Canadian people are our near neighbours. They are closely bound to us by ties of race, language and international friendship; and they have without stint sacrificed themselves their youth and their resources to the end that democracy might be saved and extended. For these reasons if your Board should see fit **to use any part of this new gift in promoting Medical Education in Canada,** such action would meet with my cordial approval."*

With this warm testimonial, **Rockefeller turned over $50 Million to the Rockefeller Foundation, which had as its mandate "the well-being of mankind": its Board set aside $5 million for Canadian Medical Schools".** - William Feindel, in "CMAJ", 7 November 2006.

"Disinterested and courageous exponents of a square deal for the people in the matter of protection from adulteration of foods in all its phases are to be found in the newspapers in many localities.

They, too, should have our support and encouragement; for they run the risk of loss of advertising patronage and are compelled to resist mighty pressure to get them to desist from their campaign of publicity and education which is very necessary in order that the pure food law does not sink into oblivion or be so emasculated that it will be worthless.

Let us, then, accept our duty in the premises and seek every where for information that will guide us in doing our part to have the public obtain that purity in food that is requisite for the maintenance of perfect health; and also use that information to instruct our patients for their good, so that they may know the necessity of using none but pure, unadulterated food products." - Dr Edward M. Gramm, MD in "North America Journal of Homeopathy", 1912.

Flexner Report

"And then what happened here even in the United States, and around the world there was a division between people called irregulars and people called heroics, **the heroics (Medical Trade) like to do things like give people mercury, they used mercury for everything a lot of famous people died because of it.** And then actually in 1847 that's when the American Medical Association came into being and they put in place certain regulations saying let's split these two groups and if you're going to be part of the more trained class of what's called physicians the following is what you have to do first of all you have to get licensed, and they put in a procedure for licensing second of all there were certain people who can never even be licensed, and that included women they were on that list of no no, Negroes no no, Native Americans no no, no one except white Caucasian men could even apply for the program to be licensed and that was a big start of this split.

Not only that those people who chose to be part of the AMA and be licensed could not discuss a case even if their therapy was not working they were not allowed to discuss the case with an irregular so that would be those people I just listed, any kind of herbalist, natural healer spiritual healer, they could dowse or they could not discuss the case with them. So there were a lot of rules put into place.

Then in 1904 they put together a council to evaluate what was going on in the educational system of herbal medicine, and a very important person to look up, is Flexner 1910, there was the Flexner Report (also called Carnegie Foundation Bulletin No.4), and Abraham Flexner he went around and visited the various Medical Schools to see what they were doing in terms of teaching they were promoted by Andrew Carnegie and also the Rockefellers, now it's soon evolved for them to understand that if they put together this conglomeration of drugs through Pharmaceutical Industry, AMA and other factors that they actually could politically and financially control healthcare.

And this is not like it just happened let's say organically, it was the opposite it was a planned political manoeuvring". - Ellen Kamhi, PhD, RN, HNC, in "Remedy; The Quest For Lost Medicine", Docuseries 2018.

> ***"The outcome from it was that the way that medical education was taught and you know ultimately would be funded,*** *was it was very codified and so at the time there were several, for example medical schools of homeopathy and that was a very integral part of that time conventional medicine and after the Flexner Report, funding was essentially gone for those Homeopathic Medical Schools, and they were gone so you know* ***if somebody wanted to become a physician then the only choice was to learn what we now call Allopathic Medicine which was very much focused on using Pharmaceuticals and more in kind of invasive techniques."*** *- Dr Lise Alschuler, in "Remedy; The Quest For Lost Medicine", Docuseries 2018.*

"We cannot be suppressing one part of the science because it does not agree the dogmas." *- Dr Luc Montagnier, MD, Nobel Prize in Physiology or Medicine 2008, in "El Diario Vasco", 10 May 2016.*

"There is a scientific basis in homeopathy but it is ignored. It is a problem of science that silences everything that can disturb the economy." *- Dr Luc Montagnier, MD, Nobel Prize in Physiology or Medicine 2008, in press conference at the Universitat Politècnica de València, 2 October 2019.*

"Did you know? A generous gift of $2 Million from the Rockefeller Foundation made the 1922 purchase of the Keppel Street site and the cost of a new building possible in 1926. Our main research funder today is the Bill & Melinda Gates Foundation." - in "London School of Hygiene & Tropical Medicine", *lshtm.ac.uk, 2020.*

Medical Association

"(AMA) is an association of physicians that develops and promotes medical practice, "research", and "education", on "medical science" and health-care.

The association provides AMA database licensees, press activities, insurance, member benefits and services through AMA solutions, credentialing products, physician-related data resources, and publications ordering.

AMA was founded in 1847 and incorporated in 1897 and is based in Chicago, Illinois." - in "JAMA" website, 2020.

The Medical Association is a Professional Trade Union, many people think it is a Charity or a Branch of Government.

Thus the history of AMA is riddled with its perceived principal objective that seems to be: **Attain a Total Monopoly of the Practice of Health Care.**

From the start AMA has merely been a Trade Lobby (and it is still is), with the purpose of stifling competition of any other health practitioners, and purporting the myth that the School of Medicine is apparently the only one delivering effective means to health.

Through self aggrandizement, by means of paid advertisement and promotion, AMA attempts to perpetuate an idealistic image of Medicine Doctors of absolute infallibility, whose judgement must never be questioned.

They wish the public to rely heavily on surgical procedures and medications, which they alone controlled.

With the help of John D. Rockefeller, AMA was on the road to total political and economic power.

Its initial steps were to dominate the entire medical education system, and make it elitist, expensive, and drawn out. This would isolate only a select group of students, who fit a particular type of profile.

The ideal profile is: some one who has a materialistic view of things, someone who does not questions things, and who would not be likely to disturb the system and make waves, saying this is not working or I don't agree with this.

The next step was to decrease the number of medical schools from 155 to 31.

This was mainly accomplished with the Flexner Report, a book-length study of medical education in the US and Canada, published in 1910, under the aegis of the Carnegie Foundation.

Many aspects of the present-day American medical profession stem from the Flexner Report and its aftermath.

This economic strategy of decreased supply and increase demand made it very easy to substantiate medical overcharging and guarantee medical monopoly.

Two individuals who were responsible for carrying these strategies out where: George Simmons, MD and, Morris Fishbein, MD.

George Henry Simmons (1852–1937) was editor-in-chief of the Journal of the American Medical Association (JAMA), and general secretary of the American Medical Association (AMA). He edited JAMA from 1899 to 1924.

Morris Fishbein (1889–1976) became the editor of the Journal of the American Medical Association (JAMA) from 1924 to 1950.

Beginning around 1900, they consecutively ran the AMA for many years. Medical historians, state that Simmons came to the AMA as a journalist and had never studied at a medical institution for a medical degree.

After years of practice, it is thought that he obtained a diploma by mail from Rush Medical College in Chicago.

Fishbein, studied at Rush Medical College, but never completed his internship, never received a diploma, and never practised medicine a day in his life.

Fishbein was considering a professional career as a circus acrobat, and was working as an extra at an Opera Company when he learned of a part-time writing position in AMA.

By controlling medical publications and advertisements to the medical profession, Simmons and Fishbein were able to gain total power over the organization and strengthen the AMA monopoly.

To get the AMA "Seal of Approval" on, for drugs, Pharmaceutical Companies had to make a substantial donations to AMA.

But AMA had no laboratory, no testing equipment, neither research staff. Another way to make money, was to purchase large amount of stock on drugs they were about to give the AMA Seal of Approval. Only Fishbein knew when approval would be released, at which time the stock would double in price.

Simmons established the Institute of Medicine in Chicago as a holding company, where many funds where received.

In 1924, he was forced to retire from the AMA, and was exposed in a court trial for trying to get rid of his wife, by plying her with narcotics while trying to convince her she was going insane and hopefully driving her to suicide.

Fishbein was kicked out of the AMA in 1949 because of the common dislike among its members for his unscrupulous activities.

Despite Fishbein's impeachment, his malign influence bedevilled the AMA for many years.

His legacy of malice and obstructionism was brought to an end in 1987 after a 11 year litigation, when Federal Judge Susan Getzendammer, US District Court, found the AMA, the American College of Surgeons and the American College of Radiologists guilty of conspiracy to destroy the profession of Chiropractic.

In 1963 AMA started a vendetta to try to eliminate the profession of Chiropractic, its biggest rival at the time, they developed a "Committee on Quackery" to misrepresent thus mislead the American public about the truth of the Chiropractic Profession. AMA used derogative names such as: Quacks, Unscientific Cultists, and Rabid Dogs, to scare people from using Chiropractic. AMA negatively influenced insurance companies, hospitals, colleges, and lobbyists. Yet, these unfounded allegations and activities were not based on the clinical and scientific merits of Chiropractic, but on the economic motives of the AMA's monopoly efforts.

But Chiropractic neither claims the treatment or cure of disease. It merely emphasizes the fact that: if the spine is properly aligned, the person will have better nerve integrity, more optimum body function and better health potential, that the body's innate intelligence or mother nature is what heals from within, and the doctor's job is to remove interference to nature.

When mental, physical and chemical stresses are reduced or eliminated, scientific research and common sense tells us that the body has better function and health potential. Osteopathy, Chiropractic and Hydropathy philosophy and principles has held up under clinical and scientific scrutiny.

It is normally more affordable and non-invasive than allopathy, yet much less publicized in its accomplishments. In order to have science, research needs to be made, and who pays for the research makes the science.

Thus underneath Medical and Pharma Science research, there is a sign dollar line.

> ***"There is an epidemic of misinformation rooted in biased research that is funded for profit rather for benefit."*** *- Dr Assem Malhotra, MD, 2019.*

The Rockefeller Foundation

1903

"The General Education Board was incorporated in 1903, John D. Rockefeller, Sr., made an initial commitment of $1 Million to the organization, and quickly grew to $43 Million by 1907. **The total of these donations marked, at the time, the largest gift to a philanthropic organization in the history of the United States.**

The General Education Board of the Rockefeller Foundation was devoted to the cause of improving education throughout the United States.

Its efforts included a number of key initiatives focusing on the improvement of medical education.

1912

Based on the success of his Carnegie report, Flexner was recruited by the General Education Board in 1912.

He was quickly promoted to Secretary of the Board, and under his leadership the General Education Board joined with the new Rockefeller Foundation in a major program to reform medical education.

1913

The General Education Board program of medical education existed from 1913 to 1929 and distributed $94 million to 25 medical schools.

1916

The first university to benefit significantly from the investment in schools of public health was Johns Hopkins University. Through extensive funding beginning in 1916, the Rockefeller Foundation created the School of Hygiene and Public Health at Johns Hopkins, and the school quickly became a model of public health education.

From 1916 to 1947 the Rockefeller Foundation contributed $8 Million in funding to the School of Hygiene and Public Health. Further funding was provided after 1948 for the emerging fields of mental health care and public health nursing.

1923

"Medical education plays an essential part in the leadership and success of public health work.

The Rockefeller Foundation is concerned, therefore, in aiding influential medical schools in many parts of the world to improve their facilities, to strengthen their teaching staffs, to perfect their methods, to maintain high standards". - in "The Rockefeller Foundation, Annual Report", 1923.

1929

By 1929 the General Education Board and the Rockefeller Foundation shifted their focus from institutional development in medical education to research initiatives.

In less than two decades the General Education Board had transformed American medical education into one of the best systems in the world, while the Rockefeller Foundation had invested over $25 Million to build institutes of public health across the globe." - in "rockfound.rockarch.org", 2020.

The Three Medical Schools in The United States

"There are three distinct schools of medicine in the United States:

Allopath,
Homeopath,
Eclectic.

To explain the difference between these 3 schools of medicine would require a volume.

To be fair to all of them, we may briefly say:

Each possesses some virtues and some faults; although they differ fundamentally in their conceptions and interpretations of the usage and effects of drugs on the human body.

The Medical School and AMA

It so happens that the Allopath school the oldest existing school, commonly known as the "regular", is now the dominant school.

It is asserted by most physicians of the later schools and many of their own practitioners that this school of medicine, through its organization, called the "AMA."

American Medical Association has become a real trust or monopoly, holding the lives of the American people in the palms of its hands.

Further, many Homeopaths and Eclectics claim that the "old school" has gotten control of so much power, wealth and influence, that it practically controls or influences most of the state boards of health, the examining boards, hospital staffs, clinics, medical societies, medical legislation, government health service, medical faculties, various publications, medical journals, manufacturing establishments of "biological" products, microscopic (and surgical) appliances, drugs and laboratory equipment."

Medicinal Administrations, Chief Cause of Difference

The Homeopathic and Eclectic schools of medicine, as well as the Allopathic, have the same 4 year course of study.

They all teach practically the same subjects, such as Bacteriology, Pathology, Chemistry, Anatomy, Physiology, Obstetrics, and Gynecology.

The main technical distinction is in their method of administrating medicines their Materia Medica (the study of medical agencies employed in the treatment of disease).

It would seem that each could and should go about his business and let the other alone, but such is not the case.

The Allopath claims that the Eclectic and Homeopath are in his way; that they are insurgents medical rebels and the like.

The Eclectics and Homeopaths claim that the Allopaths are "old-fashioned" and that they cling to blood-letting, and the excessive use and abuse of mercury, quinine and morphine; that they worship the knife, and the like.

So the lines of demarcation are very well defined.

Thus, we have in the medical profession unnecessary chaos or three separate, distinct and conflicting governing bodies, whose strife is far from ended, although nearing an end apparently.

The Progressive and Tolerant School

It would seem that medical schools should have "a chair" for each system of medication.

The Allopathic, Eclectic and Homeopathic systems should be taught by the respective experts on the subjects.

In this way the young physician would know all systems of medication and could adopt any system (or combination of systems) that appealed most rationally to him, or select from all systems that which appears the most wholesome, reliable, effective and natural. Why not teach also in the schools all the drugless methods?

Osteopathy, Hydropathy, Chiropractic, Dietetics, Mental-therapy and all other systems of treatment should be taught under one roof.

Why not?

What harm could there be in it?

Why not be tolerant?

If there is good in any of these "new" methods of treatments, let men know them and adopt them, and if not, they can surely discard them or not even accept them.

It may seem to those who have not investigated this phase of the subject that a study of all systems of healing drug and drugless might prolong the course of study to 8 or 10 years, instead of four or five as now, but such is not the case.

If some of the subjects in the medical colleges were eliminated, such as Serum Therapy and Bacteriology (should be studied under the domain of Biology at High School, at the University, under private tutorship, or alone), and if all teachers were full paid teachers and were real pedagogues, even a two-year course (one year for theory and one year for practical work) would be sufficient for most persons of intelligence.

I believe that this advanced view may disturb the "dignity" of some, who still worship the "hurrah spirit" of my alma mater, my class, my college and my profession, but we feel confident that a close study (without prejudice or monetary interest) will convince all truth-loving persons that this view and suggestion is correct and timely.

The present 4 and 5 year system full of technicalities (largely of academic importance) is uncalled for and works a hardship on those who would love to study health and the healing art.

In that way the young physician would come out more of a "finished product", and he would not be prejudiced.

Thus the public, as well as the doctor himself, would be better off.

The old, narrow training and feeling that only "my ideas" are right, and Jones' ideas are not even worth listening to, is all wrong.

Let us have democracy, even in the study of medicine.

We are living in a more progressive age and it would be very timely and becoming. (If any one believes he has a still better plan or suggestion to offer, he is invited to communicate with the author, who will be very thankful to him).

Teaching and the Teacher

Medical teachers should be real pedagogues.

They should not only know their subjects, but be capable of conveying their knowledge in a comprehensive yet interesting and original style to the student.

It is torture to have a good subject, such as Anatomy, or Physiology, abused and made repulsive just because the teacher knows as much about the science of teaching as a gonococci germ does about going to church on Sunday.

Another point: Let no man become a member of the faculty merely because his uncle is the president, or because he is a politician in the community.

If we cannot have real teachers, and real teaching on real subjects, then let us give up the schools. Better yet: **let the people own and control the medical schools, instead of having them in private or corporate ownership for the sake of exploitation or personal aggrandizements.**

We should have, and some day will have, a uniform entrance requirement and uniform graduation requirement in all medical schools of the country.

A teacher should have the right to teach as he thinks best for his class in view of his subject. He should not be discharged by the Board of Trustees for having discovered a fact, nor for giving the fact to the class.

He should not have a muzzle on his voice or brain nor a string attached to him.

A teacher should be a free person and truly held in high esteem.

He should be well compensated for all his services.

He should be so well paid that he can afford to live comfortably, to study and to give the best that is in him to the class.

This should apply to teachers in all branches of learning.

He should be a free and independent man, should have his position by virtue of merit and not by influence, politics or wealth. We should encourage rather than discourage teaching in every field of study.

Further, we should teach more facts and fewer theories in all schools. We should adhere to the proven truths even if they are old truths. We should not teach that of which we know nothing. We should do less guessing and more thinking. Schools should not exist for the sake of books, instruments, and politics, but everything, so to speak, should exist for the sake of the school, which should be the medium through which knowledge of health is imparted for the sake of alleviating human suffering and preventing human ailment. Schools should be places where the laws of nature are taught and where we may learn that the violation of nature's laws means suffering and untimely death, whereas, complying with nature's laws means comfort." - Dr Simon Louis Katzoff, MD in "Timely Truths on Human Health", 1921.

Chapter 5

Nutrition And Diet Factor

Effect of Chronic Vitamin E Deficiency in the Nervous System and Skeletal Musculature

"A prolonged histological study (Larus Einarson, Axel. Ringsted, 1938) of the nervous system and muscles in rats, of **Vitamin E deficiency** showing muscular weakness with gait disturbances, atrophy and paralysis of the hind limbs, with hypesthesiae, loss of hair, and bladder incontinence. Here there are extensive changes in the peripheral and central nervous system closely resembling the findings found in amyotrophic lateral sclerosis of humans, as well as some posterior column, (tabetic-like) findings. Of special interest is the progressive histodegeneration of the chromophil cells of the nervous system, in response to variations in the Vitamin E factor in the diet, wherein excessive chromophilia of Nissl substance advances to sclerotic irreversible degeneration. The muscular atrophies in comparing the same with the progressive muscular atrophies of humans.

In Vitamin E deficiency: Atrophy seems definitely of Spinal Origin, although, **in early stages a myogenic-like atrophy stage is approached.** A mixed myo-neurogenic state offers much suggestive material for further elucidation of these closely related and as yet not clearly differentiated situations, especially bearing on the "vegetative" cells of the spinal cord, on Kure's theories on vegetative innervation and trophic actions, and other related problems.

Altogether a highly informing, authoritative and excellent bit of careful research **touching many vital issues in clinical neurology, and especially pertinent to the amyotrophic lateral sclerosis and muscular atrophy syndromes."** - "Journal of Nervous and Mental Disease", 1940.

Chapter 6

Predisposition to Disease

"Disturbances of digestion due to unsuitable food, irregular and hurried meals, or to fatigue.

Derangement of special physiological functions.

Though these conditions may not in all cases be immediately incapacitating, they frequently tend to become chronic in nature and far reaching in effect, and they lead directly to malnutrition and to reduction of bodily energy.

If allowed to persist they invariably lay the foundations of ill health and disease in later years.

Special problems also arise in the prevention of sickness amongst boys and girls.

Both physically and mentally they are less capable than adults of prolonged effort or sustained attention to work.

They need vital energy not only for the maintenance of health but for growth; even though there are no signs of immediate ill health their future growth and development may become stunted.

Though these are a sufficiently formidable list of disabling conditions, or conditions which without proper care and precaution may readily cause disablement, they do not complete the inventory.

At least as important as any of these occupational influences, but inseparable from them, is the predisposition to disease arising from the absence of personal hygiene.

The necessities of individual health are few and simple, but they are essential.

Suitable and sufficient food, fresh air, warmth, moderation, cleanliness in ways and habits of life, the proper interrelation of work, repose, and recreation of mind and body are laws of hygiene, the elements of vital importance." - in "Bulletin of the United States Bureau of Labor Statistics", U.S. Government Printing Office, 1919.

"An easy way to implement universal prevention would be to have midwives tell pregnant women about the importance of nutrition. Nutrient-depleted mothers produce nutrient-depleted children. Nutrient-poor foods during pregnancy increase the chances that your child will have a mental health problem." *- Julia J Rucklidge, PhD, Professor of Clinical Psychology, University of Canterbury, New Zealand in "The surprisingly dramatic role of nutrition in mental health", 2014.*

"Potential neurotoxicity associated with exposure to fluoride. In this study, maternal exposure to higher levels of fluoride during pregnancy was associated with lower IQ scores in children aged 3 to 4 years. *These findings indicate the possible need to reduce fluoride intake during pregnancy." - "Association Between Maternal Fluoride Exposure During Pregnancy and IQ Scores in Offspring", JAMA Pediatrics, 19 August 2019.*

"The most important, however, is the part that chronic ulcer plays in the causation of carcinoma." *- Dr A. Everett Austin, MD in "Diseases of the Digestive Tract and their Treatment", 1916.*

"If medicine is to have a reasonable opportunity to justify its administration treatment must be based upon a careful study of the individual. Merely to put the correct name upon a disease and follow book rules for that ailment is not enough. The action of each drug must be supervised.

Time and observation alone can show which line is useful, which harmful, which useless, to any patient.

Thus it becomes the supreme glory or the obscure but conscientious general practitioner that he, and only he, can furnish the brilliant consultant with those details which confer real value upon his special knowledge.

Without his plain counsel guineas are spent in vain.

For concentration has its disadvantages, and that brilliant brain illuminates but a segment of the held, that forceful

intellect is prone to disbelieve that risks lurk in the shadowy places, and that penetrating intelligence may, for want of the diffuse physician, do things of extraordinary foolishness.

Twice within a month has medical science been warned that its present tendency is towards a dangerous neglect of the personal equation in its calculations.

On both occasions the rebuke was directed more at the laboratory men than at the bedside men. The latter can hardly forget how **the vagaries of individual patients make hash of the prettiest theories and disappoint the most carefully-founded expectations.**

The others, surrounded with scientific instruments which cannot protest, speak with the persuasive confidence of oracles and the finality of mathematicians; and it is only months later, or maybe years, that the world knows them for false prophets.

Sir Dyce Tuckworth, in an address to the Faculty of Medicine, at Paris, carefully guarding himself against even the suggestion of depreciating the value of bacteriological work, entered a strong plea for the older.

Doctrine of Diathesis

The Doctrine of Diathesis or the study of habits of body predisposing to certain diseases, which nowadays is too often neglected in favour of more new-fangled theories.

That he considered a dangerous error.

The principal study of the medical profession should be man, from his birth to his death, and all his habits and surroundings. In every disease they were face to face with the personal factor, and a long clinical experience had strengthened his confidence in the doctrine of diathesis.

The modern investigator occupied himself too much with the seed and too little with the soil in which it was sown.

To enforce his contention, Sir Dyce explained that many persons were constitutionally predisposed to rheumatism and gout, but an important characteristic m such-cases was the antagonism of the tissues to the bacilli of tuberculosis.

The more Rheumatic or Gouty a person was the less pronounced was his tendency to consumption (wasting disease).

It was said that the old conception of a scrofulous or lymphatic habit of body was a stupid doctrine of the Middle Ages, which has been demolished by the discoveries of Koch. The scrofulous were now regarded a tubercular.

He took the liberty of objecting to that new doctrine, which he considered a monstrous absurdity.

Bacteriology Run Mad

It was bacteriology run mad.

Here again they were separating the soil from the seed.

It had long been known that the tissues of scrofulous subjects were much more vulnerable than others and offered but little resistance to the introduction of any kinds of poisonous germs.

They were therefore, bad subjects for all diseases recovering slowly and frequently succumbing. It was admitted that they were more open to consumption than others, and were more frequently prey to the Koch bacillus.

What Predisposes to Cancer

So far, Sir Dyce Duckworth, FRCP. Then Dr Pearce Gould, in the course of a speech on the work of the Cancer Research Department, said that it had long been known that certain non-cancerous diseases were frequently the prelude to an attack of cancer.

For example, **chronic inflammation of the surface of the tongue was known to be a very frequent precursor of cancer on that organ**; but, he said:

> ***"Dr Victor Bonney has shown that cancer in the human subject never attacks, in the first instance, perfectly healthy tissues,*** *in all cases it is preceded by certain other definite tissue changes.* ***This is an exceedingly important fact.*** *It does not reveal to us*

the actual cause of cancer, but it certainly carries us a very important step forward; and it emphasises, the extreme importance of conserving with the utmost care the perfect integrity of the tissues of the human body. Dr Bonney's facts probably afford the explanation of the, ***fact that cancer becomes more and more frequent in its incidence with every decade of life;*** *for it is easy to see that, as time passes on, the liability to interference with that protection against the invasion of cancer* ***which the perfectly formed tissues of the body seem to give is liable to be lessened by injury or inflammatory changes."***

Here, again, scientific attention is called to the fact that, while the seed dare not be neglected, the state of the soil also demands close study of preventive medicine and the treatment of diseases are to make satisfactory progress in the future.

Heredity

In every direction one is met by the question of heredity.

Only in occasional instances, as where a debilitating disease has weakened the system or an accident has lowered its resistance, can one explain the sudden inclination of certain bodies to favour the growth of certain germs.

Oftener, in those diseases of which one thinks in this connection, gout, rheumatism, neurotic ailments, cancer, and consumption, an inexplicable predisposition seems to run in families. And it is not that there is any actual transmission of these diseases or their germs from parents to offspring. Such transmission may occur, in rare instances in a few infectious diseases, but this is not heredity any more than is the spread of influenza from a parent to the family.

The predisposition in consumption shows, to quote the high-sounding scientific phrase, as "a vulnerability of the protective epithelia"; that is the cells which pave the surface of throat, wind-pipe, air passages, alimentary canal, etc., do not offer a decent resistance to the entrance of tubercle bacilli.

The germs too readily gain access to the tissues.

And, even there, there is reason to believe that the defence is poor in comparison with what it ought to be.

Every way the soil seems prepared for the Koch bacillus, which, falling into good ground (for it makes itself secure and flourishes a t the expense of the individual).

Gout and Rheumatism

The predisposition in Gout is described as:

> ***"The inheritance of an altered mode of eliminating nitrogenous waste, a constitutional vice which becomes more apparent through excess of food and alcohol."***

That is, the individual starts life, and runs his course, handicapped **with a defective excretory apparatus, naturally inclined to allow uric acid to accumulate in his tissues.**

Let him but overeat, burden his excretory apparatus still further, or take things which injure the defective organs, and his fate is sealed.

The predisposition in Rheumatism is explained in a similar way. The predisposition in nervous complaints shows, according to Dr Thomas Smith Clouston, PRCPE as:

> ***"General morbid tendencies rather than direct proclivities to special diseases."***

That is, **the child need not develop the same complaint as the parent or grandparent,** but it is neurotic, more prone than a healthy child to all sorts of nervous manifestations, less able than the average individual to recover from any nervous ailment which it contracts." - Dr Robert Watson, MD in "Marlborough Express", Blenheim, New Zealand, 19 June 1908.

Reappearance not Equivalent to Inheritance

"The reappearance of a diseased condition in successive generations does not prove that it has been transmitted, or even that it is transmissible.

The Alpine plants which Nageli brought to the botanical garden at Munich were much modified in their new environment, and their descendants were similarly modified.

The unusual characters reappeared generation after generation, but experiment showed that the reappearance was not due to inheritance, but was due to the re-impression of similar modifications on each successive crop. So it is with many diseased states which reappear generation after generation, not because they have been transmitted, but because of the persistence' of the unhealthy stimuli in function or in environment which originally evoked them.

What is Inherited is a Predisposition Not a Disease

In fact, the frequency with which the expression changes almost forces us to conclude that what is inherited is something general, **not specific.**

Another reason for this conclusion is to be found in the fact that the nervous disorder is so often associated with some more **general constitutional disturbance.**

Thus the association of Hysteria, Epilepsy, Chorea, etc., with Rheumatism is well known.

In such cases it is probably more accurate to speak of the inheritance of a constitutional vice, **a derangement of metabolism,** and to avoid expressions which suggest that there is, to begin with, anything definitely wrong with the cerebral machinery.

"A neurotic heredity is seen to resolve itself into general morbid tendencies rather than direct proclivities to special diseases." - *Dr Thomas Smith Clouston, PRCPE*

What is inherited is a predisposition, not a disease; and, fortunately, the predisposition may never realise itself.

What we have just said does not imply that persistent nerve-fatigue and neurasthenia in parents may not favour the outcrop of neurosis in the offspring, for the abnormal nervous condition in the parent may, **through nutritive disturbances, affect the germ-plasm in a generally deleterious way (as Weismann expressly says), and the development of the nervous system of the unborn child may be affected disadvantageously by the abnormal condition of an over-fatigued mother."** - Prof. J. Arthur Thomson, MA, in "Heredity", 1920.

Hereditary or Particular Habits?

"As the gout is a hereditary disease, and affects especially men of a particular habit, its remote causes maybe considered as predisponent and occasional.

The occasional causes of the gout seem to be of 2 kinds:

I. Those which induce a Plethoric State of the body.

II. Those which, in Plethoric **Habits, induce a state of debility.**

1. Of the first kind are a sedentary and indolent manner of life, **a full diet of animal food, and the large use of wine or of other fermented liquors. These circumstances commonly precede the disease;** and if there should be any doubt of their power of producing it, the fact, however, will be rendered sufficiently probable by what has been observed, that, **gout seldom attacks persons employed in constant bodily labour, or persons who live much upon vegetable aliment.** It is also less frequent among those people who make no use of wine or other fermented liquors.

2. Of the second kind of occasional causes which induce debility are, excess in temperance in the use of intoxicating liquors; in digestion, produced either by the quantity or quality of aliments; much application to study or business; night-watching; excessive evacuations; the ceasing of usual labour; the sudden change from a very full to a very spare diet; the large use of acids and acescents; and, lastly, cold applied to the lower extremities.

The first seem to act by increasing the predisposition.

The last are commonly the exciting causes, both of the first attacks, and of the repetitions of the disease.

It is an inflammatory affection of some of the joints which especially constitutes what we call a paroxysm of the gout.

This sometimes comes on suddenly without any warning, but is generally preceded by several symptoms; such as the ceasing. **While these symptoms take place in the lower extremities, the whole body is affected with some degree of torpor and languor, and the functions of the stomach in particular are more or less disturbed.**

The appetite is diminished; and flatulency, or other symptoms of indigestion, are felt." - Dr. William Cullen, MD, Professor of Practice of Physic, University of Edinburgh, in "First lines of the Practice of Physic", 1808.

The Medical Trade Genetic Theory of Disease

"In April 2003, the sequence of the human genome was deposited into public databases. Scientists involved in the Human Genome Project (HGP) reported that the finished sequence consists of overlapping fragments covering 99% of the coding regions of the human genome, with an accuracy of 99.999%. These rapid advances provide powerful tools for determining the causes of, and potentially the cures for, many common, complex diseases such as diabetes, heart disease, Parkinson's disease, bipolar disorder, and asthma." - in "The Genetic Information Nondiscrimination Act of 2008"

The Genetic Causation of Disease Nonsense

Neither diabetes, heart disease (heart conditions, rather), Parkinson's disease (condition, rather), bipolar disorder (condition), and asthma (condition), aren't complex diseases as such, nor are these health state conditions caused by "genes".

This is easy proven, in clinical practice, by stopping and reverse each particular health condition, nourishing the body back to a normal and natural state of health, whereby symptoms gradually disappear, and each condition resolves by the correct therapeutics.

"I was an MD trained in neurology with 7 years working experience. But as they say, doctors make the worst patients. ***When it comes to your own child, you are just as prone to denial and blindness as any other parent. Apart from that, as all the parents of Autistic children discover, doctors know very little about Autism. They are taught how to diagnose it, but when it comes to treatment, official medicine has nothing to offer. On the contrary, it is hell bent on convincing you that there is nothing you can do and that any other opinion is quackery, time is precious for our children. The earlier we start helping them in the right way, the better chance they get to recover from Autism. I believe that every Autistic child has a chance, given appropriate help. And do not let anybody tell you that Autism is incurable!"*** *- Dr Natasha Campbell-McBride, MD, February 2003.*

"My mission, is to make sure that as many people as possible know that the presumed "incurability" of chronic disease is a myth, and that healing is eminently feasible." *- Dr Kelly Brogan, MD in "Own Your Self, The Surprising Path beyond Depression, Anxiety, and Fatigue", 2019.*

Inborn Errors of Metabolism

"Inborn errors of metabolism form a large class of genetic diseases involving congenital disorders of metabolism. The majority are due to defects of single genes that code for enzymes that facilitate conversion of various substances (substrates) into others (products).

In most of the disorders, problems arise due to accumulation of substances which are toxic or interfere with normal function, or to the effects of reduced ability to synthesize essential compounds.

Inborn errors of metabolism are now often referred to as congenital metabolic diseases or inherited metabolic disorders." - in "Wikipedia", October 2019.

Coexistence of Neurological and Ocular Findings

"Given the large number of metabolic diseases associated with eye symptoms.

Many inborn errors are chronic disorders with unpredictable courses.

The occurrence of eye abnormalities in metabolic disorders suggests that they are associated with direct toxic mechanisms of abnormal metabolic products or accumulation of normal metabolites, errors of synthetic pathways or deficient energy metabolism.

Systemic Manifestations

1. Neurological Involvement
2. Hearing Impairment
3. Skin Abnormalities
4. Dysmorphic / Coarse features
5. Cardiovascular Involvement
6. Hepatological Involvement
7. Renal Involvement
8. Skeletal Involvement

9. Hormonal Disturbances
10. Failure to Thrive
11. Progressive Illness / Loss of Previously Acquired Skills." - in "The eye as a window to Inborn Errors of Metabolism", Journal of Inherited Metabolic Disease, 2003.

The Damaged Brain from Iodine Deficiency Cognitive, Behavioural, Neuromotor Aspects

"Epidemiological studies have established the relation of iodine deficiency to endemic cretinism which, in its fully developed form, is characterized by mental deficiency, deaf mutism and spastic diplegia.

However, a second less common variant, myxedematous or hypothyroid cretinism, is characterized by severe hypothyroidism with dwarfism.

Mixed forms occur. It has been shown that both conditions can be prevented by correction of the iodine deficiency before pregnancy.

Cretinism forms part of a spectrum of varying effects of iodine deficiency on growth and development, now termed Iodine Deficiency Disorders (IDD).

A number of recently developed animal models establish the effect of severe iodine deficiency on brain development.

These models are all characterized by the production of severe, maternal and fetal hypothyroidism which is associated with effects on the maturation of the cerebral cortex and cerebellum.

There was a reduced brain weight with a reduced number of cells as indicated by reduced DNA, a greater density of cells in the cerebral cortex and reduced cell acquisition in the cerebellum.

There is now recent evidence indicating transfer of maternal thyroxine across the placental barrier early in pregnancy.

In this way, neurological cretinism might be produced.

Impaired fetal thyroid function would follow in the third trimester and augment the effect of reduced maternal thyroid function.

Impaired fetal thyroid function alone could produce the hypothyroid form of cretinism." - Dr Basil Stuart Hetzel, MD in "The Brain in Iodine Deficiency", Neuropathology and Applied Neurobiology, 1988.

"The establishment of the essential link among iodine deficiency, thyroid function and brain development has emerged from a fascinating combination of clinical, epidemiologic and experimental studies.

The central human phenomenon that focuses this relationship is the condition of endemic cretinism, described from the Middle Ages and characterized in its fully developed form by **severe brain damage, deaf mutism and a spastic state of the hands and feet.**

The demonstration of the prevention of cretinism in a double-blind controlled trial with injections of iodized oil in Papua New Guinea (1966–1970 by Dr Peter Pharoah, MD) established the causal role of iodine deficiency in cretinism by an effect on the developing fetal brain.

Cretinism could not be prevented unless the iodized oil was given before pregnancy." - Dr Basil Stuart Hetzel, MD in "Iodine and Neuropsychological Development", The Journal of Nutrition, Vol. 130, Issue 2, February 2000.

Chapter 7

Breast Cancer

"The most important factor in the production of breast cancer appears to be chronic mastitis." *- Dr W. Sampson Handley, MS, FRCS, in "A System of Surgery", 1912.*

"Perhaps nothing is so surprising as the remarkable and prolonged benefit that will frequently follow an operation on an irremovable carcinoma of the bowel by the complete diversion of the faecal stream from it.

One has also to realise in performing short-circuit operations that life can be carried on in apparently perfect health with only a short length of small intestine.

The surprises which extensive operative measures may afford are often extraordinary, and unless there is evidence **of secondary growth in important organs** there is practically no limit to the field of operation.

No procedure should be considered too radical or too extensive in cases in which **adjacent viscera have become involved in the growth**, and the more familiar the surgeon is with intestinal surgery the more readily will he carry out operations on conditions which may at first sight appear to be hopeless and inoperable.

Only on one single occasion have I excised the large bowel in its entirety. **The operation was done on a patient who appeared to have a malignant growth obstructing the iliac colon. Eleven years previously her left breast had been removed for cancer.**

On opening the abdomen a mass was seen obstructing the iliac colon.

It was peculiar in that it did not surround the bowel, but invaded it along its mesenteric attachment.

While freeing the diseased bowel I found that a similar growth extended in varying amounts along the entire mesentery of the large bowel, even into the pelvic colon.

I therefore proceeded to remove the entire colon, including the anal aperture. The end of the ileum was then sewn to the margin of skin which originally surrounded the anal orifice." - Sir William Arbuthnot Lane, MS, in "The Lancet", 11 December 1920.

Lymph-stasis the Precursor of Cancer

*"I have just read your very interesting address on "**Lymph-stasis the Precursor of Cancer." It appeals to me as the most reasonable and almost certain paper on the origin of cancer that I have ever seen. All others are guess work. Here is a series of facts observations which cannot be disputed."** - Professor W. W. Keen, MD*

"In a paper "Lupus in its Surgical Aspects", Annals of Surgery, January 1925, I showed that tuberculous lupus is essentially a chronic tuberculous lymphangitis of the lymphatic system of the skin.

For years the epithelium in lupus plays only a passive role.

It may be destroyed as in ulcerative lupus, but in the non-ulcerative form of lupus it gives no particular early sign of reaction.

At the edge of an area of non-ulcerative lupus the earliest change seen is that the lymphatic vessel of each papilla is replaced by a solid cord of proliferated endothelial cells.

The appearance of cancer upon an area of old lupus is invariably preceded by such local warty thickenings of the epithelium." - Dr Sampson W. Handley, MD, Surgeon to the Middlesex Hospital, London in **"The Role of Lymph Stasis in the Genesis of Cancer**, The Evidence of Lymphangitis in Papillomata", Annals of Surgery, January 1931.

"Sir Arbuthnot Lane, the eminent London surgeon, has lately called attention to ***the influence of intestinal toxaemia resulting from constipation in causing cancer of the breast and other organs. Dr Lane believes that constipation and the toxaemia resulting from putrefaction in the colon is the chief cause of cancer."*** *- James Empringham, in "Intestinal Gardening for the Prolongation of Youth", 1938.*

Lymphoid Tissue In Health

"The designation "Lymphoid" is applied to a complex of tissues scattered throughout the body.

Since the classical work of his in 1860, much has been written concerning this tissue aggregate.

The lymphoid tissues are not concentrated into one organ, but are widely diffused throughout the body.

Consequently the methods of direct experimental attack, involving complete extirpation, are inapplicable.

Indirect methods of extirpation, such as exposure of the animal to x rays, are not sufficiently selective to be of value.

Failing the experimental approach we have been compelled to fall back upon a clinical and pathological study of the problem.

Here, unfortunately, both the clinician and the pathologist, looking at the lymphoid tissues from their own special angle, have combined to draw a particularly bright red herring across the-trail.

The clinician and the pathologist have repeatedly observed that lymphoid tissues are often the seat of secondary inflammation or malignant deposits.

They have therefore assumed that lymphoid tissue exists for that very purpose, serving as a barrier which holds up for a time, at any rate-the spread of injurious matter." - Dr J. M. Yoffey, MD, FRCS in "The Problem of Lymphoid Tissue", BMJ, 10 December 1932.

Lymphangioplasty

A new method for the relief of the brawny arm of breast-cancer, and for similar conditions of lymphatic Oedema

"Among the complications of breast-cancer none is more terrible than the brawny swelling of the arm which frequently comes on in the later stages of the disease.

The pain to which it gives rise is so excruciating that amputation has been suggested and frequently carried out for its relief. Incisions into the swollen limb have been employed with temporary benefit.

Apart from actual pain and consequent insomnia the discomfort and misery produced by the constant leaden drag of the paralysed, inflexible, and bolster-like limb are important factors in the sum total of misery produced by the disease.

The brawny arm occurs in about 1 case out of every 6 of breast-cancer.

Mr. T. W. Nunn, FRCS (Cancer, p.23, 1899) has maintained that the brawny arm results from the obstruction of the main axillary lymphatics by growth within them.

This view is doubtless a part of the truth, but it fails to explain why no collateral lymphatic circulation is established to carry on the lymph circulation in the arm.

The answer to this question is a corollary to the permeation theory of dissemination in carcinoma.

I may be permitted to recall the main outlines of this view of dissemination, which was stated for the first time in my Hunterian lectures for 1905, and more fully in my recent work on breast cancer. (Cancer of the Breast and its Operative Treatment, 1906) The permeation theory has won such wide acceptance at home and abroad that it may be said to have almost supplanted the embolic theory of dissemination. Indeed, in breast-cancer, the only form of cancer which I have hitherto adequately worked out, the evidence for permeation is so strong that the word "theory" is entirely out of place.

When a carcinoma originates, its cells for a time spread by pushing their way into the intercellular lymphatic spaces of the surrounding tissue.

This process is known as infiltration. Soon, however, the cancer cells penetrate into the small lymphatic vessels which open out of the lymphatic spaces.

Within these vessels the cancer cells find less resistance than in the tissue interspaces, and they commence to spread centrifugally in all directions from their point of origin by actually growing along, and filling up, the lymphatic plexus to which they have obtained access.

This process of permeation may slowly spread in a circle any distance up to a maximum of about two feet from its point of origin. It is doubtful if the process of permeation can so completely obstruct the lymphatic vessels as to cause lymphatic oedema.

But I have been able to show that a permeated lymphatic is ultimately doomed to destruction by a process which must be included among the reparative efforts of the body against carcinoma. This process may be called peri-lymphatic fibrosis and it takes place as follows.

The plug of cancer cells within the lymphatic, continuing to proliferate, finally a splits up the lymphatic.

Around the microscopic trauma thus produced a vigorous round-celled infiltration occurs, to be replaced later by a capsule of newly formed fibrous tissue, which contracts upon, and ultimately strangles, the inclosed cylinder of cancer cells. The original lymphatic vessel is replaced by a solid, microscopic, fibrous cord, and the process of peri-lymphatic fibrosis is complete.

It thus became evident that the permeative spread of a cancer is accompanied by an almost co-extensive destruction of the lymph-vascular system.

The recognition of this fact provided for the first time an adequate pathology for the swollen arm of breast-cancer.

The circle of permeation, spreading from the breast in the plane of the deep fascial lymphatic plexus, sooner or later reaches the arm and begins to travel down it.

After permeation has involved the whole circumference of the arm and has been in turn succeeded by the obliterative process of peri-lymphatic fibrosis, and if, as generally happens, the trunk lymphatics are obstructed by growth of embolic origin in the axillary glands, the arm is utterly cut off from the lymph-vascular system.

No collateral circulation can be established, and the lymph can only return imperfectly by percolating the tissue interspaces. **The swollen (arm of breast-cancer is thus a direct consequence of the actual and complete severance of the lymph-vascular system of the limb from that of the trunk by the conversion of the connecting lymphatics, small and large, into solid cords of a fibrous tissue.**

The change affects first and mainly the lymphatics of the deep fascial lymphatic plexus.

This case, like the former, exhibited within a day or two a remarkable diminution of the tension of the arm and commencing subsidence of the swelling. The patient is already entirely free from nocturnal pain and insomnia.

In conclusion: I may be pardoned for pointing out that the operation of lymphangioplasty is no lucky chance experiment but the definite result of some years of laboratory work in the Cancer Research Laboratories of the Middlesex Hospital. For the opportunities which were afforded me my thanks are due to the Cancer Research Committee of the hospital. Fortunately, the value of lymphangioplasty is capable of immediate proof.

If a similar immediate demonstration were possible of the value of the rational method for extirpating breast-cancer in its earlier stages, which I have described and continue to advocate, a method which is also based throughout upon pathology, I believe that a marked improvement in the general results of the radical operation for breast cancer would be secured and that the field for palliatives such as lymphangioplasty would be correspondingly and fortunately narrowed." - Dr W. Sampson Handley, MS, FRCS, in "Lymphangioplasty: A new method for the relief of the brawny arm of breast-cancer, and for similar conditions of lymphatic Oedema", The Lancet, 14 March 1908.

Lymph-Stasis
The Precursor of Breast Cancer

"In the case of the breast the appearance which Lenthal Cheatle calls the "laciform edge" is a diffuse papillomatosis of the smaller ducts.

He points to this appearance as a precursor of malignancy.

Nearly every case of breast carcinoma originates in the ducts.

Duct papilloma of the breast is recognized clinically when it arises in the larger ducts and causes serous or blood-stained discharge from the nipple.

Such cases, if neglected, are known to end usually in carcinoma.

I was able to demonstrate the occurrence of carcinomatous degeneration in a duct papilloma of the breast, which had apparently only existed for a very short time.

At the time of the operation the papilloma was suffering from carcinoma, but the disease had not yet attacked the tissues of the patient herself.

These are exactly the appearances given by blocked lymphatics which have lost their lumen by proliferation of their endothelium, as I know from my experience of lupus and elephantiasis.

In other words, the patient had suffered from a chronic lymphangitis of the tissues of the breast, and it appears highly probable that the resulting lymph-stasis was one of the main exciting causes of the papilloma which so rapidly developed into a potential carcinoma.

May not mild, undetected tuberculous infection of the mammary glands in childhood leave behind them areas of **lymph-stasis which give rise in middle life to duct papillomata and carcinoma of the breast?"** - Dr W. Sampson Handley, MS, FRCS, Surgeon to the Middlesex Cancer Hospital, London, in **"Lymph-Stasis The Precursor of Cancer"**, The Canadian Medical Association Journal, November 1929.

Lymphatic Obstruction as the Cause of Chronic Mastitis

The pathology of chronic mastitis, and its relations to cancer of the breast.

Reference must be made to the work of Dr William Francis Victor Bonney, FRCP, who found traces of chronic mastitis in all the early-breast carcinomata he examined.

"Multiple and alternative chains of causation will be found to converge to a single line of links which leads through local lymphatic obstruction, often manifested by papillomatous hypertrophy, and certain consequent metabolic changes to the onset of a carcinoma, and that not otherwise can a cancer be produced.

The lymph-stasis theory of the genesis of cancer denies neither the infective nor the irritation theories.

It reduces them in rank and absorbs them in a larger generalisation.

It denies the existence of any one specific cancer organism or parasite, and **asserts that the cancerogenic action of irritants upon the epithelium is exerted indirectly through the obstructive lymphangitis they set up in the lymphatic vessels of the sub-epithelial connective tissue."** - Dr W. Sampson Handley MS, FRCS, in "The Genesis of Cancer", 1931.

Chronic Mastitis

"A study of the physiology of the breast shows that nature's method of inducing proliferation is to pour out an excess of lymph into the tissue interspaces, and provides further evidence of the important part played by lymph stasis in physiology and in the genesis of cancer.

The recurrent monthly physiological lymph stasis which occurs in the breast temporarily stimulates the proliferation of all its tissues.

If lymphatic return from the breast is hindered by local areas of lymph obstruction, the stimulus of lymph congestion instead of being periodic becomes permanent.

The lobe whose duct has thus been infected is unable to empty itself of lymph, and receives a permanent stimulus to proliferation.

The lymphatics are blocked by proliferation of their own endothelium.

The ducts are surrounded by a sheath of adventitious fibrous tissue due to proliferation and blocking of the periductal lymphatics.

Papillomata appear within them as the nutritional stimulus begins to affect the epithelium, and finally carcinoma may supervene.

A local factor must be present, is permanent lymph stasis. The various steps which lead from lymph stasis through chronic mastitis to cancer may be easily demonstrated histologically.

Congenital moles in which developmental defects of the lymphatic system lead to local areas of lymphatic obstruction and papillomatous hypertrophy, and sometimes to carcinoma or sarcoma.

Prevention in the Light of Aetiology

The prevention of cancer is to maintain the lymphatic circulation throughout the body in a state of high activity.

It is a well known that Cancer is relatively infrequent in wild animals, due to an active life, which results in a vigour of lymphatic circulation.

Even in local areas of lymph stasis a sufficient minimum flow may thus be secured to avert a threatened carcinoma.

E. H. Starling showed **a resting limb produces hardly any lymph.**

Civilised man is apt to overstrain his glandular mechanisms, especially those of digestion, while at the same time he allows his muscles to fall into disuse.

Glandular secretion increases the production of lymph without doing anything to promote the lymphatic circulation.

Muscular exercise on the contrary brings into play all the forces which maintain the lymphatic circulation, the pulsation of adjoining arteries, the massage action of muscular contraction and of bodily movements, and the aspiration effects of deep respiration.

Thus regular exercise and moderation in eating, stave off cancer, but a heavier stress must be laid on the avoidance of infections and their prompt treatment, for the small local areas of lymph block in which cancer arises are most often due to bacterial infections, severe or slight.

In this connexion dental infection requires special stress, for as **F. St. J. Steadman showed, cancer of a dentally clean mouth is a rarity." - Dr W. Sampson Handley, FRCS, in "The Prevention of Cancer", The Lancet, 2 May 1936.**

The Real Story Behind the Pink Ribbon

Charlotte Hayey, who had battled breast cancer, introduced the concept of a peach-colored breast cancer awareness ribbon.

In the early 1990s, the 68-year-old Haley began making peach ribbons by hand in her home.

Her daughter, sister and grandmother also had breast cancer.

Haley was strictly grass-roots, distributed thousands of ribbons and cards out at the local supermarket, and writing prominent women, everyone from former First Ladies to Dear Abby.

Her message spread by word of mouth, her cards read:

"The National Cancer Institute annual budget is $1.8 Billion USD, only 5% goes for cancer prevention. Help us wake up our legislators and America by wearing this ribbon."

As the word spread, executives from "Estée Lauder" and "Self Magazine", asked Haley for permission to use her ribbon. Haley refused saying the companies were too commercial. But "Self Magazine" really wanted to have a ribbon. The magazine consulted its lawyers and was advised to come up with another colour. It chose pink, a colour that focus groups say is soothing, comforting and healing, a far cry from what breast cancer really is. Soon Charlotte Haley's grass-roots peach ribbon was history, and her original idea became the pink ribbon that has come to be known as the worldwide symbol for breast cancer.

In 1936, Dr W. Sampson Handley, FRCS, in "The Prevention of Cancer", The Lancet, pointed out the cause of Breast Cancer stating:

> ***"A local factor must be present, is permanent lymph stasis. The various steps which lead from lymph stasis through chronic mastitis to cancer may be easily demonstrated histologically".***
>
> ***"The degree of malignancy, in which the nearest chain of lymphatic glands is infected with the morbid growth, offers also some points for consideration; in the first place, it is to be noted that the disease occurring in the glands is invariably of the same nature as that of the primary tumour from which the infection has spread. In all the cases which I examined this has been the case, and I have not met with a single reported exception to the rule which has borne the test of careful scrutiny. It is very seldom possible to trace the morbid elements extending along the lymphatic vessels. I have seen two cases in which the lymphatics were visibly distended with what seemed to be cancerous material; once leading from a scirrhous breast to the axillary glands, and another time stretching away from a soft cancer of the uterus."*** *- Dr Henry Arnott, FRCS in "Cancer; its Varieties, their Histology and Diagnosis", 1872.*

"Cancer of the breast occurs largely among civilized women. In those countries where breasts are allowed to be exposed, that is, are not compressed or irritated by clothing, it is rare." *- Dr. John Mayo, MD in "Susceptibility to Cancer", Minnesota Medicine, Vol.13, 1930.*

"Even in the proper breast size, most brassieres envelop or bind the breast in such a fashion that normal circulation and freedom of movement is constricted. Many cases of breast cancer have been attributed to such breast constriction as caused by improperly fitted brassieres." *- in a Bra patent, 1950.*

"Lymphatics of the Breast - The network of extensively communicating small lymphatic vessels from both the overlying skin and parenchyma of the different regions of the mammary gland. ***These vessels join into several collecting ducts that are connected to specific lymph nodes within each separate lymph node basin. This broad anatomical concept originates from the numerous lymphatic drainage patterns that have been observed during lymphatic mapping of breast cancer.*** *A centripetal lymph flow from the mammary ducts to a common subareolar plexus. From this lymphatic plexus, a medial and a lateral collecting vessel were assumed to pass to the axilla. This system was suggested to have multiple anastomoses with a superficial system consisting of dermal lymphatics from the upper anterolateral chest wall, which also drain to the axilla. Posterior lymphatic network of the breast - This posterior network, which was originally described at the end of the 18th century, mainly drains to the internal mammary chain and to interpectoral lymph nodes. Collecting lymphatic vessels at the posterior aspect of the breast draining to these lymphatic basins may be encountered in blue-dye mapping during mastectomy." - Dr P. J. Tanis, MD in "The Anatomy and Physiology of Lymphatic Circulation", 2013.*

"The problem caused by bras is due to their constriction of the breasts, particularly of the lymphatic system, which is responsible for eliminating toxins, cancer cells, bacteria, and cellular debris from the breasts. The lymphatics are an essential circulatory pathway of the immune system. Constrict lymph vessels with tight bras, and the result is lymph fluid congestion in the breasts, or lymph stasis, along with tissue Toxification. This can cause breast pain and cysts. Over time, as the breasts progressively become toxic from impaired lymphatic drainage, cancer could result." *- Sydney Ross Singer, Medical Anthropologist in* ***"How Bras cause Lymph Stasis and Breast Cancer",*** *2019.*

"The impairment of lymph circulation that specifically promotes lymph angiogenesis in addition to causing local immune dysfunction. Furthermore, several other cutaneous malignancies have been reported to appear in the presence of lymph stasis, such as basal cell carcinoma, squamous cell carcinoma, Merkel cell carcinoma, melanoma, malignant fibrous histiocytoma and lymphoma." *- De Vita Valerio, MD and Ruocco Eleonora, MD in* ***"Lymph stasis promotes tumor growth****", Journal of Dermatological Science, 2018.*

"In addition, bacterial infections often develop in the lymphedematous lesion, which ***would be mainly caused by immune suppression due to lymph stasis. Considering the fact that lymph stasis may induce malignant tumor generation as well as tumor progression, we should avoid unnecessary lymphatic disruption in any surgeries and carefully consider the flap design to minimalize lymphatic disruption even in cases with benign tumors."*** *- N. Yoshiyuki, F. Yasuhiro, O. Naoko, W. Rei, I. Yosuke, in "Reply: Lymph Stasis Promotes Tumor Growth", Journal of Dermatological Science, 2018.*

"[Osler with a patient] She was an old woman of 75 in hospital for acute rheumatism, who also showed a wind tumor of the Steno's duct the size of a walnut, which she could inflate and deflate at pleasure. Osler said it was the second one he had seen. Both of these conditions, however, were incidental to her general history. 'Mother' said Osler, 'I would like you to tell Dr Walsh something about your past life. **When were you first in hospital?' 'At 27. 'What was the matter' 'I had a sarcoma of the right knee' 'What did they do for it?' They cut off the right leg at the hip. 'Did you get entirely well? Yes, entirely well. 'When were you in again?' 'At 42. I had cancer of the breast. They cut off the left breast and the left arm. After that I was entirely well. 'What are you in the hospital for now?' 'For rheumatism;** and Doctor,' she said with tears in her voice and catching his hand, 'I hope you will make me well in a hurry, because I have to go home to take care of my grandchildren.' **Osler, in short, never forgot the patient in his interest in the malady."** - Harvey Cushing, in "The Life of Sir William Osler", 1940.

Lymph Stasis is thus recognized as the Main Risk Factor, In The Causation of Breast Cancer. In other words Lymphatic Stasis is a recurrent precursor to Breast Cancer.

Thus the questions should be made: What is hindering the lymphatic circulation? A Properly Trained Emunctologist should be able to answer this!

Note on Antiperspirants

Aluminium-containing antiperspirants prevent toxins from being expelled by the body. The exposure leads to the absorption of any toxins that antiperspirants have, clogging up the lymph nodes around the armpits, such as the axillary lymph nodes, which are connected to the breasts, thus transporting this same toxins, these may aid or contribute, in the establishment of lymph stasis. Thus the solution here should be to have more baths and showers.

Breast Cancer Screening

"The philosophy of breast cancer screening is based on wishful thinking that early cancer is curable cancer, though no one knows what is "early."

Unable to admit ignorance and defeat, cancer **propagandists have now turned to blaming the victims: they consume too much fat, they do not practise breast self-examination, they succumb to "irrational" fears and delay reporting the early symptoms. It would appear that no woman needs to die of breast cancer if she reads and heeds the leaflets of the cancer societies and has her breasts examined regularly. Adherence to these myths and avoidance of reality undermines the credibility of the medical profession with the public.**

> ***"Early" intervention as the only hope for cure means little in practice.*** *If "early" means visible, palpable, or symptomatic, then, clearly, it is too late.* ***20% of "occult" cancers, detectable only by mammography, had metastasised to the axilla."*** *- in "The 1982 National Survey of Carcinoma of the Breast in the United States by American College of Surgeons", Surg Gynecol Obstet, 1984.*

It is unacceptable to remove breasts on the basis of theoretical speculation. The earliest possible intervention is removal of a healthy breast.

The belief that the fewer organs we have the less likely we are to die is "reductio ad absurdum".

The logic of breast cancer treatment, or rather the lack of it, can be illustrated by an imaginary dialogue (inspired by Kardinal and Yarbro, in "A Conceptual History of Cancer" 1979) between a Dogmatist, shielded by "conceptual rationalisation" (brilliantly exposed by Baum in "Scientific Empiricism, and Clinical Medicine", Journal Royal Society of Medicine 1981) and an Empiricist who judges the theory by its fruits:

Dogmatist: Early detection is surest protection.
Empiricist: From what?

Dogmatist: From dying of disseminated cancer.
Empiricist: We know that breast cancer disseminates long before it is clinically detectable.

Dogmatist: Early cancer is a localised disease.
Empiricist: Why then do even your Stage I patients succumb if they are followed for long enough?

Dogmatist: They either get a new breast cancer or they were wrongly staged. I never take chances and, like Halsted, I cut it all out.
Empiricist: But Americans have just shown that radical mastectomy is no better than simple mastectomy.

Dogmatist: If you read the reports carefully you will know that with simple mastectomy they irradiated the axilla or used chemotherapy.
Empiricist: Existing evidence shows no benefit from radiotherapy or chemotherapy on mortality rates.

Dogmatist: My dear friend, you are a therapeutic nihilist. To cure cancer, surely, all cancer cells must be removed, first by radical surgery, and then by chemotherapy and radiation to gobble up the occasional cell which has gone astray.
Empiricist: But it does not cure the patients.

Dogmatist: I have always maintained that early detection is the only sure protection.
Empiricist: Against what?

Dogmatist: Exits, slamming door." - Dr Petr Skrabanek, MD in **"False Premises and False Promises",** 2000.

Intestinal Toxaemia in its Relation to Cancer

"Intestinal Toxaemia is no new subject.

For the past hundred years an enormous amount of work has been expended upon it, both medically and surgically, in an effort to counter its ill effects, and even back to the early days of our profession we find treatment and drugs which had as their object, **their one and main object, the cleansing of the bowel.**

But as the importance of this condition is being recognized, and as further work is being done, so we are better able to understand the details of its nature and the more exact conditions by which it obtains its deleterious results. **The powerful and far-reaching effects of intestinal toxaemia are as yet only beginning to be understood.**

Its wholesale ravages upon civilization, ravages the more difficult to understand because of its insidious nature, have yet to be realized. The sure, steady lowering of resistance, and the predisposition to disease, and the benefits that accrue from its removal, in the vast majority of all diseases, is yet to be appreciated by the profession. **The primary cause of this abnormality is essentially diet, and secondly, infection, which is able to take place only through incorrect food."** - Dr Edward Bach, MD in "British Homoeopathic Journal, October 1924.

> ***"Perhaps Professor James Eustace Radclyffe McDonagh, FRCS was right, after all, when he wrote: "Over £4 Million pounds have been wasted upon cancer research when the nature of the condition should at all times have been obvious*** *and its prevention solely a matter of proper living." - in "Hearings Before the Subcommittee, Public Health, Hospitals and Charities, Committee on the District of Columbia, House of Representatives, January 1938.*

Constipation and Breast Cancer

"**Diet may contribute to the cause of Breast Cancer, and Benign Breast Disease since the bacterial flora of the large intestine can transform endogenous and exogenous sterols and fatty acids into a variety of metabolites, including polycyclic carcinogens and mutagens.**

In addition, faecal microorganisms have been shown to metabolise oestrogen sulphate and glucuronide conjugates. We have shown that the non-lactating breast actively takes up and secretes into breast fluid chemical substances from the blood.

We report our preliminary findings on epithelial dysplasia in nipple aspirates of breast fluid in relation to bowel function." - Dr Nicholas L. Petrakis, MD, Dr Eileen B. King, MD, Department of Epidemiology and International Health, University of California, San Francisco, California, in "Cytological abnormalities in nipple aspirates of breast fluid from women with severe constipation", Lancet, pages 1203-5, 28 November 1981.

"Physicians Nicholas L. Petrakis and Eileen B. King of the University of California, writing in Lancet, have found that women who have 2 or fewer bowel movements per week have 4 times the risk of breast disease (benign or malignant) as women who have one or more bowel movements per day.

They studied more than 5,000 woman by employing nipple aspiration to get small sample of breast fluid, which is normally secreted by these glands. Investigating the presence of large numbers of abnormal (dysplastic) cells.

They reviewed the history of past researchers who failed to identify constipation as a factor in the development of malignancies.

As a matter of curiosity, **he chose to include questions concerning bowel function in the research protocols developed for his studies of breast-fluid chemistry and cytology.**

"We found that 5% of women having 1 bowel movement per day would have abnormal dysplastic cells, while 10% of women having fewer than 1 bowel movement a day would have this abnormality, and 20% of women having 2 or fewer bowel movements per week would show these dysplastic changes in cell character of the breast fluid. We found that 70% of the women we tested had exogenous chemicals in the breast fluid. We don't know why they are there, but we do know that the breast cells are in contact with the bloodstream, which will contain foreign substances absorbed into the Circulation System, from the Skin, Lungs, and the Gastrointestinal Tract."
- Dr Nicholas L. Petrakis, MD

Dr Petrakis also cited dietary considerations such as; the bowels of people who eat meat contain greater amounts of mutagenic substances than do the bowels of those who abstain from eating meat.

And that the Intestinal Bacterial Flora of meat eaters include certain species that interfere with so-called "glucuronide linkages" necessary to complete the excretion of estrogen delivered to the gut in bile." - Dr Cory SerVaas, MD in "Saturday Evening Post", pages 124-128, April 1982.

"The surgery of malignant disease is not the surgery of organs, it is the anatomy of the lymphatic system." *- Lord Moynihan, MD, FRCS, in "Surgery, Gynecology & Obstetrics", 1908.*

National Health and Examination Survey

"The purpose of the NHANES (National Health and Examination Survey) Epidemiologic Follow-up Study (NHEFS) was to investigate prospectively morbidity and mortality outcomes among the 14,407 adults originally examined in 1971-75.

The specific objective of this intramural project was to investigate a number of nutrition and cancer.

Results from NHEFS studies that have been published or in press include:

1. Moderate alcohol consumption (3 or more drinks per week) was positively associated with breast cancer. The association was stronger in younger, leaner, and premenopausal women. The potential role of alcohol consumption in the etiology of breast cancer has been prominent.
2. in several recent studies and is particularly important because it is a risk factor that can be modified.
3. Men and women in the lowest quartile of body stature were at reduced risk of cancer relative to those in the upper three quartiles. This association was present especially for cancers of the large bowel in men and women and breast in women.
4. In an investigation of a hypothesized association between **constipation and breast cancer, breast cancer risk was found to be slightly increased in women with decreased frequency of bowel movements** and firm stool consistency.
5. Our analysis of data from the first 5 years of follow-up found that among women with biopsy proven benign breast disease there was a direct relation between breast cancer risk and degree of Epithelial Atypia (lesion of the breast terminal duct lobular units)." - in "Annual Report", National Cancer Institute, 1 October 1989- 31 September 1990.

*"**The lesson regarding carcinoma of the breast which must be inferred from this anatomy is that when emboli of carcinoma cells filter through the defence zone of axillary lymph nodes and reach the subclavian trunk, their route of escape into the venous circulation is short and easy.** Metastases into the internal mammary nodes are almost as close to this danger point. **A description of the local extension and the regional lymph node metastasis of breast carcinoma must include a discussion of the method by which the disease extends along lymphatics.** Permeation rather than embolism is the usual method of dissemination. **The main route for lymphatic metastasis from breast carcinoma is through the axilla, the axillary nodes being the first to be involved in the regional lymphatic filter.***

*The left lateroaortic nodes rest on the vertebral origins of the psoas muscle. The right lateroaortic chain is augmented by the laterocaval, precaval, retrocaval, and interaorticovenous nodes. Retroaortic nodes are situated directly anterior to the bodies of the 3rd and 4th lumbar vertebrae. While some laterocaval, precaval, and lateroaortic nodes contribute efferents to the preaortic inferior and superior mesenteric plexus, the principal pathways to the cisterna chyli lie behind the aorta, where the convergence of these lymphatic channels form the right and left lumbar trunks. **This complex, interrelated system of superior mesenteric, inferior***

***mesenteric, and iliopelvic lymphatics provides the principal and collateral routes for lymphatic drainage of the colon and rectum."** - Dr Cushman Davis Haagensen, MD in "The Lymphatics in Cancer", 1975.*

Chapter 8

Genetic Fudge

"A tale, told by an idiot, full of sound and fury, signifying nothing." *- Shakespeare in Macbeth*

"It must be confessed that science gained very little when these terms: were invented. ***Of all the illusions of modern physiologists, the most deplorable has been that of believing that by forging a new term, vital principle or vital force, they have done something analogous to the discovery of gravity."*** *- François Magendie, Pioneer of experimental physiology, in "Compendium of Physiology", 1823.*

"Almost every disease is said to be idiopathic (without known cause) or genetic. In short, our main stream medical system is hopelessly inept and/or corrupt. The treatment of cancer and degenerative diseases is a national scandal. The sooner you learn this, the better off you will be." *- Dr Allan Greenberg, MD, 24 December 2002.*

"Genomic screening is costly. Significant resources are invested during assay development to determine how best to pursue factors involved in a biological system. It seems contradictory that the investment in the cell-based assay has not been complemented by an investment in understanding the interpretation of screening results. We measured the reproducibility between 2 genomic screens by directly testing how much overlap there was between specific analysis methods. Applying the statistical methods SR, MAD, z-score, and SSMD by following the recommendations of each method's authors produced a broad range of overlap. It would seem in some cases

that there was little overlap between identical screens. Unfortunately, the length of the hit lists was dramatically different. To compare methodologies within and between genomic screens, we chose to compare lists composed of the same number of hits. The top 200 hits for any method produced between 39% and 49% overlap. Expanding the list to include the top 500 hits did not improve the apparent reproducibility as the range was 32% to 41% overlap. The best indication that genomic data are regularly reproducible was established by comparing the top 200 from any individual method to the top 500 from the alternate screen. ***This situation reflects the stochastic nature of biological assays."*** *- Nicholas J. Barrows, in "Factors Affecting Reproducibility between Genome-Scale siRNA-Based Screens", Journal of Biomolecular Screening, 12 July 2010.*

"To mitigate some of the risks of investments ultimately being wasted, most pharmaceutical companies run in-house target validation programmes. However, ***validation projects that were started in our company based on exciting published data have often resulted in disillusionment when key data could not be reproduced. Talking to scientists, both in academia and in industry, there seems to be a general impression that many results that are published are hard to reproduce. Surprisingly, even publications in prestigious journals or from several independent groups did not ensure reproducibility. In almost 2/3 of the projects, there were inconsistencies between published data and in-house data.*** *Our findings are mirrored by "gut feelings" expressed in personal communications with scientists from academia or other companies, as well as published observations. An unspoken rule among early-stage venture capital firms that* ***"at least 50% of published studies, even those in top-tier academic journals, can't be repeated with the same conclusions by an industrial lab."*** *- Dr Florian Prinz, MD in*

"Believe it or not: how much can we rely on published data on potential drug targets?", Nature Reviews Drug Discovery , 31 August 2011.

"The scientific community assumes that the claims in a preclinical study can be taken at face value, that although there might be some errors in detail, the main message of the paper can be relied on and the data will, for the most part, stand the test of time. Unfortunately, this is not always the case. ***Some non-reproducible preclinical papers had spawned an entire field, with hundreds of secondary publications that expanded on elements of the original observation. More troubling, some of the research has triggered a series of clinical studies, suggesting that many patients had subjected themselves to a trial of a regimen or agent that probably wouldn't work."*** *- C. Glenn Begley, Lee M. Ellis in "Confirming research findings", Nature, 28 March 2012*

"Research has discovered that, about 90 % of all cells and genetic material in the human body, is our gut flora." *- Dr. Natasha Campbell McBride, MD in "The Heal Your Gut", 2014.*

"A one day controlled mindfulness intervention reduced multiple genes associated with inflammation." *- Kalaman P. et al, Pschoneuroen, 2014.*

"Over the past decade scientists in the haematology and oncology department at the biotechnology firm Amgen tried to confirm published findings related to that work, 53 papers were deemed "landmark" studies. It was acknowledged from the outset that some of the data might not hold up, because papers were deliberately selected that described something completely new, such as fresh approaches to targeting cancers or alternative

clinical uses for existing therapeutics. Nevertheless, ***scientific findings were confirmed in only 6 cases. Unfortunately, Amgen's findings are consistent with those of others. A team at Bayer HealthCare in Germany last year reported that only about 25% of published preclinical studies could be validated*** *to the point at which projects could continue."- in "Nature", 28 March 2012.*

"Something is rotten in the state of biomedical research. Everyone who works in the field knows this on some level. *We applaud presentations by colleagues at conferences, hoping that they will extend the same courtesy to us, but* ***we know in our hearts that the majority or even the vast majority of our research claims are false."*** *- Dr Danielle Teller, MD in "Nearly all of our medical research is wrong", Quartz, 29 January 2016.*

"The theory of genes is ultimately disempowering. It says, nothing that you do matters*; not what you eat, expose yourself to believe you're just born broken. So take this pill and be a good patient." - Dr Kelly Brogan MD, 16 April 2018.*

Genetics Another Medical Trade Fantasy

"In Medical Trade Schools during the first week some of the lecturers will explain to the class that: **"If you come here to find out what are the causes of disease, let me explain to you that the causes of disease are either: unknown, congenital or genetic".**

The smoking Gun: The first time that daunted upon me, on the Medical Trade deception of what they call "Genetic Predisposition to Disease, genetic disease genes", was when in conversation on the topic of fundraising for the Breast Cancer Research, the person mentioned that the cause of Breast Cancer was BRCA1, and BRCA2 genes.

I had just finished at the time 2 chapters, on 2 different books one on Lymph Stasis, and the other on Breast Cancer.

It caught me by surprise that the Medical Trade had actually invented such a fallacy, I knew that the cause was not genetic, neither a gene, like the rest of the population, thinking what else could we expect from the Medical Trade.

I thought not, about it much, knowing that it would be difficult to change opinions.

Around a month soon after, I came across, upon yet another "genetic causation" of disease claim, this time the Medical Trade graduates where claiming that Alzheimer's was due to genetics.

This was when, I started realizing the extent of yet another intricate and complex deception by the Medical Trade. The population is not only being drugged, but it is also being duped." - Rui Alexandre Gabirro, Emunctologist

Ichthyosis

> ***"Hydropathy as a means of remedying many diseases it is a valuable addition to therapeutics.*** *Though numerous medical writers have praised water as a remedial agent, we think it has been too seldom used, and probably the system of Priessnitz* ***may eventually place the therapeutic agency of cold water more strikingly before the public mind. Already, in the hospital of St. Louis, M. Gibert has submitted 8 patients to the external as well as the internal application of cold water, for severe diseases of the skin. Two cases of ichthyosis, and one of prurigo, were completely cured."*** *- in "The Lancet", 1842.*

"In the Adjuster, on pages 237 to 255, is given a full description by many authors of this "constitutional and **nutritive disorder."** It is my desire to make you and the world acquainted with the etiology of this well-known disease, characterized by disorders of the digestive system and alterations in the shape and structure of bones.

Substances known as poison are noxious because of their exciting or depressing effects on the nervous system and their adaptation to modify functions; for this reason and for such a purpose physicians prescribe drugs.

Stover's case of ichthyosis congenita, dry scaly tetter, a skin disease, a squamous scale-like covering from the sebaceous glands, which disappeared in summer and re-appeared in winter, covered the posterior portions of the forearms and the dorsal region of the back, were relieved by adjusting the 12th dorsal for the former two diseases and the fifth dorsal for the latter two conditions." - Dr D. D. Palmer, DC, in "The Chiropractor", 1914.

Medical Trade Nonsense:

"What causes ichthyosis: Most people with ichthyosis have inherited a particular faulty gene from their parent. The signs and symptoms of inherited ichthyosis appear at birth or within the first year of life. The faulty gene affects the rate at which the skin regenerates – either the shedding of old skin cells is too slow, or the skin cells reproduce at a much faster rate than they can shed old skin."- in "nhs.uk/conditions/ichthyosis/", 2019.

Medical Trade Research, Cancer Research UK, And Big Pharma

Finding a Common Genetic Fault in Melanoma (2002)

"Our pioneering study reveals how a gene called BRAF is faulty in a wide range of cancers. It's the 1st success for the ambitious Cancer Genome Project.

The project aims to pinpoint all of the genes that can go wrong in cancer cells." - in "Beating cancer: our progress", Cancer Research UK, 2019.

"**Cancers arise owing to the accumulation of mutations in critical genes** that alter normal programmes of cell proliferation, differentiation and death." - Richard Marais, **Richard Wooster,** in "Mutations of the BRAF gene in human cancer", Nature, Vol. 417, 2002.

"Richard Marais research on BRAF led to the development of the Drug Vemurafenib which is used to treat melanoma.

Continuing Our Milestones series on Cancer Research UK-funded science that has made a big impact, we turn to BRAF – a gene that is faulty in more than half of all malignant melanomas and many other cancers.

Our work paved the way for the development of the drug Zelboraf (vemurafenib), which is bringing precious extra time for people with advanced melanoma. The research was funded by Cancer Research UK, the Wellcome Trust, The Institute of Cancer Research, Regione Autonoma della Sardegna and Breakthrough Breast Cancer, working together as part of the Cancer Genome Project.

This publication was the first major success for the Cancer Genome Project – an ambitious attempt to search for every human gene that stops working properly in cancer cells.

The publication sparked a surge of interest in BRAF, which has thrown up exciting new leads for cancer drugs of the future.

Researchers suggest that around 5,000 people die every year from different cancers with BRAF faults – and around 7 out of 10 melanomas are caused by BRAF faults." - in "Finding faults in the BRAF gene", Cancer Research UK , 2009.

It is curious, to find that the Chap who made the research and published the so-called scientific medical trade research is also the same Fella who conveniently developed a drug.

Another Mate who seems to muck much about these same type marshes and, newly findings, the more the better , newly found: "disease causing genes", (and he finds loads of genes causing disease).

Identification of the Breast Cancer Susceptibility Gene BRCA2

"In Western Europe and the United States approximately 1 in 12 women develop breast cancer.

A small proportion of breast cancer cases, in particular those arising at a young age, are attributable to a highly penetrant, autosomal dominant predisposition to the disease.

The breast cancer susceptibility gene, BRCA2, was recently localized to chromosome 13q12-q13.

Here we report the identification of a gene in which we have detected 6 different germline mutations in breast cancer families that are likely to be due to BRCA2.

Each mutation causes serious disruption to the open reading frame of the transcriptional unit.

The results indicate that this is the BRCA2 gene." - **Richard Wooster**, Section of Molecular Carcinogenesis, Haddow Laboratories, Sutton, Surrey, UK, in "Identification of the breast cancer susceptibility gene BRCA2", Nature, Vol. 378, 1995.

> ***"In extremely rare cases the mutation (BRCA2) is not hereditary, but arises spontaneously."*** *- in "It's in our genes", DW Documentary, 2019.*

Cancer Classification with DNA Microarrays, is: Less More?

"The dissection of cancer and the underlying molecular processes that are defective in cancer cells has become an important tool in the fight against this disease.

DNA microarrays can provide detailed information of the expression pattern of thousands of genes in tumours.

But how much of this data is useful and is some superfluous?

Can array data be used to identify a handful of critical genes that will lead to a more-detailed taxonomy of tumours

and can this or similar array data be used to predict clinical outcome?

Primary tumours will give us the statistical power to draw these conclusions, but can cancer cell lines be used as models to point us in the right direction?" - **Richard Wooster**, Section of Molecular Carcinogenesis, Haddow Laboratories, Institute of Cancer Research, Sutton, Surrey, UK in "Cancer classification with DNA microarrays is less more?", Trends in Genetics, August 2000.

The new class of potentially transformative Medicines to treat diseases Caused by Protein or Gene Dysfunction

"Translate Bio, Inc. (Nasdaq: TBIO), a clinical-stage messenger RNA (mRNA) therapeutics company developing a new class of potentially transformative medicines to treat diseases caused by protein or gene dysfunction, appointed of Dr **Richard Wooster** as chief scientific officer in 2019.

Dr Wooster has three decades of experience with a focus on cancer genetics and pharmaceutical drug discovery and development.

In his most recent role as President of Research & Development and Chief Scientific Officer at Tarveda Therapeutics Inc., he was responsible for the company's R&D strategy, successfully developing an innovative platform with multiple pipeline programs at different stages of development, from discovery to clinical-stage. Previously, **he was Vice President and Discovery Performance Unit Head in Oncology at GlaxoSmithKline (GSK) where he led the evaluation of the metabolic pathways that are deregulated in cancer and the PI3K portfolio of and other protein kinase inhibitors.**

Before this, Dr. Wooster led the translational medicine group in Oncology at GSK and worked on Tykerb, Mekinist and Tafinlar. During his academic career, Dr Wooster discovered the breast cancer susceptibility gene BRCA2, was one of the founders of the Cancer Genome Project at the Welcome Trust Sanger Institute where mutations in BRAF were first discovered." - in "Translate Bio, Inc.", 2019.

"What I was told 8 years ago, at diagnosis, that autism is an inborn genetic disorder, has been debunked by scientific research over the past couple of years. We're on the cusp of a massive paradigm shift, which understands autism to be the result of a complex intermeshing of degenerative diseases and comorbidities, largely created and exacerbated by environmental factors. ***Perpetuating the myth of autism as a primarily genetic disorder is a disservice to those who might benefit from treatment, and diverts attention from non-genetic causes****." - Adrienne Murphy in "The Irish Times", 18 March 2014.*

It is well known that many parents report their children behaving with Autism, after Vaccinating them.

The "genetic element" was not present up and until Vaccination happened.

"In adults, aluminium exposure can lead to apparently age-related neurological deficits resembling Alzheimer's and has been linked to this disease, injection of aluminium adjuvants in an attempt to model Gulf War syndrome and associated neurological deficits leads to an ALS phenotype in young male mice. In young children, a highly significant correlation exists between the number of pediatric aluminium-adjuvanted Vaccines administered and the rate of autism spectrum disorders." *- in "Aluminum in the Central Nervous System", Immunologic Research, July 2013.*

"There are more, and more children with Attention Deficit Hyperactivity or Autism in California. Between 1990 and 2001 the number of children diagnosed with Autism, increased by 600%. Figures hard to believe by their progression so strong and fast." *- in "Demain, Tous Crétins", Arte France, 2017.*

Graves Disease

"A genetic predisposition for Graves disease is seen, with some people more prone to develop TSH receptor activating antibodies due to a genetic cause. Human leukocyte antigen DR (especially DR3) appears to play a role ("Infection, thyroid disease, and autoimmunity", Endocrine Reviews, Feb. 1993). To date, no clear genetic defect has been found to point to a single-gene cause. Genes believed to be involved include those for thyroglobulin, thyrotropin receptor, protein tyrosine phosphatase nonreceptor type 22, and cytotoxic T-lymphocyte–associated antigen 4, among others ("Graves Disease", New England Journal of Medicine, Oct. 2016)." - in Wikipedia, 2019.

Resolving Graves Disease Thorough Lifestyle Changes

A 34 Caucasian female diagnosed with Graves disease for 5 years overcome the condition by implementation of lifestyle modifications, including a more healthy diet, oral health interventions, practice of meditation, and avoidance of environmental toxicants.

The person did not take any antithyroid drugs or beta-blockers during her treatment period, nor any other type of medication that could have had immunosuppressant effects.

After 6 months of engaging in these lifestyle interventions, her thyroid analysis normalized and no anti-thyrotropin receptor antibodies were negative.

> ***"This case report demonstrates that Graves disease can effectively be put into lasting remission without conventional medical interventions. It also emphasizes the importance of a healthy lifestyle as a first line intervention for all patients but especially in the particular case of patients suffering from Graves disease."*** *- Dr Kelly Brogan, MD, in "Healing of Graves Disease, Thorough Lifestyle Changes: A Case Report", 2019.*

Epilepsy

"I am happy to respond to your kind request and I confirm that I noticed a very good and lasting effect of the intestinal baths that I was able to take where you were.

As you know that all doctors consider that my spinal cord disease is neither recoverable nor curable, I am pleased to say that through the intestinal baths my digestion seemed to flow better, with this my physical appearance became very fresh and afterwards I always felt very relieved and strengthened and like a newborn.

If this is the case of most people after stool evacuation, then even more with the enema.

The blood becomes more fluid because it is not so loaded with faecal poisons, and that is precisely what makes it happy again.

In this main matter, I would like to inform you that the intestinal baths were for me the sovereign measure to help my epileptic attacks finally overcome victoriously; and I wanted to ask you to take note of this fact in your prospect, also for the sake of the many epileptics.

I am surprised that you have not been confirmed more frequently or have you ever had an epileptic in treatment?

Today I say:

"He who leads a simple lifestyle with natural diet, adding to this for a while to make intestinal washes according to your method, has the prospect of seeing his epileptic fits disappear, at least if it is not a hereditary cause, particularly tenacious and lasting If I had known an institute of intestinal baths 5 years ago, time when my affliction began.

I did not want to know to what extent even my paralysis could have been effectively influenced, after the rest of my nervous, and general condition it improved so considerably, my mind is considerably calmer through this intense inner purification, yes, that served me more than all psychotherapy.

I believe, that any person having serious and seriously suffering and knowing about this novel issue, what in relation would mean investing such low expenses; he would reacquire his health in such a simple, painless and pleasant way.

That all those who suffer could come to know of your beneficial institution, I sincerely wish your patient, always grateful.

Signed Hans Munich, 1 October 1928." - in **"Case Reports on Colon Irrigation, Testimonials from Patients and Results Obtained"**, Gymnacolon Institute 1928.

Treatment and Prevention of Certain Mental Disorders

Infection of the Gastrointestinal Tract in Relation to Systemic Disorders

"For many years those interested in the general problem of the insane and feeble-minded were inclined to adopt a fatalistic attitude in regard to the treatment of these conditions.

Consequently, custodial care has been the basic principle involved in these matters.

If a patient was insane he was placed in an institution for the protection of others as well as himself and if he was feeble-minded the protection of the community was of paramount importance and the training of the individual secondary.

Such a situation arose largely from our previous lack of knowledge of the causes of these various mental abnormalities and consequently there was no adequate treatment which could be successfully instituted to restore these people to normal activity.

Our fundamental knowledge of these conditions was based largely on speculation and coincidence and the real cause remained a mystery.

One of the most prevalent errors as to the causation pertaining to the psychoses is that of heredity.

So fixed has this become in the minds of the profession and laity, and I might add psychiatrists as well, that it has been considered the principal, if not the fundamental, cause of the psychoses.

This fact arose from the rather loose way in which statistics regarding heredity were gathered in the old state hospital records that such an opinion became prevalent.

Any patient in which there was "insanity in the family" was noted as suffering from a hereditary taint. This occurred in sufficient numbers to substantiate the opinion that the psychoses were hereditary in origin.

In the first place the doctrine of heredity is extremely fatalistic, for if a patient is born with the potential element of mental disorder then there is little use of trying to prevent a psychosis or to successfully arrest it if it does appear.

Hence the attitude was adopted that only by methods of training, education, and environmental advantages could these symptoms be forestalled.

But, we have observed many cases where the environment was extremely favourable, where education and training were all that could be desired, and in spite of this a psychosis developed.

In general medicine we see more and more a tendency to discard "functional" disease for the organic type.

Hewlett has recently stated, "It is true that in the last analysis all disturbances of function must be capable of explanation in terms of physical or chemical changes in the body, cells and fluid." This viewpoint is more readily accepted in diseases concerning the body in general than when applied to the mind and brain.

Another known scientific fact substantiates the viewpoint that a disordered mind, whether the disorder could be classed as insanity or defectiveness, must have an anatomical basis.

Consequently, in dealing with a mental disturbance we must first ascertain what factors are at work which could cause anatomical changes in the brain tissue.

This is extremely important if we want to accomplish anything in the treatment of the individual.

Infection

If we have destroyed our belief in the important role of heredity and psychogenic factors, what have we to offer in their place as causative factors?

Formerly the physical condition of the patient was of minor consideration and many patients were classed as physically normal, which practice we know now was a serious error.

We are indebted to modern medical practice for the methods which permit the finding of serious physical disease in apparently otherwise healthy individuals.

The work of Billings, Hastings, Rosenow, Barker and Upson of the medical, as well as Kurt H. Thoma and others of the dental profession has established, without any question of doubt, the doctrine of focal or massed infections.

These infections were formerly overlooked, not only in the psychotic patient but in patients suffering from various systemic disorders.

This doctrine has been the most important contribution of XX century medicine, and the application of the methods evolved to determine the presence of chronic infection has added an entirely new chapter to the treatment and prevention of the psychoses.

That local foci of infection which cause no local symptoms and of which the patient may be ignorant, can cause serious systemic diseases, both by spread of the organisms to other parts of the body and by a dissemination through the blood streams of the toxic products, the result of such infection, is still doubted by many.

But we feel that enough work has been done to establish such a doctrine in spite of this skepticism.

Our investigations in the last 4 years have shown conclusively that the psychotic individual harbours multiple foci of infection which often can be located and eliminated.

In view of the successful application of these principles at the State Hospital at Trenton in the last 4 years, shall we still adhere to the old ideas expressed at the beginning of this

paper; or shall we lay prejudice aside, which limited the treatment of the psychosis to psycho-therapy, or the so-called occupational therapy, and study the individual as a whole and endeavour to discover any pathological condition which might be present.

The so-called Functional Psychoses, we believe today to be due to a combination of many factors:

> *"But the most constant one is the intracerebral, biochemical, cellular disturbances arising from circulatory toxins originating in chronic foci or infections situated anywhere throughout the body and probably secondary disturbance to the endocrin system."*

The psychosis then instead of being considered a disease entity should be considered as a symptom and often a terminal symptom of a long continued masked infection, the toxaemia of which acts directly on the brain.

As psychiatrists have for years recognized a toxic infectious psychosis, especially in patients who had an obvious infection, acute in character and easily diagnosed, we have not established a new principle when we speak of the toxic origin of some psychoses.

But we have extended the diagnosis to include types such as manic depressive insanity, dementia praecox (schizophrenia), paranoid condition, etc.

If the profession at large can accept this viewpoint, which we feel we have demonstrated beyond a reasonable doubt, then their attitude will be changed from a hopeless, fatalistic one, previously in vogue, to a hopeful one wherein they themselves can not only arrest many cases after a psychosis has developed, but better still by eliminating these foci of infection, easily prevent the occurrence of the psychosis.

There can be no question that many of the psychoses can and will be prevented when the result of such infection is properly understood by the profession at large.

It is obvious that when the psychosis can be arrested by

eliminating chronic foci of infection, then by properly treating such patients long before the psychosis appears the mental disorder can be prevented.

Source of Infection

We have found that the source and type of chronic infection in the psychotic patient is the same found in many of the systemic disorders.

We have come to regard the infection of the teeth as the most constant focus found in our patients. Without exception the functional psychotic patients all have infected teeth.

Briefly they may be divided into unerupted and impacted teeth, especially third molars; periapical granuloma; carious teeth with infection; apparently healthy teeth with periodontitis; devitalized teeth with either Richmond or gold shell crowns; extensively filled teeth with evidence of infection; and gingival granuloma in apparently vital teeth.

While the progressive men and leaders of the dental profession are awake to all the types of infection, unfortunately the "rank and file" are not sufficiently acquainted with these many forms.

Consequently, the physician who attempts to rid his patient of focal infection must become acquainted with modern dental pathology. In our younger patients, from 16 to 30 years of age, no matter what the psychosis may be diagnosed, we find unerupted and impacted third molars in a large proportion of the cases.

And we would unhesitatingly advise, when there are clinical evidences of systemic infection and intoxication present, that these should be removed.

We have found that they are always infected and the infection is in some way related to the fact that the tooth is unerupted and impacted.

All crowns and fixed bridge work have been condemned by the best men in the dental profession and we voice the same opinion.

So in order to rid a patient of focal infection a very

thorough job must be done and no suspicious teeth allowed to remain.

This does not mean that every patient should have all his or her teeth extracted.

We would like to call attention to the method of removing the infected teeth. In many cases simple extraction is not sufficient, even when the socket is thoroughly curretted.

When the alveolar process is severely involved, the Novisky method of surgical removal is absolutely necessary.

Failures to get results from removing infected teeth are frequently due to the fact that diseased, infected, necrotic bone is left and absorption continues even after the teeth are extracted.

Dissemination of Infection

From the fact that the elimination of infected teeth produced marvelous results in some cases and in others no results whatever, it was logical to conclude that the infection had spread to other parts of the body, through either the lymphatic circulation or the blood stream, and preferably by the former.

Secondary infection of the stomach and lower intestinal tract could also come from constantly swallowing the bacteria, originating in the mouth, so that we find secondary foci of infection of the stomach, duodenum, small intestine, gall bladder, appendix and colon.

The genito-urinary tract is frequently infected, not only by the organism of the streptococcic group but colon bacillus group as well. The source of this infection of the genito-urinary tract is not altogether known.

Treatment By Detoxication

It should be evident from what has been said that all surgical measures utilized are primarily for the elimination of the chronically infected tissue.

It has no relation to the surgery practiced some years ago, which was directed towards correcting malpositions and the removal of ovaries and other organs irrespective of infection.

The removal of all infected teeth is imperative.

As early as 1906 the writer was convinced from his work with Alzheimer, in Munich, that there were definite cell changes in the psychosis known as dementia praecox.

With these facts as a basis the problem in the last 15 years has been to find the cause for the anatomical changes in the brain.

The glands of internal secretions were intensely studied for over 5 years and every known method of glandular therapy resorted to, but without benefit to the patients.

Finally the problem of infection was taken up following the work of such men as Hastings, Billings, Rosenow and others, and in the last 4 years, as stated before, we have proved conclusively that the psychosis is due to a combination of factors, the most important of which is intra-cerebral toxemia resulting from chronic infections located in the teeth, tonsils, gastro-intestinal and genito-urinary tracts, and probably other sources.

As a result of this work we have been able to increase our discharges in the so-called functional group from an average of 3.7% for 10 years, to between 80% and 90% in the last 4 years.

This means that formerly a little over 1/3 of these cases ever left the hospital 2/3 remaining as chronic patients. Today more than 2/3 of this group recover and are returned to useful occupations in their environment.

Aside from the humanitarian aspect of this question the economic one is also extremely important, and when this fact is generally understood by the laity and profession, it will be the means of saving millions of dollars to the states, now paid in maintenance for these chronic patients.

Over one-half of the permanent population of state hospitals can be classed as dementia praecox or chronic deteriorating types with an average life of 15 years.

Prevention.

The most important development of the work at the State Hospital at Trenton has been the establishment of the fact that the so-called functional mental diseases are due to chronic infections.

The fact that 1,278 patients have been discharged as recovered in the last 4 years and that out of that number only 47 have been returned and are in the hospital, which is less than 37%, would substantiate our opinion stated above.

Assuming that this is a fact, then the responsibility of the practitioner is indeed great.

If it is perfectly logical to assume that these patients clear up, after the development of their mental symptoms, by the removal of chronic foci of infection, proper care on the part of the physicians years before the onset of the mental symptoms would, without question, prevent such developments.

Conclusions

Are we justified in continuing to classify these groups as functional, or would it not be more correct to place them in the toxic group?

Have the results obtained in the last 3 years, wherein the discharges in this group have increased from 37% to 75%, substantiated our viewpoint or not?

Have any other methods produced similar results?

Can we continue to ignore chronic infections as a factor in producing the so-called functional psychoses?" - Dr Henry A. Cotton, MD in "The American Journal of Medical Sciences", 1922, "New York State Journal", 1923.

Aetiological Factors: Heredity

"Discussing the role of heredity in the causation of the psychoses. We are of the opinion that it should not occupy the prominent position that it has done in the past.

The belief that heredity was the most prominent factor has had the most unhappy result of stifling investigation, and retarding constructive work.

This doctrine was more or less fatalistic, and simply served as a cloak to hide our ignorance of other factors. For if we believed that the psychoses depended upon heredity, there was no chance for us to prevent their occurrence.

So firmly has the theory of heredity become fixed in the minds of the physicians and the laity, that it has been difficult to combat.

Yet the statistics upon which this conception has been based have been very loosely compiled.

The mere fact that there was "insanity in the family", no matter what degree or nature, was evidence enough to build up a structure which was difficult to tear down.

And yet modern biological research would not support this doctrine. On the contrary, it teaches that the inheritance of mental disorder, in the sense that such inheritance is largely responsible for the disorder, is practically impossible.

Whatever role heredity may be found finally to occupy in the production of a psychosis, the discussion of this question is purely academic.

It did not prevent spontaneous recovery of the individual from a psychosis in the past, and, as far as we have been able to determine, has no bearing on the prognosis of a given case.

We can all agree that it is a factor which cannot be influenced by discussion or treatment; that it is a fixed quantity in the equation, and other factors which can be successfully attacked offer a much more fertile field for our endeavour.

Toxic Factors

If we have destroyed our traditional belief in the important role of heredity and psychogenic factors, what have we to offer in their place as causative factors?

Formerly the physical condition of the patient, with the exception of the neurological symptoms, appeared to be of minor importance.

Consequently, if the heart and lungs showed no abnormalities, the patient was classed as physically normal.

A great many patients, however, showed distinct evidence of serious physical disturbances.

Many of them were extremely weak and often emaciated.

Even some years ago, although we did not know the causes of the physical disturbances, we were in the habit of

keeping these cases in bed, and by forced feeding, building them up until they gained in bodily weight.

We were inclined to consider "ill-health" as a factor producing such psychoses.

The doctrine of chronic sepsis, or masked infections, has been firmly established.

These infections were formerly overlooked, not only in the psychotic patients, but in patients suffering from various systemic disorders as well.

This doctrine has been the most important contribution, and the application of the methods evolved to determine the presence of chronic sepsis has added an entirely new chapter to the treatment and prevention of systemic disorders, as well as the treatment and prevention of the "functional" psychoses.

That local foci of infection, which give no local symptoms, and of which the patients may be entirely ignorant, can cause serious systemic diseases, both by spread of the organisms, and by a dissemination of the toxic products through the blood-stream.

Our investigations in the last 5 years have shown conclusively that the psychotic patient harbours multiple foci of infection, which often can be located and eliminated. Why should we adhere to the traditional teachings?

Should we not lay prejudice aside, and instead of limiting the treatment of the psychotic to psychotherapy, or the so-called occupational therapy, study the individual as a whole, and then endeavour to discover and eliminate any pathological conditions which may be present?

The so-called functional psychoses we believe today to be due to a combination of many factors; but the most constant one, and, from the standpoint of treatment, the most important one, is the intra-cerebral, bio-chemical cellular disturbance arising from circulating toxins originating from chronic foci of infection, these foci being situated anywhere throughout the body, but originating in the teeth.

Associated with this toxaemia, and probably secondary, are the disturbances of the endocrine system.

The psychogenic factors should not be ignored, as they

have an important role in precipitating the mental disturbance in an individual literally saturated with infection, and the resulting toxaemia.

We know that many persons harbour chronic sepsis, without showing any distinct physical or mental symptoms.

We believe that this condition of apparent health in the presence of sepsis depends largely upon the patient's immunity, for as long as the immunity or resistance is sufficient to control the infection, no serious results will occur.

However, let any factor, either physical or mental, become operative in the mechanism whereby the immunity is lowered, the infection immediately becomes more active and virulent.

We will state the fact, which is a common law of disease. This was shown in the relation to influenza during the recent epidemic.

Many individuals, previously healthy, developed mental disorders following an attack of influenza.

In some 200 cases treated by us at that time, we found that all of them were suffering from chronic sepsis, and recovered when these foci were eliminated.

As is well known, influenza acted as a devitalising factor of terrible severity, and allowed the latent chronic sepsis to become virulent.

Instead of considering the psychosis as a disease entity, it should be considered a symptom, and often a terminal symptom of a long continued chronic sepsis or masked infection, the accumulating toxaemia of which acts directly or indirectly on the brain-cells.

As stated above, the presence of chronic sepsis in an individual does not necessarily mean that that individual will develop a psychosis.

In the first place, the organisms do not invade the brain-tissue, but **the active element is the toxaemia. In many cases the bacteria do not produce toxic products.**

This is a well-known law in bacteriology; thus, diphtheria may occur without any toxaemia, and no ill-effects produced.

It is interesting to note what a small amount of toxaemia is necessary to produce serious results.

Bronfenbrenner has shown that the toxaemia from the Botulinus, when diluted to the incredible solution of one-to-three times 10 to the minus 18th power (which means 1 to 3 with 18 ciphers following), **was sufficient to kill rabbits in 1 cc. dosage.**

It is not incredible to believe that **a very small amount of the toxaemia from chronic sepsis should produce serious damage to the cerebral cortex, and result in a profound mental disturbance.**

Psychiatrists for years **have recognised a toxic-infectious psychosis.**

This type constituted a very small group (not over 2%) in our former classification.

We have merely extended this diagnosis to include the whole so-called functional group, such as manic-depressive insanity, dementia praecox, paranoid condition, the psycho-neuroses, etc., in which the infection is present, but not apparent, or easily found upon casual examination.

Personally, as a result of our work, I do not believe there is any fundamental difference in the functional psychoses.

> *"The more we study our cases, we are forced to conclude that* ***distinct disease entities in the functional group, from a mental diagnosis at least, do not exist.*** *The aetiological factors are the same."*

The psychosis is modified by several factors; first, the duration of the sepsis, the severity of the toxaemia produced, plus the patient's resistance, or lack of resistance, to the septic processes.

This latter factor may depend upon an inherited predisposition.

We know that alcohol produces different types of psychoses in different individuals, dependent similarly upon the factors described above.

But that does not hinder us from recognising the various

types of alcoholic insanity, or from recognising that alcohol is a definite aetiological factor.

Also, another parallel exists between these 2 toxic factors, and that is the fact that many people indulge in alcohol, even to excess, without developing a psychosis.

Chronic Sepsis in the Psychotic Patient

Source of infection:

We have found that the source and type of chronic sepsis in the psychotic patient is the same as that found in those suffering from other systemic disorders.

We have come to regard infection of the teeth or oral sepsis as the most constant focus found in our patients. Without exception the psychotic patients all have infected teeth.

We may divide them into:

1. Unerupted and impacted teeth, especially third molars
2. Periapical granulomata
3. Carious teeth with infections
4. Apparently healthy teeth with periodontitis
5. Devitalised teeth with either Richmond or gold shell crowns
6. Extensively filled teeth, with evidences of infection at the root
7. Gingival granulomata in apparently vital teeth

These types of dental sepsis should be easily recognised by the dental profession.

Unfortunately, while the progressive men and leaders of this profession are familiar with dental sepsis, the rank and file are not sufficiently acquainted with the subject, and consequently the physician who attempts to rid his patient of oral sepsis must become acquainted with modern dental pathology.

In our younger patients, from 16-30 years of age, no matter how the psychosis may be diagnosed, we find that

unerupted and impacted third molars or wisdom teeth occur in a large proportion of the cases.

We would unhesitatingly advise, when there are clinical evidences of systemic infection and intoxication present, that these teeth should be extracted.

We have found that they are always infected, and this infection is in some way related to the fact that the tooth has not erupted in a normal manner.

The X-ray pictures of these teeth will not show evidences of infection, but cultures made carefully from the cavities will always show pure cultures of streptococci.

We have never found impacted molars without infected tonsils also.

All gold crowns, fixed bridge work and pivot teeth (Richmond crowns) have been condemned by the best men of the dental profession.

We would even go further, and state that all devitalised teeth should be extracted if we expect to get results. In order to rid the psychotic patient of oral sepsis, a very thorough job must be done, and no suspicious teeth allowed to remain.

This is not a radical doctrine, and does not mean necessarily that all patients must have all their teeth extracted. In young cases one or two impacted molars are all that are extracted. We would emphasise the fact that a thorough elimination of the oral sepsis can only be obtained by extraction.

Removing crowns, filling root canals, and other methods, have proved worthless and dangerous to the general health of the individual.

In some cases simple extraction is not sufficient, even when the socket is thoroughly curetted.

When the alveolar process is extensively involved, the Novisky method of surgical removal is absolutely necessary.

Failures to get results from extracting infected teeth are frequently due to the fact that infected and necrotic bone is left in, the process of absorption being continued even after the teeth are extracted. We have found that the tonsils are nearly as frequently involved in our patients as the teeth.

Note: Removal of tonsils may be done if and when is absolutely necessary, all attempts should be made to recuperate the state of health of the tonsils. Tonsils exist for a reason.

Dissemination of Infection

One of the most important lessons we have learned from our work is that while chronic sepsis originates in the teeth, the organisms do not remain there.

From the fact that the elimination of infected teeth produced marvellous results in some cases, and in others no results whatever, it was logical to conclude that the original infection had spread to other parts of the body, through either the lymphatic or the blood-stream.

Secondary infections of the stomach and lower intestinal tract could also come from constantly swallowing the bacteria originating in the mouth.

Consequently we find secondary foci of infection in the stomach, duodenum, small intestines, gall-bladder, appendix and colon.

We are inclined, to the belief that the secondary foci of the infection are transmitted through the lymphatic circulation.

It has been noted that in many of our cases with a severe lesion of the colon, the stomach is free from evidences of infection.

The genito-urinary tract is frequently affected, especially in the female, and the source of this infection is probably through the lymphatic circulation.

In the female the cervix is frequently infected, more constantly in child-bearing women, but also in non-child-bearing women as well.

It has been surprising to find the large number of women with an infected cervix, and the results obtained from enucleation of the cervix have been remarkable, to say the least.

Only a small proportion of the male patients show infection of the genito-urinary tract.

This infection is limited usually to the seminal vesicles.

Conclusions

The successful treatment of 1,412 cases during the last 5 years, must be accepted as evidence that our work has been efficient.

The fact that our recoveries in the last 5 years average 87% of this group against an average of 38% for a period of 10 years prior to 1918 should be convincing.

The latter can be considered as spontaneous recoveries, and the increase of 49% is due entirely to the method of detoxication employed." - Dr Henry A. Cotton, MD, Medical Director, State Hospital, Trenton, New Jersey, USA, Lecturer in Psycho-Pathology, Princeton University, in "The Journal of Mental Science", 1923.

States of Toxaemia

The following note is very much revealing on both the nature of the causation of Toxaemia, and the clinical aspects of its progression, in the affect that has upon body and mind of the individual affected by Toxaemia.

Toxaemia can come about by several factors, being it from: bad dietary choices and food combinations; from the excessive use of medications or drugs; and, or from excessive use of intoxicating liquors; and from untreated focal sepsis such as a bad state of teeth and gums.

Delirium Tremens

"Delirium Tremens occurs as an incident in the life of persons addicted to the excessive use of intoxicating liquors.

Loss of appetite, sleeplessness, or a marked mental depression are the chief symptoms of the first stage of the affection which is known as "the horrors."

As the disease advances the patient talks incoherently; has a wild expression; his mind wanders from one thing to another. He answers questions in a rambling manner.

The delirium is always worse at night, but the patient requires careful watching all the time.

Delirium tremens may be confounded with acute inflammation of the brain or with acute mania (insanity) or with certain forms of pneumonia, and any one of these diseases may also be present.

Pneumonia is a frequent complication of delirium tremens, and in fatal cases may be the direct cause of death. In favourable cases the symptoms begin to improve in 3 or 4 days from the onset. The patient sleeps and gradually recovers." - Dr W. G. Stimpson, MD, Assistant Surgeon General, United States Public Health Service, in "Prevention of Disease and Care of the Sick and Injured", 1915.

The following is a **list of conditions which display an Advanced State of Toxaemia:**

Fatal Familial Insomnia FFI

Fatal Familial Insomnia (FFI) is not a rare genetic degenerative brain disorder.

FFI is one of the many clinical manifestations, of which an individual suffering from severe or advanced state of Toxaemia can present.

One of its initial characteristics, is the inability to sleep (insomnia), panic attacks, paranoia, and phobias.

Has the toxaemia progresses hallucinations may start to happen.

The eye sight is also affected, and dementia follows such as Parkinson's-like symptoms, all these are clear and normal clinical progression stages of individuals with advanced Toxaemia.

Thus Toxaemia brings a burden to the nervous system affecting its function, so a complete dysfunction of the autonomic nervous system may arise in the progressive state of untreated Toxaemia.

The great novelist Balzac in a private letter to a very dear friend describes an illness that came upon him:

"I have been very ill. The doctor called it coagulation of the blood, which might affect the brain. M. Nacquest condemned me to ***a bath of 3 hours each day, and to drink 3 pints of water every day, and to take no other nourishment. At the end of 2 weeks I came out of this barbarous but heroic treatment with a clear skin, renewed strength, and with fresh courage for new struggles."*** *- Honoré de Balzac*

"Cancer arises from damage to cellular respiration.
Energy through fermentation gradually compensates for insufficient respiration.
Cancer cells continue to ferment lactate in the presence of oxygen (Warburg effect). ***Enhanced fermentation is the signature metabolic malady of all cancer cells."*** *- Dr Otto Warburg, MD in "On the Origin of Cancer Cells", Science, 24 February 1956.*

The Genetic Swindle

"Emerging evidence indicates that cancer is primarily a metabolic disease; involving disturbances in energy production through respiration, and fermentation.

Cancer is suppressed following transfer of the nucleus from the tumour cell, to cytoplasm of normal cells containing normal mitochondria.

These findings indicate that nuclear genetic abnormalities cannot be responsible for cancer, despite commonly held beliefs in the cancer field.

The genomic instability observed in tumour cells, and **all other recognized hallmarks of cancer are considered downstream epiphenomena of the initial disturbance of cellular energy metabolism.**

The disturbances in tumour cell energy metabolism can be linked to abnormalities in the structure and function of the mitochondria.

Cancer growth, and progression can be managed

following a whole-body transition from fermentable metabolites, primarily glucose and glutamine, to respiratory metabolites, primarily ketone bodies.

This transition will reduce tumour vascularity and inflammation while enhancing tumour cell death." - Dr Thomas N. Seyfried, Ph.D., Genetics and Biochemistry, University of Illinois, Master's degree in Genetics, Illinois State University, Professor of Biology, Boston College, in "Cancer: A Metabolic Disease With Metabolic Solutions", 2015.

"Idiopathic Scoliosis (IS) has been associated with several genetic loci in varying study populations, reflecting the disorder's genetic complexity.

One region of interest is on chromosome 17, flanking regions linked to neurofibromatosis type 1 (NF1).

This region is of particular relevance because the most common osseous manifestation in NF1 is scoliosis (10–30% of patients).

This alludes to a potential genetic correlation within this region affecting spinal development or stability.

The objective of this research is to identify candidate genes within this region that are statistically linked to IS." - in "Idiopathic Scoliosis and Scoliosis in NF1: Common Genetic Significance on Chromosome 17Q11", Orthopaedic Proceedings, Vol.94-B, No. SUPP XXVII, 21 Feb. 2018

"A hundred theories have been advocated and entertained, and at last cast aside as worthless." *- Dr Harry Hakes, MD in "Transactions of the Luzerne County Medical Society", 1887.*

"Genetic testing is the lynchpin of precision medicine. Today there are more than 140,000 unique Genetic Testing products on the market, an average of 10-15 new products are added each day." *- in "Concert Genetics", March 2020.*

"Medicare spending on molecular diagnostics more than doubled from 2016 to 2018, increasing from $493 Million to $1.1 Billion, according to Laboratory Economics, a lab industry newsletter. Charges range from hundreds to thousands of dollars, depending on how many genes are involved." - Liz Szabo in "Bill of the Month: A Genetic Test For A Microscopic Problem Came With A Jumbo Price Tag", Kaiser Health News, 31 March 2020.

"3 companies, 3 errors & 6 different results." - Rafi Letzter in "I took 9 different commercial DNA tests, and got 6 different results", Live Science, 5 November 2018.

Alzheimer's Disease Genetics

"A bold arrangement of the Medical Profession for the the Practice of False Theories, False Pretences, Fraudulent Claims for a False Science." - Adriel Sylvanus Kingsley, 1890.

1. Causes of Alzheimer's Disease

"Scientists believe that many factors influence when Alzheimer's disease begins and how it progresses. **The more they study this devastating disease, the more they realize that genes play an important role.** Research conducted and funded by the National Institute on Aging (NIA) at the National Institutes of Health (NIH) and others is advancing our understanding of Alzheimer's disease genetics.

2. Alzheimer's Disease is Irreversible

"**Alzheimer's disease is an irreversible**, progressive brain disease. It is characterized by the development of amyloid plaques and neurofibrillary, or tau, tangles; the loss of connections between nerve cells (neurons) in the brain; and the death of these nerve cells." - in "Alzheimer's Disease Genetics Fact Sheet, National Institute on Aging, NIH, 30 August 2015.

"**Alzheimer's disease is currently ranked as the 6th leading cause of death in the United States, but recent estimates indicate that the disorder may rank 3rd**, just behind Heart Disease, and Cancer, as a cause of death for older people." - in "What Is Alzheimer's Disease", National Institute on Aging, NIH, 30 August 2015.

1937

The Neurotoxic Effect of Aluminum salts Was First Demonstrated by Scherp and Church

"In the course of experiments involving the fractionation of herpes virus preparations by aluminum salts it was observed that rabbits which had received an intracerebral injection of certain fractions developed a syndrome indicative of a lesion of the central nervous system.

It was found that the characteristic syndrome may be induced in rabbits, mice and monkeys by a single intracerebral injection of a small amount of an aluminum salt." - Henry W. Scherp, Charles F. Church, Department of Paediatrics, School of Medicine, University of Pennsylvania, Children's Hospital of Philadelphia, in "Neurotoxic Action of Aluminum Salts", Experimental Biology and Medicine, June 1937.

Alzheimer's Disease No Longer A Mystery

*"**A genetic predisposition, a viral cause and chromosomal abnormality have all been proposed.** Alzheimer's disease is no longer the mysterious disease of 1906." - R. L. Strub, Department Neurology, LSU Medical Centre, in "Alzheimer's disease Current perspectives", Journal of Clinical Psychiatry, April 1980.*

1984

"**Aluminum is widely recognized as a potentially neurotoxic** environmental agent.

Two of the most important functional changes known to occur in the experimentally induced aluminum encephalopathy are changes in performance of learning-memory tasks (Crapper and Dalton, 1973).

Several human neurodegenerative conditions including Alzheimer's Disease, Down's Syndrome, Guam Parkinson-Dementia, and Amyotrophic Lateral Sclerosis are associated with Alzheimer type neurofibrillary degeneration and an increase in intranuclear aluminum concentration (Crapper et al, 1980; Perl et al, 1982)." - D. R. Crapper, McLachlan, University of Toronto, Canada in "Aluminium and Calcium Ineractions in Alzheimer's Disease", Clinical Neuropharmacology, June 1984.

1985

Aluminum -Alzheimer's Smoking Gun?

"It is becoming apparent that with an aging population comes an increase in the incidence of mental impairment.

In death certificates of people over 75 years of age, the number listed as having dementia has increased by a factor of 20 in the last 15 years (Forbes, Lessard, & Gentleman, 1995, appearing in the present issue).

Interest in the association of aluminum (Al) with Alzheimer's Disease stemmed from the observation that significant Al deposits 4% to 19% occur in the core of senile plaques (Edwardson et al., 1986), and it accumulates as well in neurons displaying neurofibrillary tangles (Perl, 1983)." - John CM. Riley, John C. Carlson, in "Canadian Journal on Aging", Vol. 14, No. 4 1995.

1995

"Microtubules, present in all eukanotic cells, are labile dynamic polymers, rapidly exchanging subunits with the soluble tubilin pool by polymerization and depolymerization. In neurons they play an important role in the stability of neuronal cytoskeleton, neurite elongation, intracellular transport, etc.

In this connection, a disturbance in brain tubulin polymerization revealed in Alzheimer's Disease (AD), characterized by multiple impairments of memory and cognitive function, may be an important event in the pathological process of this disorder.

One conceivable reason for the existence of the disturbance in microtubule assembly is an increased amount of aluminum detected in the brain of patients with AD." - Burbaeva, Shevzov, in "Aluminum as a factor affecting brain microtubule assembly in Alzheimer's disease", Behavioural Pharmacology, May 1995.

1999

Aluminum Is Known To Be a Potent Neurotoxin

"**Of the possible toxic agents, aluminum is known to be a potent neurotoxin and has also been implicated as an environmental factor in the pathogenesis of Alzheimer's Disease** (Perl and Brody, 1980; Perl, 1985; Perl and Good, 1987)." - Patrick R. Hof, Constantin Bouras, John H. Morrison, in "Cortical Neuropathology in Aging and Dementing Disorders, Cerebral Cortex, Vol. 14, 1999.

2001

"A Vaccine adjuvant is any material which is incorporated with a Vaccine. **Vaccines containing whole cell toxins as antigens tend not to require a separate adjuvant because the whole cell toxin acts as its own adjuvant.**

However, **newer vaccines containing partial cell toxins or synthetic toxins are greatly enhanced with the use of a separate adjuvant**.

Until recently, the only adjuvants approved for human use were aluminum salts generically referred to as alum.

Although these aluminum adjuvants are given a variety of generic and/or trade-names, they are either aluminum oxyhydroxide (commonly called aluminum hydroxide adjuvant) or aluminum hydroxyphosphate (commonly called aluminum phosphate adjuvant).

Aluminum hydroxide and aluminum phosphate adjuvants have different physical and chemical properties which makes each useful for different vaccine formulations.

Commonly used aluminum-adjuvanted vaccines include: Diphtheria, Tetanus, Hepatitis, Hib (Haemophilus Influenzae type B), Lyme, Rabies, and Anthrax (Baylor, 2000).

> *"WARNING:* ***This product contains 100 mcg/L of aluminium that may be toxic.*** *Aluminium* ***may reach toxic levels with prolonged parenteral administration if kidney function is impaired.*** *Research indicates that* ***patients with impaired kidney function, including premature neonates****, who receive parenteral levels of aluminium at greater than 4 to 5 mcg/kg/day* ***accumulate aluminium at levels associated with central nervous system and bone toxicity. Tissue loading may occur at even lower rates of administration****." - Black Box Warning, in "Vitamin K1", Vaccine, USP.*

Age, Vaccine, Range of Aluminum Content

Age	Vaccine	Range of Aluminum Content	
		min. mg	max. mg
Birth	HepB	0.68	0.75
1 month	HepB	0.68	0.75
2 months	DTP, Hib	0.51	3.00
4 months	DTP, Hib	0.51	3.00
6 months	Hep B, DTP, Hib	1.19	3.75
18 months	DTP	0.51	2.55
5 yrs	DTP	1.53	4.56

" - Richard Flarend in "Absorption from Aluminum from Antiperspirants and Vaccines Adjuvants", Aluminium and Alzheimer's Disease The Science that Describes the Link, 2001.

2013

"There are 3 main forms of aluminum toxicity: Acute, Sub-acute, and Chronic.

All 3 forms share some similarity and yet are significantly different from each other.

They are similar is that they all cause some form of brain disease.

The 3 forms differ in the type of subjects they affect.

The rates at which these conditions occur and the aluminum concentrations involved are distinctly different.

1. Acute Aluminum Neurotoxicity: Acute aluminum neurotoxicity occurs when a large amount of aluminum (as much as 500#g/l or more) enters the circulation. Acute aluminum neurotoxicity can affect humans with normal kidney function as well as those with chronic renal failure, resulting in an encephalopathy that typically involves grand mal seizures (Epilepsy), culminating in coma and death within days or several weeks.

2. Sub-acute Aluminum Neurotoxicity: Sub-acute aluminum neurotoxicity involves intermediate aluminum levels in blood or CSF over several years. An example is dialysis encephalopathy syndrome or dialysis dementia.

3. Chronic Aluminum Neurotoxicity: Finally, there is chronic aluminum neurotoxicity. Considerable evidence supports the possibility that AD is a form of chronic aluminum neurotoxicity that occurs in humans." - J. R. Walton, Faculty of Medicine, University of New South Wales, Australia, in "Aluminum's Involvement in the Progression of Alzheimer's Disease", Journal of Alzheimer's Disease, 2013.

2014

The Body Burden of Aluminium

"**Aluminium is neurotoxic. Its free ion, Al3+ (aq), is highly biologically reactive and uniquely equipped to do damage to essential cellular (neuronal) biochemistry.**

This unequivocal fact must be the starting point in examining the risk posed by aluminium as a neurotoxin in humans.

Aluminium is present in the human brain and it accumulates with age.

The most recent research demonstrates that a significant proportion of individuals older than 70 years of age have a potentially pathological accumulation of aluminium somewhere in their brain.

What are the symptoms of chronic aluminium intoxication in humans?

What if Neurodegenerative Diseases such as Alzheimer's disease are the manifestation of the risk of Aluminium as a Neurotoxin?

There are circumstances where **Aluminium is not only Biologically Reactive, but also Neurotoxic** and these are situations where the additional presence of aluminium in the brain tips the balance toward toxic effects.

Neurodegenerative diseases affecting significant numbers of individuals, such as Alzheimer's Disease, Parkinson's Disease and Multiple Sclerosis are likely to be multifactorial in their etiologies and aluminium is a potential contributor to the onset, progression and aggressiveness of these conditions." - Christopher Exley in "What is the risk of aluminium as aneurotoxin?", Expert Review of Neurotherapeutics, June 2014.

2017

Alzheimer's Disease Might Now Be Considered as an Acute Response to Chronic Intoxication by Aluminium

"**Aluminum is unquestionably Neurotoxic and it is accepted as the cause of Encephalopathies.**

There are myriad ways by which aluminum can exert toxicity.

I have summarized **the experimental and largely clinical evidence that implicates aluminum as a Primary Etiological Factor in Alzheimer's disease.**

The Unequivocal Neurotoxicity of aluminum must mean that when brain burdens of aluminum Exceed Toxic Thresholds, that it is inevitable that aluminum contributes toward disease.

Aluminum acts as a catalyst for an earlier onset of Alzheimer's disease in individuals with or without concomitant predispositions, genetic or otherwise.

Alzheimer's disease is not an inevitable consequence of aging in the absence of a brain burden of aluminum." - Christopher Exley, The Birchall Centre, Lennard-Jones Laboratories, Keele University, Staffordshire, UK, in "Aluminum Should Now Be Considered a Primary Etiological Factor in Alzheimer's Disease", Journal of Alzheimer's Disease Reports, 2017.

"Over 35 million people live with Alzheimer's Disease (AD) worldwide.

AD is a progressive neurodegenerative diseases and represents a brain dysfunction that affects language, cognition and emotion, resulting in socioeconomic burden for society.

In the past few decades, the tremendous progress that has been made in AD research, but the exact aetiology of AD remain unknown, and currently, there is no effective therapeutic or preventive strategies for AD.

Alzheimer's Disease exists in 2 forms:

1. Familial Alzheimer's Disease (AD)
2. Sporadic Alzheimer's Disease (SAD)

Interestingly, SAD accounts for more than 95% of AD cases and is expected to increase to 131.5 Million in 2050.

SAD has been reported to link with Aluminum (Al) accumulation in brain. Aluminum, a Neurotoxic Metal, was considered as the pathological hallmark and contributing factor of Alzheimer's Disease." - Zheng Cao, et al., in "Biomedicine & Pharmacotherapy", No. 91, 2017.

2018

"Our century is an "aluminum age"; **aluminum is used in many fields of our daily life, such as vaccine adjuvant, antacids, food additives**, skin care products, cosmetics, and cooking wares, and may be as elements or contaminants appeared in a lot of foods, including infant formulae, milk products, juice, wine, sea foods, and tea.

It also appears in drinking water due to the water treatment process." - Qiao Niu, in "Neurotoxicity of Aluminum", 2018.

"The available literature clearly shows that the Neurotoxicity of Aluminum in the CNS manifests itself in symptoms such as: **Deficits in Learning, Memory, Concentration, Speech, Psychomotor Control, Increased Seizure Activity, Altered Behaviour (i.e., Confusion, Anxiety, Repetitive Behaviours, Sleep Disturbances).**

The ability of aluminum to adversely affect both the immune, and the nervous system in an interactive manner makes it a **strong candidate risk factor for triggering developmental disorders such as Autism Spectrum Disorder** in which the 2 principal features are precisely those of: **Neurological and Immune System Signaling Dysfunctions.**

The data cited in the above sections clearly shows that A**luminum,** far from being either inert or safe, **is actually "Insidiously Unsafe" in any of its manifestations or routes of ingress into the bodies of humans or animals.**

In adult humans or animals, the impacts include those of various organ systems, particularly the Central Nervous System and immune system, and can lead to a variety of multisystem disorders.

In children, especially early in Central Nervous System development, exposure to aluminum from various sources, possibly significantly from vaccines containing aluminum adjuvants, may have profound deleterious consequences.

One of these consequences may be Autism Spectrum Disorder." - Christopher A. Shaw, in "Neurotoxicity of Aluminum", 2018.

> *"**I think that a very good analogy of the importance of the human genome is to compare it with man landing on the moon.** It was the hidden benefits that seeped through into everyday life.* ***The BRCA1 breast cancer predisposition gene, which was discovered before the human genome had been sequenced.**" - Richard Wooster*

"The **Cancer Genome Project was set up** in early 2000.

Funded **by The Wellcome Trust,** it aims to use data emerging from the Human Genome Project to identify all the gene abnormalities associated with cancer.

Michael Stratton, **Richard Wooster** and Andy Futreal, came up with the idea after working closely with scientists at the Sanger Centre, Cambridge, UK, on the discovery of the tumour-supressor gene BRCA2." - in "**Richard Wooster** on cancer and the Human Genome Project, The Lancet, Oncology, March 2001.

"Eppur si muove!" *- Galileo Galilei*

Chapter 9

The Microbiome and its Influence on Genetics

The Human Microbiome: "Signify the ecological community of commensal, symbiotic, and pathogenic microorganisms that literally share our body space and have been all but ignored as determinants of health and disease." - Joshua Lederberg, in "Scientist", 2001.

***"Recent research as shown a fact, that 90% of all cells and all genetic material in the human body, is our Gut Flora (Microbiome)."** - Dr Natasha Campbell-McBride, MD in "Conscious Club", 2015.*

"The human genome has been referred to as the blueprint of human biology.

In this review we consider an essential but largely ignored overlay to that blueprint, the human microbiome, which is composed of those microbes that live in and on our bodies.

The human microbiome is a source of genetic diversity, a modifier of disease, an essential component of immunity, and a functional entity that influences metabolism.

A logical step following the completion of the human genome sequence was the identification and functional validation of variation in the human genome as well as dissection of its association with disease.

An important aspect to be considered in parallel to these studies is now emerging: the contribution of the human microbiome to health and disease.

The microbiota of our bodies have largely been overlooked (aside from attempts at suppression and

eradication), they constitute 90% of the total number of cells associated with our bodies; only the remaining 10% are human cells.

Despite the extensive demonization that has ensued in this age of antibiotics and antimicrobials, the microbes living in and on our bodies are largely commensal and provide us with genetic variation and gene functions that human cells have not had to evolve on their own.

In this review, we discuss:

a) The genomic technology that instigated and continues to advance human microbiome studies;

b) How the human microbiome causes, contributes to, and modulates health and disease, including conditions that once were thought to be genetically encoded purely by the 23 human chromosomes.

- Julia A. Segre, Elizabeth A. Grice, in "The Human Microbiome: Our Second Genome", Annu. Rev. Genomics Hum. Genet., 2012.

> *"Researchers are studying the community of microbes that are in and on our bodies. In our bodies, the microbiome plays a role in our health, including mediating metabolic and inflammatory disorders, cancer, depression, infant health and longevity." - Linh Anh Cat, in "The Decade Of The Microbiome", Forbes, 31 December 2019.*

Understanding What Exactly is Heredity as a Factor

"Heredity as a Factor, by far the most frequent and constant individual etiologic factor in migraine is heredity.

Clinical facts teach that transmitted conditions continue throughout many generations and render easily possible the evolution of migraine under suitable conditions.

Just what these degenerative stigmata are we do not know, but there is a preponderance of evidence locating the disorder in the nervous system.

I believe it has a pathologic entity susceptible to and having an affinity for certain toxic elements in the circulatory system. The nerve cells, bathed in the life current, hold out against these ptomaines until their cumulative strength, overcoming the normal resisting powers of the individual, culminate in an explosion.

These nerve storms are denominated migraine.

They appear periodically, their frequency being determined by the vulnerability of the tissues, intensity of the ptomaines and contributory influences known as reflex causes.

The transmissibility of conditions favouring migraine is evidenced by its appearance in early childhood and its unabating continuance till after the middle third of life." - Dr J. M. Aikin, MD, Lecturer and Clinical Instructor in the Medical Department, Nebraska State University, in "Etiology and Treatment of Migraine", JAMA, 30 August 1902.

Definitions

"**Microbiota:** A collection or community of microbes.

Microbiome: Some use "microbiome" to mean all the microbes in a community. We and others use it to mean the full collection of genes of all the microbes in a community.

The human microbiome (all of our microbes genes) can be considered a counterpart to the human genome (all of our genes).

The genes in our microbiome outnumber the genes in our genome by about 100 to 1.

The Microbiome and Disease

Some of the health conditions that involve our microbes.

Acne
Antibiotic-associated diarrhoea
Asthma/allergies
Autism
Autoimmune diseases
Cancer
Dental cavities
Depression and anxiety
Diabetes
Eczema
Gastric ulcers
Hardening of the Arteries
Inflammatory Bowel Diseases." - in "Learn.Genetics", Genetic Science Learning Center, University of Utah, 2019.

"**Genotype:** Your genotype is your complete heritable genetic identity; it is your unique genome that would be revealed by personal genome sequencing.

However, the word genotype can also refer just to a particular gene or set of genes carried by an individual.

Phenotype: Your phenotype is a description of your actual physical characteristics. This includes straightforward visible characteristics like your height and eye colour, but also your overall health, your disease history, and even your behaviour and general disposition." - in "Personal Genetics Education Project", Department of Genetics, Harvard Medical School, 2019.

"Host genetics and the gut microbiome can both influence metabolic phenotypes (observable physical properties of an organism; these include the organism's appearance, development, and behaviour, an organism's phenotype is determined by its genotype, which is the set of genes the organism carries, as well as by environmental influences upon these genes).

We identified many microbial taxa whose abundances were influenced by host genetics.

The most heritable (transmissible from parent to offspring) taxon (a group of one or more populations of an organism), the family Christensenellaceae, formed a co-occurrence network with other heritable (transmissible from parent to offspring) Bacteria and with methanogenic (or biomethanation is the formation of methane by microbes known as methanogens, organisms capable of producing methane have been identified only from the domain Archaea) Archaea (single-celled organisms).

Our findings indicate that host genetics influence the composition of the human gut microbiome and can do so in ways that impact host metabolism." - Julia K. Goodrich, Andrew G. Clark, Ruth E. Ley, in "Human Genetics Shape the Gut Microbiome", 2014.

What Is The Microbiome?

"Humans are mostly microbes, over 100 trillion of them.

Microbes outnumber human cells 10 to 1.

The majority live in the colon, particularly in the large intestine.

The microbiome is the genetic material of all the microbes: bacteria, fungi, protozoa and viruses, that live on, and inside the human body.

The number of genes in all the microbes in one person's microbiome is 200 times the number of genes in the human genome.

The microbiome of the mother may affect the health of her children.

Researchers mapping the human microbiome are discovering previously uncharted species and genes.

Genetic studies that measure the relative abundance of different species in the human microbiome have linked various combinations of microbe species to certain", human health conditions." - in "Fast Facts About The Human Microbiome", Center for Ecogenetics and Environmental Health, University of Washington, 2014.

> *"The body's microbiome, composed of microbial cells that number in the trillions, is involved in human health and disease in ways that are just starting to emerge. The microbiome is assembled at birth, develops with its host, and is greatly influenced by diet and other exposures." - Julia K. Goodrich, Andrew G. Clark, Ruth E. Ley, in "The Relationship Between the Human Genome and Microbiome Comes into View", 2017.*

"The human genome has been referred to as the blueprint of human biology.

In this review we consider an essential but largely ignored overlay to that blueprint, the human microbiome, which is composed of those microbes that live in and on our bodies.

The human microbiome is a source of genetic diversity, a modifier of disease, an essential component of immunity, and a functional entity that influences metabolism and modulates drug interactions.

Characterization and analysis of the human microbiome have been greatly catalyzed by advances in genomic technologies.

We discuss how these technologies have shaped this emerging field of study and advanced our understanding of the human microbiome.

We also identify future challenges, many of which are common to human genetic studies, and predict that in the future, analyzing genetic variation and risk of human

disease will sometimes necessitate the integration of human and microbial genomic data sets." - Elizabeth A. Grice, Julia A. Segre, Genetics and Molecular Biology Branch, National Human Genome Research Institute, National Institutes of Health, Bethesda, Maryland in "The Human Microbiome: Our Second Genome", 2012.

"In recent years, human microbiota, especially gut microbiota, have emerged as an important yet complex trait influencing human metabolism, immunology, and diseases.

Many studies are investigating the forces underlying the observed variation, including the human genetic variants that shape human microbiota.

We present the largest consortium to date devoted to microbiota-GWAS.

We have adapted our analytical pipelines to suit multi-cohort analyses and expect to gain insight into host-microbiota cross-talk at the genome-wide level." - Jun Wang, Alexander Kurilshikov, Alexandra Zhernakova, in "Meta-analysis of human genome-microbiome association studies: the MiBioGen consortium initiative", 2018.

> *"Sequencing of genomic libraries constructed from cancer genomes would come closest to this goal,* ***but given the diversity of cancers and the effort and cost required to obtain reasonable coverage of a human genome this is a daunting challenge****." - Richard Wooster, Cancer Genome Project, Institute of Cancer Research, Sutton, Surrey, UK, in "Cancer and genomics", Nature, Vol. 409, 2001.*

Growth and Development is not due to the Genetic Blueprint Alone

"According to the biodynamic model of embryology, cellular differentiation and organism form occurs directly in relation to growth forces.

While this process could not occur without genes, growth and development involves much more than genetic information alone." - Dr Brian Freeman, MD in "Lectures on Biodynamic Embryology", Melbourne 2019.

Your DNA is not a Blueprint

"Day by day, week by week, your genes are in a conversation with your surroundings.

Your neighbours, your family, your feelings of loneliness:

They don't just get under your skin, they get into the control rooms of your cells.

Inside the new social science of genetics. Steve Cole a researcher (trained in psychology at the University of California-Santa Barbara and Stanford; then in social psychology, epidemiology, virology, cancer, and genetics at UCLA), extracted genetic material from the blood's leukocytes (a key immune-system player) and looked at what their DNA was up to.

He found a broad, weird, strongly patterned gene-expression response that would become mighty familiar over the next few years.

Of roughly 22,000 genes in the human genome, the lonely and not-lonely groups showed sharply different gene-expression responses in 209.

That meant that about one percent of the genome, a considerable portion, was responding differently depending on whether a person felt alone or connected.

Printouts of the subjects' gene-expression patterns looked

much like Robinson's red-and-green readouts of the changes in his cross-fostered bees:

Whole sectors of genes looked markedly different in the lonely and the socially secure.

And many of these genes played roles in inflammatory immune responses.

That's a really important part of this: To an extent that immunologists and psychologists rarely appreciate, we are architects of our own experience.

Your experiences today will influence the molecular composition of your body for the next 2 to 3 months, or, perhaps, for the rest of your life. Plan your day accordingly." - David Dobbs, in "The Social Life of Genes", Pacific Standard, 3 September 2013.

Chapter 10

Chorea

Chorea (choreia) is an abnormal involuntary movement condition.

The term chorea is derived from the Greek word "choreia"; (dance), in which the quick movements of feet or hands, are comparable to dancing.

Saint Vitus Dance, Sydenham's chorea, chorea minor, Huntington's disease, Huntington's chorea. See also: "International Medical Digest", 1929.

Aetiology

> *"Chorea is due to an encephalitic rheumatic process which at times may be associated with meningitis." - Swift in "American Journal of Medical Sciences", November, 1924.*

"This last discovery, made by Poynton and Holmes, (Lancet, 13 October 1906, 982) at an early day is a strong argument in favour of the belief that chorea is due to an encephalitic rheumatic process which at times may be associated with meningitis." - in "Annals of Internal Medicine", 1929.

The Chorea states have manifestations of disturbances to the central nervous system.

These causations can be either from inflammation caused by organic metabolism, and in the majority of cases there is also found a disturbance caused by bone pressure on nerve, causing either partial obstruction, or total impediment.

When the condition is in its main causation from organic inflammation, as the metabolic waste increases so do the symptoms of the condition.

St. Vitus Dance

Also known as Sydenham's chorea, chorea minor, and historically referred to as St Vitus dance, a disorder characterized by rapid, uncoordinated jerking movements primarily affecting: face, hands and feet. Sydenham's chorea results from infection and overgrowth of Streptococcus and is reported to occur in 20 to 30% of individuals with acute rheumatic fever.

(Chorea Sancti Viti.)

Description

"This singular disease is characterized by a twitching and convulsive action of certain muscles, usually confined to one side of the system; and it affects principally the arm and leg.

It is chiefly incident to young persons of both sexes, but particularly those of a weak constitution, or whose health and vigour have been impaired by confinement, or by the use of scanty and improper nourishment; and makes it attacks between the ages of 10 and 15, occurring but seldom after that of puberty.

By some physicians it has been considered rather as a paralytic affection than as a convulsive disorder, and has been thought to arise from a relaxation of the muscles, which, being unable to perform their functions in moving the limbs, shake them irregularly by jerks.

Causes

This disease may arise from various causes; from morbid condition of the stomach, as teething, acidity in the bowels, offensive smells, violent affections of the mind, as anger, fear, &c.

It may arise also from debility, and from extreme irritability of the nervous system.

Symptoms

"It is a kind of convulsion which principally attacks children of both sexes, from ten to fourteen years of age.

It first shows it self by a lameness, or rather unsteadiness, of one of the legs, which the patient draws after him like an idiot; and afterwards affects the hand on the same side, which, being brought to the breast or any other part, can by no means be held in the same posture for a moment, but is distorted or snatched away by a kind of convulsion into a different posture or place, notwithstanding all possible efforts to the contrary.

If a glass of liquor be placed in the hand to drink, before the patient can get it to his mouth he uses a thousand odd gestures, not being able to carry it in a straight line thereto, because his hand is drawn different ways by the convulsions ; as soon as it has reached his lips, he throws it suddenly into his mouth and drinks it very hastily, as if he only meant to divert the spectators." - Sydenham

With these evidences of disturbance of the brain are usually united very unequivocal marks of a deranged condition of the stomach and bowels.

A variable, and often ravenous, appetite, a swelling and hardness, or sometime flabbiness, of the abdomen, with constipation, accompany, in a large proportion of cases, the onset of the disease.

In its advanced periods we may observe impaired digestion, a very offensive state of the alvine evacuations, and flaccidity and wasting of the muscles throughout the body.

Treatment

The indications in this complaint are:

1 . To remove the exciting causes

2. To remove the constipated state of the bowels, and regulate their functions

3. To strengthen the general system

First; If, upon inquiry, the stomach is found deranged, administer an emetic; this will evacuate the stomach, and impart new tone to it, as well as to the nervous system.

The day after this emetic has been exhibited, a moderate purgative may be given, to be repeated weekly; from the sympathetic effect of this class of medicines, they are very valuable in this complaint.

After having thus cleared the stomach and bowels, and created in them a more healthy action, give the restorative wine bitters, to which add half an ounce of the red oxide of iron.

Anti-dyspeptic pills to be taker, at night, and in sufficient number to regulate the bowels; 2 or 3 every day or two are usually sufficient.

They impart tone and energy to the system, while they carry off all faeculent matter from the intestines. The feet should be occasionally bathed, as also the surface of the body, if the skin is usually dry.

The following infusion, used with the other means recommended, (and probably used alone,) is a specific in this disease; I know not of a single case in which it has failed to effect a cure: Take scullcap, (Scutellaria lateriflora,) one ounce; boiling water, one quart; strain, and sweeten with loaf sugar.

Let the palient drink of this freely through the day, and constantly to be drank alternately with the tea of valerian before-mentioned.

I have found this treatment invariably successful. One case occurred in a woman 50 years of age, who had had the complaint a length of time, had been treated by 7 or 8 physicians without benefit, and, after submitting to the use of the above remedies, (emetics excepted) she recovered.

The scullcap appears to have specific effects in this and most other nervous complaints.

Dr Elliotson states, in the London Lancet, that he has cured several coses of chorea by giving 2 drachms of carbonate of iron every 6 hours.

Regimen

A diet that is nutritious and easy of digestion must be used, and every thing calculated to excite mental affections avoided.

Skull-cap. (Scutellaria Lateriflora)

Common Names — Officinal Scull-cap, Mad-weed, Hood-wort, Blue Pimpernell.

Locality - This plant is found all over the United States, in meadows, woods, near water, &..; blossoming in the summer.

Properties. — Tonic. nervine, and antispasmodic. It is remarkably efficacious in chorea, or St. Vitus's dance: with the infusion I have cured a great number of cases of this disease. It has of late become quite famous as a cure for the bites of mad dogs. Its property as a medicine in this case was first discovered by Dr Vanderveer, toward 1772.

He used it with the utmost success; and is said to have, till 1815, at which period he died, preserved four thousand persons and one thousand cattle from becoming affected with the disease, after they were bitten by rapid animals.

It is likewise stated that his son preserved, relieved, or cured 40 persons in 3 years, in the states of New York and New Jersey, by the use of this article. It is also very useful in convulsions, tetanus, and tremours.

Employment - Given in the form of infusion, to be drank freely through the day. It is an excellent nervine, used as a common drink.

ST. VITUS' DANCE
(Chorea Sancti Viti)

Cases which have been successfully treated at the Infirmary

Case 101 - About 6 months ago, a woman applied at our Infirmary, with a remarkable ease of St Vitus Dance.

Her limbs were thrown In various directions, having no control over them; loss of appetite, debility, and excessive pain attending it. She consulted five physicians, who were unable to tell what the complaint was, much less to cure it.

The treatment which we pursued had a salutary effect; and after a short period, restored her to perfect health.

Case 102 - About this time, George, a boy about 15 years old came to the Infirmary, afflicted with the same disease; his left leg mid arm be was unable to control. They were kept in constant motion. The same treatment which was pursued for the woman above mentioned, cured this lad.

This doctrines have guided my practice many years, and experience has taught me not to distrust their truth, safety and value." - Dr W. Beach, MD in "American Practice", 1851.

"Of the other morbid states noted to have been associated with the chorea, in 9 of the cases the following are the particulars:

Bronchitis ….....2 cases
Diseased bone.....2 cases
Convulsions...….....1 cases
Adenitis….....1 cases
Idiocy.....1 cases
Headaches.....1 cases
Psoriasis.....1 cases
Total ….....9 cases

The reaction of the urine was noted 33 times:

Reaction Acid….....26 cases
Reaction Alkaline.....3 cases
Reaction Neutral.....4 cases
Total.....33 cases

Association with Rheumatism and other Morbid States

Definite information on this point was obtained in the whole series of cases admitted into the wards, and is tabulated as follows:

No history of antecedent rheumatism.....8 cases
History of antecedent rheumatism.....11 cases
History of subcutaneous fibrous nodules.....1 case
History of other morbid states..... 5 cases
Total.....25 cases."

- Dr John Lindsay Steven, MD, in "An analytical study of certain of the clinical phenomena observed in 112 consecutive cases of chorea", Archives of Paediatrics, 1900.

The Relation Between The Nervous Manifestations (or Chorea) and The Rheumatic Process as Indicating The Nature of the Disease

"Dr. Edward D. Fisher, MD said that most physicians started with the notion that chorea and rheumatism were very intimately connected, in fact, Duckworth had said that rheumatism and chorea were virtually the same, the disease at one time manifesting itself as chorea, and at another time as rheumatism.

In chorea the physician had to deal with malnutrition, not with an organic disease, but with a condition of malnutrition giving rise to functional disorder.

A Study of the Heart Wall in Diphtheria, Rheumatic Fever, and Chorea

By Dr. F. J. Poynton. — The various cardiac phenomena seen in diphtheria, rheumatic fever, and chorea are due to similar causes, i.e., a direct effect of the poison of the disease upon the cardiac muscle.

In support of this view the writer brings forward evidence based upon the results of clinical observation and microscopical investigation of the heart wall in eighteen cases of rheumatic heart disease, four cases of diphtheria, and one case of chorea. In all these cases there were found extreme fatty change in the muscular fibres of the heart wall and alterations of the nuclei.

The poison of diphtheria appears to destroy the muscle fibres far more than does that of rheumatic fever, possibly explaining the clinical fact that cardiac dilatation in diphtheria is usually not so marked as in rheumatism, but the tendency to a fatal termination is vastly greater." - in "New York Medical Journal", 1900.

"An important point in this case is the old time question of the relation of rheumatism, chorea, and heart disease, and I think it demonstrates that the same autochthonous poison may be the cause of the rheumatism, the chorea or the heart disease.

To my mind it is not at all impossible that a good many cases of chorea are due to the rheumatism affecting the serous membrane of the brain, this in turn irritating the motor cortex. This child had but the one attack of chorea, but has had marked rheumatic pains many times.

In a good many cases of chorea in which I have watched, pains had been a notable feature in the previous history.

The children under treatment have entirely recovered from the rheumatic condition, and thus have become less liable to recurrent attacks of chorea." - Dr. F. S. Pearce, MD in "Case of Chronic Valvular Endocarditis and Acute Nephritis Following Chorea", Archives of Paediatrics, 1900.

"In one case the injection of 2,000 units of antitoxin was followed by rheumatism, urticaria, endocarditis and chorea. Some dyspnoea was present, 4 days after the disappearance of rheumatic symptoms marked choreic movements were noticed in the extremities. The chorea that ensued was one of severe type and lasted several months." - Dr John Zahorsky, MD in "A Few Clinical Studies of Cardiac Diseases in Infancy and Childhood", The New York Medical Journal, Vol. 71, No.6, 1900.

The Cure of Chorea

My early use of large doses of arsenic in chorea

"It is now the general therapeutic experience of our profession that large doses of arsenic are often curative in chorea, when smaller doses, and what used to be held to be the usual doses, fail.

Herein is one of the most striking of the therapeutic advancements of our times.

Whose is the earliest discovery of this truth I know not. Perhaps I was the first to publish it.

Perhaps several clinical observers arrived at the truth simultaneously, or about the same time.

At the least, I made it out independently of other workers, purely by my clinical observation, and I published the fact more than 23 years ago.

In The British Medical Journal, for December 18th, 1880, I wrote: "I think that arsenious acid is the best remedy for chronic chorea in the materia medica.

If I remember rightly, some statistics of cases of chorea treated by various drugs were published in the St. Thomas's Hospital Reports, about 10 years ago.

From these it appeared, that arsenic cured the malady more quickly than any other remedy; that is, the duration of the chorea was shorter under arsenical treatment than when zinc or other drugs were given. What I have seen in practice, especially when I was physician to the Birmingham and

Midland Free Hospital for Sick Children, is generally confirmatory of this conclusion.

In determining our treatment of a case of chorea, we must always keep in view the causal antecedents of the disorder.

We mostly find chorea associated with, and causally related to, one or more of four distinct conditions namely: rheumatism, acute or subacute; faulty hygienic circumstances, especially an insufficiency of animal food; emotional shock, particularly fright; reflex irritation due to intestinal worms.

Each of these separate circumstances calls for appropriate treatment. But, however arising, for the chorea itself, if I may be allowed the phrase, arsenious acid is the best drug we have. Whatever dose we give, it is best to administer it in solution, freely diluted with water, and immediately after a meal.

Mode of administration of the remedy

The dose of liquor arsenicalis, as laid down in text-books, is too small. Garrod, for instance, places it at from 2 to 8 minims. Some time ago, I tried how much arsenic a choreic young woman could bear. I found I could gradually increase the dose of Fowler's solution from ten minims up to a drachm, (equal to half a grain of arsenious acid), thrice daily, apparently with good effect on the chorea, before I produced signs of gastro-intestinal irritation.

Sometimes chorea is a very obstinate affection, and chronic cases often pass from doctor to doctor, and go through long courses of medicaments, without benefit.

The point I want to insist upon is this: we may cautiously increase the dose of liquor arsenicalis far beyond the limit of the text-books with good effect; and we may so cure cases of chorea which smaller doses of the remedy would not affect."

Successful case

Again, in The British Medical Journal, in an abstract of a clinical lecture delivered to the medical students at The Queen's Hospital, published on 23 December 1882, I wrote:

"This little girl, 10 years old, about to be discharged, owes her recovery from chorea to the administration of arsenic.

We had to give the remedy freely before the disorder gave way. The case was one of subacute general chorea, of moderate severity, occurring in a weakly, nervous girl.

We began with 5 minims of Fowler's solution of arsenious acid, thrice daily, in an ounce of water.

In 3 days the dose was increased to 10 minims; in 3 days more, to 15; in 3 days more, to 20; and so on until she was taking 35 minims of the solution thrice daily.

When this last dose was reached, the choreic movements, which before had been gradually subsiding, entirely ceased; and a little vomiting warned us that we had reached the first and most usual physiological action of our remedy.

We then withdrew the drug for 2 days; after that time we gave it again, in 15 minim doses, for a few days more, when we gave it up altogether, and the child remained well. You have seen me treat many cases of chorea in this way with similar success.

The dose of liquor arsenicalis in chorea, as laid down in textbooks, is too small.

Arsenic, freely and properly given, rarely fails. If a case of chorea come to you, and you learn that arsenic has been given and has failed, give it again, in large doses.

You may cautiously increase the dose of liquor arsenicalis, far beyond the limits of the text-books, with the best results in chorea; in this way, you may usually cure cases which smaller doses of the remedy would not affect." - Sir James Sawyer, FRSE, FRCP, FSA, in "Contributions to Practical Medicine", 1904.

"The following symptoms have been noted:

1. Neuralgia
2. Hyperesthesia
3. Irregular Muscular Tremors
4. Paresis
5. Hysterical Tetanus
6. Coma

7. Convulsions
8. Transient defects in vision
9. Tinnitus Aurium
10. Diseased sense of taste

These are all among the recorded symptoms.

Whitehead notes Chorea and Paralysis in children (a number of cases of mucous colitis have been recorded in children about the 10th year of life), and Copeland has observed a cataleptic condition following one hysterical outbreak in one who was the subject of mucous disease.

Mental Depression, Faulty Memory, Hypochondriasis, and Melancholia may be exhibited for a time, to be followed in some cases by increased mental activity.

The association of this disease with Uterine Disorders has already been noted." - Dr William A. Edwards, MD in "A Handbook of Practical Treatment", 1912.

Nervous and Brain Disorders

"What is certain is that in the following disorders, intestinal putrefaction plays a role.

The Proof: The success of Intestinal Treatment!

Disorders in the sexual sphere of man, such as prostatitis, increased erections, nocturnal emissions after sexual dreams, irritable weakness with increased libido, deficient erections, premature ejaculation, spermatorrhoea during going to the bathroom.

The headache (also of "rheumatic" type) and migraine, under which patients with constipation suffer immensely, disappear frequently after the first intestinal bath as if by a touch of magic wand. **Other nervous phenomena are: Slight Fatigue, Tremor and Convulsions (Huntington's Chorea), Hypersensitivity, Herpes Zoster, Dercum disease, Neuralgia, which may be present in Polyneuritis and often considered as "rheumatic" (eg; sciatica can be caused by intestinal putrefaction and especially by irritation from pressure of the full rectum).**

Brain concussions and the large area of common mental disorders, which are very often related to intestinal putrefaction are: rapid physical and mental fatigue, idiopathic hypersomnia, insomnia, dizziness, fainting (eclampsia of pregnant women), tetanus-like disorders and epileptiforms, states of depression, feelings of dissatisfaction, discomforts, states of anxiety and many cases considered unsatisfactory as well as "neurasthenics" and "hysterics."

The favourable effect of the Intestinal Bath on psychic health is so evident and is unanimously reaffirmed by all patients who feel extremely "relieved" and "released" that the influence of intestinal baths on the vegetative nervous system is considered proven." - Dr. August Von Borosini, MD in "Gymnacolon Intestinal Bath Institute", 1930.

*"**Migraine is often caused by Constipation, especially when there is distension of the rectum and pelvic colon. Clearance of the bowel by Colonic Irrigation will give immediate relief to a number of sufferers.** In more severe cases the headache may only disappear some hours after the treatment, which confirms the fact that Auto-Intoxication is present. **Constipation frequently occurs in Chorea and probably causes aggravation of the symptoms.** Many authorities believe that Constipation associated with Toxaemia may act as the exciting cause of the fits in Epilepsy. **The incidence of fits is certainly lessened when the bowels are kept in a normal condition.** Colonic Irrigation is a valuable adjuvant in the treatment of this malady." - Dr W. Kerr Russel, MD in "Colonic Irrigation", 1932.*

Psychoses with Huntington's Chorea

"Improve the general nutrition by a course of graduated tonic baths.

The salt glow, fomentations to the abdomen or liver and hot and cold to the spine are the best preparatory treatments.

If it is not practicable to send the patient to the hydriatric suite (Hydropathy), give wet mitten friction each morning. Apply fomentations to the abdomen, 9 to 12 minutes, morning and evening.

Apply the Neptune girdle (a special wet binding for the abdomen) during the intervals. Renew it every 3 hours.

Elimination: Have the patient drink water copiously in order to increase the amount of urine eliminated.

May drink a glass of cold water, preferably carbonized, upon arising and another one after each meal.

One hour before the noon and evening meals may drink a cup of hot water to which a pinch of salt has been added. This also assists in cleansing the stomach and in prompting activity of the bowels.

Colonic Irrigations of normal salt solution, temperature 38° C, to cleanse the bowels of waste material, cause the expulsion of gas and soothe the lining of the colon.

Insomnia: Give continuous baths, 34° to 35° C, duration 20 minutes to 1 hour, previous to retiring. Supplement the hydrotherapy with a cup of hot milk.

Agitation: Administer continuous baths, 34° to 35° C, for periods of 2 to 6 hours." - Dr Rebekah Wright, MD, Massachusetts Department of Mental Diseases in "Hydrotherapy in Hospitals for Mental Diseases", 1932.

Chorea And Its Treatment

"Chorea has for many decades past been considered to be a manifestation of the rheumatic state. It would seem to be a kind provision of nature that the 2 commonest rheumatic manifestations, arthritis and chorea, seldom occur together, a point which was noted by Mark Twain, since the pain occasioned by the uncontrolled movements of an inflamed joint would indeed be agonizing.

As is well known, chorea is characterized by the presence of uncontrollable restlessness and nervous twitchings of an apparently purposeless nature.

The most commonly affected muscle groups are those of the face and the limbs; next most commonly those of the trunk.

These movements may be differentiated from those of tic, with which they are most likely to be confused, by the fact that the choreic movements stop during sleep, and are entirely inco-ordinated.

Causes of chorea, other than the rheumatic state, must be borne in mind, although examples are uncommon: these include encephalitis and tumours or any similar lesion which affects the subthalamic area of the mid-brain.

The chorea of pregnancy comes into rather a different category, being possibly merely one incident in the manifestation of a puerperal toxaemia.

Chorea of rheumatic origin usually increases in severity gradually for several weeks, unlike the form due to encephalitis, which reaches its zenith in about 24 hours.

It is not uncommon to see cases in which the choreic movements are confined to one side of the body (hemi-chorea).

The prognosis does not seem to be affected by such an occurrence. In association with the inco-ordination typical of this affliction must be mentioned the muscular hypotonia and weakness in all the groups affected.

The hypotonia has been less commented upon, but persists when weakness can no longer be appreciated.

It is curious that in limbs in which this "hypotonia" is

marked the tendon reflexes should nevertheless be increased. Such is however usually the case, although the response to repeated equal strokes of the tendon hammer tend to be unequal and occasionally unobtainable if sought for within a few seconds of a response having been obtained.

This phenomenon tends to disappear, however, as the patient regains normality, and might constitute a rough prognostic guide.

The sudden onset and cessation of the muscular contractions, particularly when provoked by voluntary movement or emotion, are typical of the condition.

The meaningless choreic smile is an example of this, as is the "trumpeting" when the tongue is protruded.

If these movements affect the lower limbs the patient's progress is likely to be stumbling and jerky, and bruised shins are a very common finding in these patients.

In the very bad cases described by the pre-war pediatricians it proved often necessary to nurse them on the floor, surrounded by pillows, to prevent them from falling out of bed.

Cardiac disease frequently develops at a later period in these cases, probably in about 30-40%, of cases, and it is largely as the result of this observation that the Rheumatic Basis of the disease is assumed.

Poynton and Holmes, examined three brains in 1906 and reported the occurrence of fairly extensive perivascular accumulations of leucocytes, with local thromboses, and the presence of a diplococcus.

The cerebro-spinal fluid has been examined in many cases, and is invariably found to be sterile, although Warner has reported a lowering of the calcium content.

The psychical make-up of these patients must be emphasized since they mostly appear to be "highly strung."

Night terrors, sudden attacks of crying, and other forms of heightened emotionalism are of common occurrence.

These patients frequent reluctance to talk was commented upon by Sydenham in his original description of the disease in the 17th century.

The onset of carditis must continually be watched for in choreic patients, and is of grave significance.

The chief signs are a sudden pallor and lassitude, often with pyrexia, but equally often with a subnormal temperature.

The development also of a cardiac murmur where no murmur was before is presumptive evidence of carditis.

Recurrence is unfortunately fairly common even after apparent recovery, and like the original onset of the disease tends to be seasonal, the chief peaks being in the autumn and spring. The blood sedimentation rate is, in the absence of carditis, always normal in chorea.

Treatment

Septic Foci - Controversy has recently raged round the subject of the influence of tonsillectomy on the various rheumatic processes; and the pendulum has swung several times.

It is probably now the view of the majority, however, that to operate on a patient with chorea, if there be no specific indication for tonsillectomy, is unwise psychically in view of the mental disturbance consequent on the procedure, and is inadequate on general grounds in so far as it would appear to be locking the stable-door after the horse has left.

In the pre-rheumatic state the procedure may be advisable, although recent investigation tends to suggest that if rheumatism develops subsequently to tonsillectomy the form likely to be chosen is the choreic.

Glover, however, apparently now considers the prophylactic value of tonsilectemy to be practically nil.

Gross nasal abnormalities which might reasonably be supposed to be perpetuating the condition reflexly should be rectified.

Psychical

A cheerful tolerance must be cultivated by those in charge of these somewhat difficult patients. Scolding must be avoided, but naughtiness detected and gently reprimanded.

They should not, if possible, be allowed to get bored, however, and simple handicrafts are useful both from this point of view and also to teach precision of movement.

They are said generally to be above the average intelligence, in which case individual observation, so far as is practicable, is desirable in order to avoid their being forced up for scholarships.

Dietetic

The diet of the choreic should be simple but may be planned on normal lines, and should include adequate amounts of uncooked fruit and vegetables. Milk, which contains Calcium, should be given in large quantities if it is well tolerated, whilst an adequate vitamin content must be ensured.

Vitamin B which is most often deficient in invalid dietaries of this type, may be supplemented."

Most authorities are today agreed that no medicinal agent exercises any specific influence on the course of chorea.

Arsenic has stood the test of time in so far as it remains the favourite; its action, however, is merely a general one.

Medicinal

It should be prescribed as Fowler's Solution (Liquor Arsenicalis) in increasing doses, starting with M.iii after each meal, well diluted.

It must be remembered, however, that arsenic is cumulative, and intervals should be left during which its administration is discontinued; it is generally recommended to push it to the limit of tolerance before discontinuing it, this is often surprisingly high in children.

The first sign of intolerance is generally vomiting, occasionally with diarrhoea.

Mutch has recently recommended the use of Calcium Acetyl Salicylate as being actually to some extent curative.

It has the additional advantages of being soluble in water

and less disturbing to the digestion. Iron is often indicated and should be prescribed in those cases showing secondary anaemia.

It can be given harmlessly as ferri et ammonii citras in doses of 10 grains upwards after meals, and may be combined with liquor arsenicalis and bromides if so desired.

Laxatives are often necessary. Sydenham taught that adequate purgation would prevent relapse in chorea.

Baths

The most successful cases are those suffering with muscular rheumatism in some form or lumbago, and cases of monarticular osteo-arthritis or gout during sub-acute exacerbations of their trouble.

I have elsewhere (Treatment of Chorea by Baths: 44 cases of chorea were treated without drugs but by means of prolonged immersion in baths at "neutral" temperatures, and general massage.

A small control series was treated on orthodox lines.

It was found that the same result was ultimately achieved in both groups.

The bath group took longer, but the ultimate incidence of relapses proved lower than in the orthodox group."

British Medical Journal, 10 Dec., 1932) described the use of reclining baths in the treatment of chorea.

The method employed was to immerse the patient in a bath at skin-temperature twice daily for 1 hour with an inflated rubber ring round his neck in order that he may lie back in the bath and relax completely without fear of a ducking.

The sedative effect produced by this method was marked.

Medicated Baths

The procedures which have just been described may be performed with the addition of various therapeutic substances to the water.

To what extent certain of these substances, amongst

which may be mentioned extract of pine, sulphur, mustard, salt, and Epsom salts, actually do increase the therapeutic value of the bath is uncertain.

It is often wise, however, to prescribe some such addition in the case of patients who, like Naaman the Syrian, are inclined to doubt the value of mere local water.

The method of preparing a certain number of such baths will be mentioned, since, although directions are generally given with the substance, it is often wise for die medical man to be able to forestall these to some extent.

Pine Bath

From 2 to 4 tablespoonfuls of Extract of Pine, which is sold for this purpose by most chemists, is added to an ordinary bath.

There is no definite therapeutic indication for this, but the smell is pleasant and very soothing, especially to an irritable bronchial mucous membrane." - Dr W.S.C. Cpeman, MD, FRCP, in "The Treatment of Rheumatism in General Practice", 1939.

Research done by the Medical Trade on Huntington's Disease

2016

"The pathogenesis of Huntington's Disease and Huntington's Disease-Like 2, similar progressive neurodegenerative disorders caused by expansion mutations, remains incompletely understood." - in "Quantitative Proteomic Analysis Reveals Similarities between Huntington's Disease and Huntington's Disease-Like 2 Human Brains", 2016.

2017

"Huntington's Disease-like 2 presenting with isolated Parkinsonism: Parkinsonism may occur during the course of disease, usually in association with other movement disorders, such as chorea. There are few reports of HDL2 patients presenting parkinsonism as the only motor abnormality." - in "Journal of the Neurological Sciences", 2017.

"**Background:** Huntington Disease-like 2 (HDL2) is a neurodegenerative disorder similar to Huntington Disease (HD) in its clinical phenotype, genetic characteristics, neuropathology and longitudinal progression. Proposed specific differences include an exclusive African ancestry, lack of eye movement abnormalities, increased Parkinsonism, and acanthocytes in HDL2.

Objective: The objective was to determine the similarities and differences between Huntington Disease and Huntington Disease-like 2 by establishing the clinical phenotype of HDL2 with the published cases.

Methods: A literature review of all clinically described cases of Huntington Disease-like 2 until the end of 2016 was performed and a descriptive analysis was carried out.

Results: 69 new cases were described between 2001 and 2016. Chorea was noted in 48/57 cases (84%). Dementia was reported in 74% patients, and Parkinsonism in 37%. Psychiatric features were reported in 44 out of 47 cases.

Patients with chorea had lower expanded repeat lengths compared to patients without chorea. Eye movements were described in 19 cases, 8 were abnormal. Acanthocytes were detected in 4 of the 13 patients tested. 19 out of 20 MRIs were reported as abnormal with findings similar to Huntington Disease." - in "A Systematic Review of the Huntington Disease-Like 2 Phenotype", 2017.

2018

"Neuroacanthocytosis (NA) syndromes are a group of rare diseases characterized by neurological disorders and misshaped spiky red blood cells (acanthocytes) including Chorea-Acanthocytosis (ChAc), McLeod syndrome (MLS), Huntington Disease-Like 2 (HDL 2), pantothenate kinase-associated neurodegeneration (PKAN), abeta and hypobetalipoproteinemia and aceruloplasminemia.

This clinically and genetically heterogeneous group of diseases shares main clinical features presenting most often as a hyperkinetic movement disorder.

Even though these are long noted disease conditions, we still know only little on the underlying disease mechanisms. The current review focuses upon ChAc as the core entity of NA syndromes caused by mutations in the VPS13A gene." - in "Current state of knowledge in Chorea-Acanthocytosis as core Neuroacanthocytosis Syndrome", 2018.

Research Questions

1. Is Chorea caused by a gene? Thus; Is Chorea a Genetic Disease?
2. Are all Choreas caused by genes? Or just certain types of Chorea?
3. Is Huntington Disease caused by genes?
4. Could you please indicate if known one (1) Disease, which at present (2019) is being cured by gene therapy?

This questionnaire was sent to several Medical Trade so-called scientists and academic researchers on the 29 September 2019.

No reply was ever received.

Chapter 11

Nanotechnology

"Nanomedicine is the medical application of nanotechnology. Nanomedicine ranges from the medical applications of nanomaterials and biological devices, to nanoelectronic biosensors, and even possible future applications of molecular nanotechnology such as biological machines. Current problems for nanomedicine involve understanding the issues related to toxicity and environmental impact of nanoscale materials (materials whose structure is on the scale of nanometers, i.e. billionths of a meter)." - in "Wikipedia", 9 April 2020.

Mauro Ferrari

"Mauro Ferrari is a nanoscientist and leader in the field of nanomedicine. He served as special expert on nanotechnology for the National Cancer Institute (2003-2005) and was instrumental in establishing the Alliance for Nanotechnology in Cancer in 2004." - in "Wikipedia", 9 April 2020.

Academy of Nanosciences

"Mauro Ferrari and Paola Del Zotto Ferrari, co-founders of: "L'Accademia di Gagliato delle NanoScienze".

L'Accademia di Gagliato is financially sustained by private sponsorships and public grants.

Founding session

The first NanoGagliato was convened in 2008 by Mauro Ferrari, Ph.D, with the help of his wife, Paola, and hosted at his summer residence in Gagliato. Attendees were asked to provide their own transportation. Several countries were represented, including Japan, the United Kingdom, Portugal, the United States, and France. Hospitality was kindly provided by local private residents."- in Wikipedia", 9 April 2020.

> *"Mauro Ferrari, Ph.D, is the Honorary President of the Accademia di Gagliato. He is recognized as one of the founders of biomedical nano/micro technology, especially in its applications to drug delivery for cancer therapy (see latest discovery published on Nature Biotechnology on 14 March 2016). Dr. Ferrari is the author of 30 patents. NanoGagliato USA is a 501 (c) 3 non-profit organization based in Houston, Texas, USA. It was established in 2015 to support the activities of the Accademia di Gagliato. L'Accademia di Gagliato is financially sustained by private sponsorships and public grants. Its Executive Board is composed by the following members: Domenico Garieri (founding member); Patrizia Doldo (founding member); Fabrizia Venuta; Barbara Bass; Paola Ferrari (founding member and current President); Mauro Ferrari (Honorary President); Giovanni Sinopoli (Executive Secretary)." - in "nanogagliato.org", 9 April 2020.*

Paola Del Zotto Ferrari, worked at the United Nations as Assistant to the Undersecretary General for Public Information, after holding an internship at UNICEF Headquarters, and in the NGOs Office of the same department from 1992 to 1994.

In 2009, she founded the Academy of Gagliato of the Nanosciences, of which she is President.

"Nanotechnology is an emerging industry with a projected annual market of around $1 Trillion US Dollars by 2011–2015.

Concerns about the Toxicity of Nanomaterials in Humans, have recently been raised.

Although studies of nanoparticle toxicity have focused on lung disease the molecular link between nanoparticle exposure and lung injury remained unclear.

In this report, we show that cationic Starburst polyamidoamine dendrimer (PAMAM), a class of nanomaterials that are being widely developed for clinical applications can induce acute lung injury in vivo.

PAMAM triggers autophagic cell death by deregulating the Akt-TSC2-mTOR signaling pathway.

The autophagy inhibitor 3-methyladenine rescued PAMAM dendrimer-induced cell death and ameliorated acute lung injury caused by PAMAM in mice.

Our data provide a molecular explanation for nanoparticle-induced lung injury.

Nanomaterials are used in medicine for diagnosis, imaging and drug delivery.

In the pharmaceutical industry, dendrimers are of particular interest for applications in gene transfer, drug delivery and imaging.

Some PAMAM nanoparticles are toxic.

Toxic PAMAM nanoparticles induce autophagic cell death in A549 cells." - in "PAMAM Nanoparticles Promote Acute Lung Injury by Inducing Autophagic Cell Death through the Akt-TSC2-mTOR Signaling Pathway", Journal of Molecular Cell Biology, Oxford University Press, October 2009.

"Dr McNeil added that characterizations of more than 200 nanomaterials at the Nanotechnology Characterization Laboratory, including 50 animal studies have revealed a few basic principles about nanomaterials and their effects in the body.

These studies indicate that nanoparticles with high surface charge **are Cytotoxic regardless of particle type, and that uncoated nanoparticles will accumulate in the liver and spleen,** and they are more likely to be digested by phagocytes, unlike those that are PEGylated.

Dr Zhao pointed out that his study of the **metabolism of nanomaterials has revealed that many bind to proteins in the body, which impedes their excretion and metabolism.**

> *"They can stay there in the body for a long time - for 9 months or longer."*

Dr Josephson added that:

> *"The key thing is to make sure that the nanoparticle is gone at the end of your toxicity study. If it is still there, the interpretation is that there was no toxicity seen, but* ***the animal didn't live long enough."***

Taking a lesson from history, he pointed out that gadolinium chelate contrast agents were shown to be rapidly eliminated by the kidney, and thus were touted as safe as saline by their manufacturer. But those studies neglected to look at people whose kidneys did not completely eliminate the compounds. This caused a buildup of gadolinium in their kidneys which was linked to their developing nephrogenic systemic fibrosis.

> *"It has heightened the issue of elimination in nanotechnology - where do things go, how long to they stay, and can they cause toxicity years and months after they have been given."*

Dr Libutti pointed out that if high toxicity standards were adhered to 50 years ago, there would not be a single standard chemotherapeutic on the market now.

Dr Curley gave an example of one of his patients, who was a violinist when he was diagnosed with colorectal cancer metastatic to the liver.

Although he has survived 8 years post treatment, he experienced such severe neurotoxicity from his chemotherapy that he is no longer able to play his instrument." - in "Risks Associated with Nanotechnology", Nanotechnology and Oncology: Workshop Summary, Institute of Medicine, 2011.

Tiny Science, Huge Concern

"The rapidly developing field of nanotechnology is likely to become yet another source for human exposures to NSPs —engineered nanoparticles (NPs)—by different routes: inhalation (respiratory tract), ingestion [gastrointestinal (GI) tract], dermal (skin), and injection (blood circulation).

Information about safety and potential hazards is urgently needed. Results of older biokinetic studies with NSPs and newer epidemiologic and toxicologic studies with airborne ultrafine particles can be viewed as the basis for the expanding field of nanotoxicology, which can be defined as safety evaluation of engineered nanostructures and nanodevices.

Collectively, some emerging concepts of nanotoxicology can be identified from the results of these studies.

When inhaled, specific sizes of NSPs are efficiently deposited by diffusional mechanisms in all regions of the respiratory tract.

The small size facilitates uptake into cells and transcytosis across epithelial and endothelial cells into the blood and lymph circulation to reach potentially sensitive target sites such as bone marrow, lymph nodes, spleen, and heart.

Access to the central nervous system and ganglia via translocation along axons and dendrites of neurons has also been observed.

NSPs penetrating the skin distribute via uptake into lymphatic channels.

The following emerging concepts of nanotoxicology can be identified from these studies: The biokinetics of nanosized particles are different from larger particles.

When inhaled, they are efficiently deposited in all regions of the respiratory tract; they evade specific defence mechanisms; and they can translocate out of the respiratory tract via different pathways and mechanisms (endocytosis and transcytosis).

When in contact with skin, there is evidence of penetration to the dermis followed by translocation via lymph to regional lymph nodes.

A possible uptake into sensory nerves needs to be investigated.

When ingested, systemic uptake via lymph into the organism can occur, but most are excreted via faeces.

When in blood circulation, they can distribute throughout the organism, and they are taken up into liver, spleen, bone marrow, heart, and other organs." - Günter Oberdörster, Eva Oberdörster, Jan Oberdörster, in "Nanotoxicology: An Emerging Discipline Evolving from Studies of Ultrafine Particles", Environmental Health Perspectives, July 2005.

Does Nanotechnology Pose Health Risks?

"There are numerous cosmetics and silver-based anti-microbial products.

A simple example is an anti-cancer drug in which a dendrimer is designed to find cancer cells and then release a chemical that kills them.

As science and technology develop and advance, the environment and ecological systems are at great risk, as there is a deviation from natural forces of equilibrium.

Some nano-fabrication methods use toxic raw materials or produce toxic by-products (for example, some carbon nanotube synthesis routes).

Extensive research is underway to characterize the nanotoxicological effect of different nanoparticles on aquatic and animal species.

A good review on the adverse effects of nanomaterials has been provided by Dr Fadeel of Karolinska Institute's

Division of Biochemical Toxicology, who has summarized the proceedings at the Stockholm Symposium on Nanotoxicology (There's plenty of room at the forum: Potential risks and safety assessment of engineered nanomaterials, NanoToxicology, 2007).

There are also concerns on waste management of nano-enhanced products and their contribution to environmental pollution.

There is a need for quantitative data followed by intensive scientific insight into the risks to human beings and the environment due to genetically modified organisms (GMOs) in agriculture and service applications.

As a result of these concerns, a new field of research termed as nano (eco-)toxicology has emerged in the last decade.

This field studies the effect of engineered nanoparticles on living organisms." - in "Concerns and Challenges of Nanotechnology", Textbook of Nanoscience and Nanotechnology, 2013.

"The Embassy of Italy in Washington hosted on the 15 November 2019, the annual meeting of the Italian Scientist and Scholars in the North America Foundation (ISSNAF).

The meeting, held under the High Patronage of the President of the Republic, was opened by the Italian Ambassador and by the President of the Foundation, who was awarded the Order of the Star of Italy in the rank of Grand Officer.

The meeting allowed to review the important discoveries and innovative projects carried out by Italian researchers and scientists in North America and to plan the activities of the Foundation for 2020.

Mauro Ferrari, nanotechnology luminary, and, as of 1 January 2020, President of the European Research Council, attended the meeting.

ISSNAF awarded Ferrari with the Life Achievement Award by as a recognition of his career." - in "Embassy of Italy in Washington", 15 November 2019.

"Take "messenger RNA," the technology platform that supports the vaccines from Pfizer-BioNTech and Moderna.

Ozlem Tureci and Ugur Sahin, the wife-and-husband team at the helm of BioNTech, began exploring the use of mRNA more than 25 years ago and founded their company in 2008.

Theoretically, mRNA can instruct the body to engineer proteins, including ones that increase immunity against infectious pathogens, cancers and rare genetic conditions.

But the Covid-19 vaccines are the first applications of this technology." - Thomas Cueni, Director International Federation of Pharmaceutical Manufacturers and Associations, in "The Risk in Suspending Vaccine Patent Rules", New York Times, 10 December 2020

Chapter 12

Vaccines

"Wisdom is essential. And that's what we hope to bring with this book." *- Dr Didier Raoult, MD in "The Truth About Vaccines", 2018.*

Vaccination and General Enervation

"Functional derangements precede structural changes by months and even years.

Before the 1st world war was over, 95% of the American army had received hospital attention for sickness, other than injury, from 1 to 5 times.

And the boys who did not get over to France died by the thousands from the "flu."

What does this mean? It means that life as it is lived causes the people generally to be enervated.

And when nerve-energy drops below normal, the elimination of toxin, a natural product of metabolism is checked, and it is retained in the blood, bringing on Toxaemia, the first, last, and only efficient cause of all so-called diseases.

It should be obvious to discerning, minds that the amount of toxin in the blood must vary with each individual, and that the degree of resistance also must vary with each individual.

An amount would cause a toxemic crisis in one would apparently have no effect on another.

An enervating cause - the usual immunization - that would scarcely produce a reaction at one time in a given subject might send the same subject to a hospital at another time, or even be fatal instanter.

Active immunization is the alibi or apology of the pro-vaccinators; but it does not change the fact that Vaccines Are Poisons, even if they are "pure," regardless of the iterated and reiterated protests that they are innocent and harmless.

The amount of harm done the army by Vaccination and re-vaccination will never be known.

No words can describe the harm that immunizing with Vaccines and serums has done and is doing, except wholesale vandalism.

I was browsing in my library a few days ago, and picked up "Facts and Comments."

I turned to "Vaccination", and in it found more worthwhile, constructive thought, in a short essay of less than 3 pages, than can be found in all medical literature on the same subject.

When once you interfere with the order of nature, there is no knowing where the results will end, was the remark made in my presence by a distinguished biologist.

There immediately escaped from him an expression of vexation at his lack of reticence; for he saw the various uses I might make of the admission.

Jenner and his disciples have assumed that when the vaccine virus has passed through a patient's system he is safe, or comparatively safe, against smallpox, and that there the matter ends. I will not here say anything for or against this assumption. I merely propose to show that there the matter does not end. The interference with the order of nature has various sequences other than that counted upon. Some have been made known.

A Parliamentary Return issued in 1880 (No.392) shows that, comparing the quinquennial periods 1847 - 1851 and 1874 - 1878, there was in the latter a diminution in the deaths from all causes of infants under one year old of 6,600 per million births per annum; while the mortality caused by 8 specified diseases, either directly communicable or exacerbated by the effects of Vaccination, increased from 20,524 to 41,353 per million births per annum—more than double.

It is clear that far more were killed by these other diseases than were saved from smallpox.

We have no means of measuring alterations in resisting power, and hence they commonly pass unremarked.

There are, however, evidences of a general relative debility.

Measles is a severer disease than it used to be, and deaths from it are very numerous. Influenza yields proof.

60 years ago, when at long intervals an epidemic occurred, it seized but few, w as not severe, and left no serious sequelae; now it is permanently established, affects multitudes in extreme forms, and often leaves damaged constitutions.

The disease is the same, but there is less ability to withstand it.

> ***"When once you interfere with the order of nature, there is no knowing where the results will end."***

Health, good health, is a greater force than bad - than every interference - and can correct every evil effect that is not fatal, if the influence is removed.

Stimulants, continued over a long period, cause a gradual deterioration, and finally, unless the habit is stopped, end fatally.

Toxin is a stimulant and a natural product of metabolism.

When the body is normal, the toxin is removed as fast as generated; but when any enervating habit is practiced beyond the power of recuperation, the toxin accumulates, and Toxaemia is established, which means that the body has lost its protecting power.

Now, if vaccine or any infection gains entrance into the blood, "there is no knowing where the effects will end."

In toxemic subjects, a local infection set up by the virus of sepsis from any source vaccination, a badly cared-for injury, a wound that fails to drain, an infected tooth, sinus, etc. - causes a septic fever of a malignant type, which is liable to end in death or in invalidism.

A system badly enervated and toxemic, has little power to resist; and when the blood is very toxemic, it is very vulnerable to the influence of any infection.

Such cases can be brought back to the normal, but never under conventional treatment.

When toxemic subjects are infected, the infection will never be eliminated entirely until enervation and Toxaemia are overcome.

Unless patients of this character are put to bed and fasted until elimination is completed, then fed properly, and taught how to eat within their limitations, and unless they are willing to give up all enervating habits, there is no hope of their ever getting well.

Immunization and Auto-immunization

Man's immunization to disease requires a life so well ordered that his nerve-energy is kept at or near normal.

When nerve-energy is prodigally squandered, he is forced into a state of enervation; then elimination of the waste-products is checked, leaving the waste toxin in the blood, causing Toxaemia self-poisoning, the first, last and only true disease that man is heir to.

All other poisons are accidental and evanescent, and without Toxaemia can have no entree to the system.

Poisons may be swallowed, injected or inoculated into the body and poison or even kill; but such an experience is not to be classed as disease, any more than a broken leg or a gunshot wound.

Toxin is a normal, natural product of the system, always present.

Being a constant, it answers every requirement for a universal cause of all so-called diseases.

All the different symptom-complexes, which are given special names, take their names frown the organs involved in the toxin crisis; but they are not individual—they are only symptoms of vicarious elimination.

For example:

1. Tonsilitis
2. Gastritis
3. Bronchitis
4. Pneumonia
5. Colonitis

Are each and every one Toxemic crises, differing only in location and symptoms.

So-called diseases are just so many different locations where toxin is being eliminated. All are different manifestations of one disease Toxaemia." - Dr. John H. Tilden, MD in "Toxaemia Explained, The True Interpretation Of The Cause Of Disease", 1926.

"The blood also contains white corpuscles, which act in a most marvellous manner.

These white corpuscles are the body guards, the policemen of the blood.

Suppose, for instance, that a bacterium (germ) sneaks into the blood, on mischief bent.

Along comes a white blood corpuscle (phagocyte), wraps himself around the intruder, incorporates the villain in his own (the phagocyte's) body, and starts to digest him.

If we treat ourselves fairly the blood is always able to take care of any kind of infection, with one exception: If a puncture wound is made and filth is introduced into the body and the wound is then sealed up again; or if filth is rubbed into an abraided surface, then there is apt to be trouble. If such wounds are freely drained, there will be no trouble.

This explains why serum treatment, and vaccination, and antitoxin treatment kill many individuals each year, for they are injected into the body, or rubbed into the skin and no drainage furnished; these substances are a form of animal filth - diseased or decayed animal matter.

They have no relationship to health, except that they sometimes destroy it, and sometimes end life.

The blood stream should be kept sweet and pure. These serums, antitoxins, bacterins, caccins (or whatever the filth is called) make the blood foul, and poison the body." - Dr Rasmus Larssen Alsaker, MD in "Outwitting Old Age", 1926.

Chiropractic views on Vaccination

"Chiropractors are opposed to poisoning any person, be they sick or well, therefore we are opposed to vaccine virus, and the use of drugs as a curative measure, for they do not fix the wrong that causes the trouble." - Dr B. J. Palmer, DC in "The Science of Chiropractic: Its Principles and Philosophies", Palmer School of Chiropractic, 1917.

Dr David Daniel Palmer, DC assumed the role of President of Palmer School of Chiropractic after his father's death.

Like his father, Dr Palmer was against vaccines:

"The outrageous practice of the M.D. who injects vaccine poison into a healthy person, affects nerves, which act on muscles sufficient to displace vertebrae and impinge nerves, causing derangements which we name disease. Vaccine virus, or other poisons which create diseased conditions, will not permanently affect the patient when a Chiropractor keeps the vertebra in proper position. We have checked the fun of doctors and saved children from being poisoned, by adjusting the vertebra that the pus poison was displacing."

"The idea of poisoning healthy people with vaccine virus, inoculating them with one disease to prevent another, spreading it in a mild form, to protect the victim from a more serious attack, is irrational."

Combined Live Measles-Mumps-Rubella (RA 27-3) Virus Vaccine and Live Rubella (RA 27/3) Virus Vaccine

"Study Number: Clinical Protocol – 443

Initiated: 28 October 1975
Completed: 20 January 1977

Table 10: Clinical Complaints Reported Among Children Who Received a 0.5 Ml Dose of Combined Live Measles-Mumps-Rubella (RA 27/3) Virus Vaccine, Lot No. 621/C-D763 (Study 0443).

Total Vaccinated 102 Children
(All vaccine was given subcutaneously in the arm)

Clinical Complaints within 42 day period:

Gastrointestinal Illness: 43%
Upper Respiratory Illness: 64%
Anorexia: 28%

Medical Opinion: **Upper Respiratory and Gastrointestinal Infections were reported in about 55% and 40% of vaccines respectively.** - Dr Robert E. Weibel, MD

- in "Summary No. 1 of Clinical Investigative Studies of Combined Live Measles Virus Vaccine (Moraten Line-ATTENUVAX), Jeryl Lynn Mumps Virus Vaccine (MUMPSVAX), RA 27/3 Rubella Virus Vaccine for Purpose of Support for a License to Manufacture and Sell", Merck Institute for Therapeutic Research, West Point, Pennsylvania, 27 April 1978.

Measles Vaccine And The Central Nervous System

"Measles Vaccine is associated with Central Nervous System Immune Problems. ("Acceptance of Measles Vaccine", in The Lancet, 20 August 1997, page 387. A leader) The Mumps Vaccine seems probably to be barely effective, if at all, in preventing the disease, and might have increased the attack rate. There were some reports of serious Neurological Sequelae probably associated with the vaccine.

Rubella Vaccination has developed a similar reputation ("Risk of Chronic Arthropathy Amongst Women After Rubella Vaccination", Paula Wray, et. al. in JAMA, 20 August 1997, Vol. 258:7, pp. 551-556).

Tetanus vaccine (a bacterial illness provoked by the exotoxin of the bacillus) is undoubtedly one of the best examples of an immensely effective vaccine.

What is interesting, here, is that it is the Vaccine against the toxin, not the bacterium. Influenza vaccination, although promoted extensively by the authorities, is probably ineffectual (I base this on 20 years of personal experience as a provider of this vaccine), and certainly has been associated with nasty Neurologic Complications such as Guillian-Barrè Syndrome." - Dr Thomas Dorman, MD, in "Vaccination", March 1999.

Behavioural Disorders included Autism

"Onset of Behavioural Symptoms was associated, by the parents, with Measles, Mumps, and Rubella vaccination in 8 of the 12 children, with Measles infection in one child, and Otitis Media in another.

All 12 children had Intestinal Abnormalities, ranging from: Lymphoid Nodular Hyperplasia to Aphthoid Ulceration. Histology showed Patchy Chronic Inflammation in the Colon, in 11 children and reactive Ileal Lymphoid Hyperplasia in 7.

Behavioural disorders included Autism 9, Disintegrative Psychosis 1, and possible Postviral or Vaccinal Encephalitis 2." - Dr Andrew Jeremy Wakefield, MD, FRCS, in "The Lancet", Vol. 351, 28 February 1998.

British Court Throws Out Conviction of Autism / Vaccine MD: Andrew Wakefield's Co-Author Completely Exonerated

In a stunning reversal, world renowned Pediatric Gastroenterologist Dr John Walker-Smith, MD, Professor at the University of London, and former Editor-in-Chief of the Journal of Pediatric Gastroenterology & Nutrition, won his appeal against the UK General Medical Council regulatory board that had ruled against both him and Dr Andrew Wakefield, MD for their roles in the 1998 Measles, Mumps and Rubella (MMR) study associating various vaccines with the onset of autism spectrum disorders and gastrointestinal disease.

The complete victory means that Dr Walker-Smith, MD has been returned to the status of a fully licensed physician in the UK.

Justice John Mitting ruled saying that the General Medical Council "panel's determination cannot stand.

I therefore quash it" based on "inadequate and superficial reasoning, and in a number of instances a wrong conclusion."

In 1998 the Lancet published a case series on 12 children receiving treatment for bowel dysfunction at the Royal Free Hospital in London, calling for further study of a possible association between bowel disease and developmental delay, including cases of Autism. **Noted that 8 of the children's Gastrointestinal, and Autistic Symptoms began shortly after they received the Measles, Mumps and Rubella (MMR) Vaccination.** The 13 original co-authors of the 1998 Lancet case series were members of the Royal Free

Inflammatory Bowel Disease Study Group. In 2004, under pressure from the British Medical Establishment, 10 of the co-authors signed a letter retracting. - in UK Press, and "Autism Action Network", March 2012.

Autism and Vaccines CDC Whistle-Blower Exposes Vaccine Dangers, Lies, and Cover-Ups

According to a study by Focus Autism Foundation, a CDC whistle-blower revealed manipulation of scientific data in regards to the MMR vaccine.

"A top research scientist working for the Centers for Disease Control and Prevention (CDC) played a key role in helping Dr Brian Hooker of the Focus Autism Foundation uncover data manipulation by the CDC that obscured a higher incidence of autism in African-American boys.

The whistleblower came to the attention of Hooker, a PhD in biochemical engineering, after he had made a Freedom of Information Act (FOIA) request for original data on the destefano et al MMR (Measles, Mumps, Rubella) and autism study." – marketwatch.com

Dr Hooker stated:

> *"The CDC knew about the relationship between the age of first MMR vaccine and autism incidence in African-American boys as early as 2003, but chose to cover it up."*

The CDC informant, who has worked for the government agency for over a decade, remarked to Dr. Hooker in phone calls:

> *"We've missed ten years of research because the CDC is so paralyzed right now by anything related to autism. They're not doing what they should be doing because they're afraid to look for things that might be associated."*

The whistleblower alleges criminal wrongdoing of his supervisors, and he expressed deep regret about his role in helping the CDC hide data." – focusautismminc.org - Michael Edwards in "Organic Lifestyle Magazine", 19 August 2014

The "Tiny" List of Vaccines That The Medical Trade and The NHS in England Recommends to be given to:

8 Weeks Old Babies
1. 6-in-1 vaccine
2. Pneumococcal (PCV) vaccine
3. Rotavirus vaccine
4. MenB vaccine

12 Weeks Old Babies
1. 6-in-1 vaccine, second dose
2. Rotavirus vaccine, second dose

16 Weeks Old Babies
1. 6-in-1 vaccine, third dose
2. Pneumococcal (PCV) vaccine, second dose
3. MenB vaccine second dose

1 Year Old Toddlers
1. Hib/MenC vaccine, given as a single jab containing vaccines against meningitis C (first dose) and Hib (fourth dose)
2. Measles, mumps and rubella (MMR) vaccine, given as a single jab
3. Pneumococcal (PCV) vaccine, third dose
3. MenB vaccine, third dose

2 to 9 Years Old Children (including children in reception class and school years 1 to 5)
1. Children's flu vaccine (annual)

3 Years and 4 months Old Children

1. Measles, mumps and rubella (MMR) vaccine, second dose
2. 4-in-1 pre-school booster, given as a single jab containing vaccines against: diphtheria, tetanus, whooping cough (pertussis) and polio

12-13 Years Old (girls only)

1. HPV vaccine, which protects against cervical cancer – two injections given 6-12 months apart

14 Years Old Children

1. 3-in-1 teenage booster, given as a single jab containing vaccines against diphtheria, tetanus and polio
2. MenACWY vaccine, given as a single jab containing vaccines against meningitis A, C, W and Y" - in nhs.uk/conditions/vaccinations, 2018.

The Vaccine War

In 2010 the PBS "The Vaccine War" Frontline program, the conclusions are drawn that vaccines do not cause autism. The cause of autism lays else where, it lays on the internet, and on the conspiracy theories, but not in vaccines, medical experts state that children who get autism symptoms the days after vaccination is pure coincidence, the two are not related.

Adverse Events After Routine Immunization of Extremely Low-Birth-Weight Infants

"Most of the 13,926 infants (91.2%) received 3 or more immunizations. The incidence of sepsis evaluations increased from 5.4 per 1,000 patient-days in the preimmunization period to 19.3 per 1,000 patient-days in the postimmunization period.

The need for increased respiratory support increased from 6.6 per 1,000 patient-days in the preimmunization period to 14.0 per 1,000 patient-days in the postimmunization period, and intubation increased from 2.0 per 1,000 patient-days to 3.6 per 1,000 patient-days.

The postimmunization incidence of adverse events was similar across immunization types, including combination vaccines when compared with single-dose vaccines.

Infants who were born at 23 to 24 weeks gestation had a higher risk of sepsis evaluation and intubation after immunization. A prior history of sepsis was associated with higher risk of sepsis evaluation after immunization." - in "JAMA Pediatr.", 2015; 169(8), 740-745.

"Encephalitis is inflammation of the brain that occurs when a virus directly infects the brain or when a virus, vaccine, or something else triggers inflammation. The spinal cord may also be involved, resulting in a disorder called encephalomyelitis. People may have a fever, headache, or seizures, and they may feel sleepy, numb, or confused." - Dr John E. Greenlee, MD, University of Utah School of Medicine in "MSD Manual, Consumer Version", (Merck Manual in the US and Canada and the MSD Manual in the remainder of the world), 2019.

Vaccines Little Profit

"**Vaccines were regarded for many years as bad business for the pharmaceutical industry.**

In 1990, the British company, Wellcome, announced it was stopping research into, and manufacture of, vaccines because there was, too much litigation and too little profit ("British firm halts vaccine manufacture, research", JAMA, 1990).

The change over recent decades has been astounding, and today the story is very different: vaccines have become big business, and are now the fastest growing sector of the pharmaceutical industry.

All the major multinational vaccine manufacturers reported large increases in income from vaccines in their 2007 annual reports, with vaccines being their fastest growing products.

By 2014 the global vaccines market had grown to US $33 Billion and is projected to grow to US $41 Billion by 2021." - Dr Richard Halvorsen, MD in "Vaccines: Making the Right Choice for your Child", 2018.

Vaccines
Profit Ahead of the Public Good

"The Report: "Vaccines Market by Technology (Live, Toxoid, Recombinant), Disease (Pneumococcal, Influenza, DTP, Rotavirus, TT, Polio, MMR, Varicella, Dengue, TB, shingles, Rabies), Route (IM, SC, ID, Oral), Patient (Pediatric, Adult), Type - Global Forecast to 2024", is projected to reach USD $58.4 Billion by 2024, from USD $41.7 Billion in 2019, at a CAGR of 7.0% during the forecast period.

Pediatric patients segment accounted for the larger share of the vaccines market, by patient type.

The large share of this segment can be attributed to increasing government support and rising company investments in conjugate Vaccine development." - in "Markets and Markets", January 2020.

"**Among the other causes of possible paralysis - including bacterial meningitis, Japanese encephalitis, mumps, even diarrhoea and dehydration with hypokalaemia - that are not being diagnosed, John suspects that a major cause of paralysis is post-traumatic neuropathy after injections.**

Despite a nationwide ban on intramuscular injections in children's buttocks, many unregulated and poorly trained doctors still do them. **If they hit the sciatic nerve, the child has a transient paralysis; in some cases paralysis is permanent.**" - Dara in "Polio-like disease in the news: much ado about nothing?", The Lancet Neurology, July 2014.

Vaccine Industry Has Absolute Legal Immunity

"The Vaccine Companies went to Congress and said:

> ***"We're going to stop making Vaccines and that's going to be a national security problem, because if there is a bioterrorism attack or if there is an epidemic, there's going to be no factories that are up and running that can create New Vaccines that can respond to those national emergencies. And so, if you want us to continue to make Vaccines you're going to have to give us immunity from litigation."***

And that's what happened." - Robert F. Kennedy, Jr in "The Truth About Vaccines", 2018.

> ***"The Vaccine Industry has absolute legal immunity. They can put anything in a Vaccine. And to some extent, they do. They put known Neurotoxins in the Vaccines. It's criminal what they do to our fellow human beings."*** *- Mike Adams in "The Truth About Vaccines", 2018.*

"The lawyers representing the Pharmaceutical Industry, Government, and Medical Trade, convinced the Supreme Court that there should be no liability at all for the Pharmaceutical Industry when it comes to Vaccines that are licensed by the FDA as Safe & Effective.

The Supreme Court majority, with 2 dissents, Justices Sotomayor and Ginsberg dissented.

The Supreme Court said:

> *"**Vaccines are unavoidably unsafe**, and there shall be no more lawsuits against any Vaccine Company."*

So, today, if you or your child are injured by Vaccine or **if your child dies from a Vaccine, you cannot hold anyone accountable in a civil court of law, anyone who makes or sells the Vaccine,** who regulates the Vaccine and who makes policy for the Vaccine, who votes to mandate for the Vaccine, or who gives the Vaccine.

The only one who's left with any responsibility for what happens to a child, after that child's injured by Vaccine, is the parent." - Barbara Loe Fisher in "The Truth About Vaccines", 2018.

> ***"Legally Vaccines are classified as "unavoidably unsafe." That's their legal classification.***
> *When I say that, in court in the state cases that I have which are not injury obviously, that's federal court, the judges always stop me and go:*
> *"What? What did you say?*
> *Wait, repeat that, repeat that!"*
> *I'm like: "They're legally classified as unavoidably unsafe, your honour."*
> *Then they're like, "Woah, wait a minute." - Dr Toni Bark, MD in "The Truth About Vaccines", 2018.*

Ingredients, Components Excipients Found In Vaccines

Albumin, Bovine	DOPC	Phosphate Buffer
Albumin, Bovine	EDTA	Polymyxin
Serum	Egg Protein	Polymyxin B
Albumin, Calf Serum	Ferric (III) Nitrate	Polymyxin B sulfate
Albumin, Calf Serum	Formaldehyde	Polysorbate 20
Protein	Galactose	Polysorbate 80
Albumin, Egg	Gelatin	Porcine DNA
(Ovalbumin)	Gelatin, Bovine	Potassium
Albumin, Fetal Bovine	Gelatin, hydrolyzed	Aluminum Sulfate
Serum	Gelatin, Porcine,	Potassium Chloride
Albumin, Human	Hydrolyzed	Potassium
Albumin, Human	Gentamicin Sulfate	Glutamate
Serum	Glutamate	Protamine Sulfate
Aluminum	Glutaraldehyde	Salts and Sugars,
Amino Acid	Hexadecyltrimethylamm	Inorganic
Ammonium Sulfate	onium Bromide	Salts, Inorganic
Amphotericin B	Histidine	Salts, Mineral
Ascorbic Acid	Hydrocortisone	Sodium Bicarbonate
Barium	Kanamycin	Sodium Borate
Benzethonium	Lactalbumin	Sodium Citrate
Chloride	Hydrolysate	Sodium Citrate
Beta-Propiolactone	Lactose	Dihydrate
Bovine Casein	L-cystine	Sodium
Bovine Extract	L-histidine	Deoxycholate
Bovine, Casamino	L-tyrosine	Sodium Hydroxide
Acid	Magnesium Stearate	Sodium
Calcium Carbonate	Magnesium Sulfate	Metabisulphite
Calcium Chloride	Monosodium glutamate	Sodium Pyruvate
Carbohydrates	Monosodium L-	Sodium
Chick Embryo	glutamate	Taurodeoxycholate
Chick fibroblasts	Mouse Serum Protein	Sorbitan Trioleate
Chlortetracycline	MRC-5	Sorbitol
Citric Acid	Neomycin	Streptomycin
Monohydrate	Neomycin Sulfate	Succinate Buffer
CTAB	Nonylphenol Ethoxylate	Sucrose

Dextrose	Octoxynol-10 (Triton X-100)	Thimerosal (mercury)
D-glucose	Octylphenol Ethoxylate (Triton X-100)	Vero Cells
Dimethyl-beta-cyclodextrin	Peptone, Soy	Vitamins
DNA	Phenol	Xanthan
	Phenol Red Indicator	Yeast
		2-Phenoxyethanol

Health Does Not Come From Injecting Poison Into The Blood-stream

The principle in which Vaccines produced by the Medical Trade act are those to produce within the body system those same conditions which the germs produce.

Thus the Medical Trade delivers into the blood stream those same elements which cause the same disease or condition which wants to avoid.

Adverse conditions may arise from the bad combination of mercury and bovine vaccines, these can affect the organs themselves, thus producing conditions such as congestion in the lobes of the liver, affecting the glandular system in its abilities to create the elements necessary for proper activity of these glandular secretions, to the central system of blood supply.

Thus gradually producing a tendency from this congestion such that there is the inclination towards forms of anaemias, or that as related to activity of the structural portions of the body, to become deficient in supplying those portions of the hormones as to make sufficient red blood cells.

These in turn may produce the attempt in the glandular forces to produce the amount of the lymph in excess in body. Which then may cause an irritation to the mucous membranes as in the face, head, throat and lungs.

Vaccines tend to produce acidity in the blood stream.

Therefore vaccines should not be used unless in cases of epidemics or as such.

The best Vaccines would be a combination of providing a good wholesome nutrition to the body, and those made from the own body's blood flow, that is, the form of Vaccine that would be grown from the body's own blood.

Prevention is the best way to create immunity to germs in the body system.

"An ounce of prevention is better than a pound of cure." - Old Adage

"A few years ago **a child of mine, would have died from Vaccination.**

This led me to turn my attention to the question of Vaccination, and to read everything I could find about the practice, with the view to learning whether it is in any degree beneficial, or whether it is only quackery, destined to go the way of inoculation, powdered earth worms, weasel's brains, toad's eyes, pounded egg shells, and all the innumerable doctors nostrums of superstitious times; of which times perhaps ours is not the least superstitious.

During the course of my reading I wrote down thoughts that occurred to me upon the subject, together with others leading from it. Hence this book." - H. Strickland Constable, in "Our Medicine men a few Hints", 1876.

"Yours is, I grant, a very hard case. ***Your children are murdered according to the law, and you have no redress."*** *- H. Strickland Constable, in* ***"Advice to parents whose children have been killed by Vaccination",*** *Our Medicine men a few Hints, 1876.*

"Out of 800 patients admitted into the Small Pox Hospital in 1852, only 230 were unvaccinated; in other words, 570, or considerably more than two-thirds of the whole, had been vaccinated." ***There is also a strong suspicion****, based on the experience of many eminent medical men, that it not only introduces other diseases into the system, but that* ***some children: "Never enjoy good health after vaccination****." - John Gibbs Esq., in "Our Medical Liberties, or the Personal Rights of the Subject as Infringed by recent and Proposed Legislation - A Review", The Witness, Edinburgh, 15 July 1854.*

Chapter 13

On the Treatment of Small-Pox

"In the mild variety of small-pox treatment is not of importance. "We must only remain at rest."

The patient should be kept in bed until crustation is completed, should be fed on light and easily digestible food, and should have his linen changed daily and fresh cool air in abundance.

No drugs will be required, except perhaps a purgative pill or a little castor oil.

In the black small-pox all treatment is useless, and our efforts should be directed simply towards palliating the patients sufferings.

Cold, water will probably be most grateful, and that ought to be given freely.

An egg beaten up in a little whisky-and-water will relieve sensations of exhaustion, but beyond this our art is powerless.

Large doses of stimulants are simply wasted. In the severe or confluent small-pox, however, treatment is of the highest importance. Here our management will sometimes determine the result.

The patient should be placed in a large well-ventilated room, a room with opposite windows if possible, and these should be kept open by night and by day and in all seasons.

If the weather is very cold, keep a good fire in the room, and let the patient have an extra blanket, but keep the windows open; and if the weather is mild, treat the patient absolutely in the open air.

Nothing is of so much importance as pure air, and that in unlimited quantities.

In this hospital we have kept our windows open constantly by night and by day throughout the months of February, March, April, &c.; and this has been attended with

the very best results, for our mortality is the lowest of all the small-pox hospitals in London, and we were receiving our patients from the same sources, and some time before the epidemic reached its height.

Including every death, our mortality is only 14.6%; and if we were to strike off those who died of sequelae, and those who died 6, 12, and 24 hours after admission, it would be considerably less.

Up to 22 July the mortality in the different hospitals has been as follows: Hampstead, 19.1%; Stockwell, 17.6; Homerton, 17.1; Mrs. Gladstone's Small-pox Hospital, 17.1; Stockwell Fever Hospital, 15.5; Homerton ditto, 14.6.

The patient's bed may consist of feathers, or a hair or flock mattress; and there ought to be two beds in the room, in order that the patient may be changed from one to the other, and the bed made-a matter of great comfort to a sick person.

The sheets ought to be of the finest and softest material.

The coverings should be light, and all curtains should be removed. The room ought to be absolutely cleared of rugs, carpets, cushioned chairs, wardrobes, pictures, and everything which might harbour a particle of dust or a small-pox scab. Inquire first about the bowels, and, as a rule, give a gentle purgative.

Do not place your patient on low diet.

That a patient about to undergo the exhausting labour involved in an attack of small-pox should be starved is, in my opinion, of all medical absurdities the most absurd.

Your patient will not be able to take food in the same form as in health, but he must and should have the same in quantity, if not indeed more, although in a different form.

Let your patient then have milk in abundance, as many raw eggs beaten up with a little whisky as can be stuffed into him, beef-tea, arrowroot, sago, tapioca, &c.

Ordinary coffee, of moderate strength, you will find pleasant stimulants, and these should be given, remembering, however, that if given in too large a quantity they have a tendency to prevent sleep. To relieve thirst, cold water is usually the best and the most pleasant to the patient, and he ought never to be refused this.

There is nothing more pleasant to a parched mouth and a dry tongue than pure cold water. For heat of skin the patient may be sponged with tepid water 2 or 3 times daily.

Indeed, in all cases of small-pox the whole body should be sponged daily. If there be restlessness or sleeplessness, the following, repeated in half an hour, if needed, will be found of great service: Tincture of opium, 15 minims; spirit of ether, 15 minims; camphor water, 1 ounce.

Or, what we have often found to succeed when drugs proper failed, was 2 or 3 ounces of whisky in warm water.

Of course the dose must be modified according to age and sex; but in restlessness, sleeplessness, and delirium we have found this latter most useful. In the early stages, with the last-mentioned exception, avoid stimulants as a rule; but remember them about the tenth day, when the patient's powers will be taxed to the utmost.

There is no special drug to be given; and I would advise you not to bother your patients much with mixtures.

Feed them. If salivation be present, you had better let it alone; and be careful of giving sedatives, as the mouth and air-passages become more or less choked up with the saliva- a condition which would be very serious if bronchitis were also present.

Soreness of the throat is always more or less troublesome.

Oleaginous and mucilaginous drinks, and black-currant jelly, may be given as an amusement; but the only remedy is time and patience.

Try the following, which we have found beneficial in this condition: Tincture of perchloride of iron and glycerine, of each 30 minims: 3 times a day.

Towards the 11th day look out for laryngitis; and when it occurs wrap a large linseed poultice round the throat, and keep it there, changing it 3 or 4 times in the 24 hours.

Raise the temperature of the room, and surround the patient with an atmosphere of steam.

Avoid antimony, mercury, and such like; and do not exhaust your already exhausted patient with emetics.

I suppose I need hardly caution you against bleeding, Warmth, steam, feeding, and some stimulant are in my

opinion the best and safest remedies.

If the difficulty of breathing increases, and you perceive commencing exhaustion, perform tracheotomy at once.

Delirium is present in some stage of the disease in a considerable proportion of cases, and it requires very careful management. It is usually most violent and dangerous in the early stage of the illness.

See that your patient is not left alone for a moment. Humour him always if you can.

Always agree with your patients, therefore, and try to convince them that you are taking the necessary steps to accomplish what they wish, or to prevent what they fear.

Try to discover the way in which the objective world presents itself to their consciousness, remembering that in the highly irritable condition of the nervous system present in delirium objects are far more vividly conceived, and produce a much stronger impression than they do in health.

Beware of using force, or of tying your patient down. I have again and again seen slightly delirious patients driven frantic by this means.

Patience, gentleness, and firmness will almost always succeed, but above all things gentleness. Remember you can never handle a sick person too gently, nor speak to one too softly.

To a shattered or highly sensitive nervous system the slightest sound, the faintest light, the gentlest touch, are sometimes almost unbearable.

If, therefore, a patient will get out of bed and walk about, will persist in throwing about his arms and legs, let him do so. It is far better that he should exhaust himself than himself and one or more attendants.

About the 11th day you may find diarrhoea troublesome; but I would not advise you to interfere with it unless it is excessive or clearly weakening the patient.

A little castor oil may be necessary; and in most cases I should prefer to try this first, as **patients are usually constipated in the earlier stages of small-pox**, and diarrhoea is sometimes an indication of the presence of irritating substances in the intestine.

Along with this may be given a starch - and - laudanum Enema, with 15, 20, or thirty drops of the latter, according to the age.

This will succeed in the majority of cases; but when it fails, recourse must be had to the more powerful astringents. Just about this period bronchitis, by itself or with pneumonia, may arise.

Wrap your patient's chest in a blanket or in cotton wool; and if you think he requires a drug, the following is a good one: Carbonate of ammonia, 5 grains; spirit of chloroform, 15 minims; tincture of squills, 10 minims; infusion of senega, 1 ounce: every 3, 4, or 6 hours.

The most hopeless of complications or sequelae is pleurisy.

We have employed with some success the following treatment: tincture of iodine painted over the affected side; cotton-wool wrapped round the chest and throat; a mixture containing 15 minims of tincture of muriate of iron and 30 minims of spirit of nitric ether, in an ounce of water, 3 times daily; with stimulants in moderation, and good feeding.

Always feed, whatever may be the complication.

Erysipelas requires simply feeding and tonics; as local applications we have invariably used fine flour and poultices. We have only had one fatal case.

With regard to abscesses, early opening, tonics, feeding, and stimulants should be the treatment pursued.

The following is an admirable tonic: 2 grains of sulphate of quinine, 20 minims of tincture of muriate of iron, and 15 minims of spirit of chloroform, in 1 ounce of water; 3 times daily.

Crusts should not be allowed to remain about the nostrils and mouth, where they poison the air which the patient must breathe.

They should be carefully removed as they form, and a stream of carbolic acid lotion kept running over the part which is being removed.

Air cannot pass over decomposing fetid matter without being more or less contaminated, and I believe this source of contamination is not sufficiently recognised.

Always remove scabs under which pus is forming; and at this period see that your patient is bathed, which, if properly managed, may be done without producing exhaustion.

It greatly adds to a poor creature's comfort to have a quantity of stinking matter washed' away.

When the patient begins to convalesce, and also for some time during convalescence, he is often irritable, and generally uncomfortable.

Be particular throughout that your patient's linen is frequently changed.

In some cases this may be an hourly instead of a daily necessity.

Also see that he does not always lie upon his back, but that he is frequently changed, so as to avoid too constant pressure on particular parts.

In severe cases procure a water bed at once. By good nursing, let me repeat, almost all bedsores might be prevented, and to their prevention we ought to look most carefully. For haemorrhages from the mucous surfaces.

If it is severe, add to your stimulant, and take care that your patient does not get out of bed to stool.

Orchitis, gonorrhoea, and arthritis sometimes require warm poultices and mild astringent lotions, but these are usually sufficient. **Such is the treatment we have employed.**

To sum up: air, cleanliness, feeding, stimulants in moderation, sedatives, and tonics are, we believe, the best treatment for small-pox.

One important question may be here answered:

When a small-pox patient may be considered free of danger to his neighbours?

This, in reference to the public, is a most important question, and one which requires an accurate answer.

We have thought over this very carefully, and we believe that we have arrived at an unassailable conclusion.

It is a truism to say that a healthy man cannot give to another a contagious disease; for the question at issue is, when and how a person may be certainly recognised to be in a state of health.

Now, you know **the ordinary signs of health: a certain temperature, or rather range of temperature, a quiet pulse, a clean tongue, a clear mind, &c.**

When you find these conditions in a small-pox patient, he is in a state of health.

But, and this "but" is very important, certain products of disease remain for an indefinite time attached to the body.

These are the scabs, and the scales which follow them.

When these are quite gone, your patient well washed, and clean clothing put on, you may send him anywhere without let or hindrance.

The practice here has been that, as a patient is ordered out of bed, he has a bath, and this is repeated every day until he leaves the hospital. It facilitates the removal of the scabs. No person has ever been sent out of this hospital with a small-pox scab or scale.

I have but a word to say about children's heads; they are most aggravating. Shave, poultice until removal of the scales, then use tar or oxide-of-zinc ointment, the former being preferable, and give the following: Cod- liver oil, 1 drachm; iron wine, 2 drachms: 3 times daily." - Dr Alexander Collie, MD, Resident Medical Officer, Homerton Fever Hospital, in "The Lancet", 30 September 1871.

"Another instance was thrust on my attention during the Small-Pox Epidemic, which a while since so unaccountably spread, **after 20 years of compulsory Vaccination.**

A lady living in London, sharing in the general trepidation, was expressing her fears to me.

I asked her whether, if she lived in a town of 20,000 inhabitants, and heard of one person dying of small-pox in the course of a week, she would be much alarmed.

Naturally she answered, "No"; and her fears were somewhat calmed when I pointed out that, taking the whole population of London, and the number of deaths per week from small-pox, this was about the rate of mortality at that time caused by it. Yet in other minds, as in her mind, panic had produced an entire incapacity for forming a rational estimate of the danger.

Nay, indeed, so perturbing was the emotion that an unusual amount of danger to life was imagined at a time when the danger to life was smaller than usual.

For the returns showed that the mortality from all causes was rather below the average than above it.

While the evidence proved that the risk of death was unusually small, this wave of feeling which spread through society produced an irresistible conviction that it was unusually great." - Herbert Spencer, in "The Study of Sociology VII", Popular Science Monthly Vol. 2 February 1873.

"The small-pox epidemic of 1872, 1873, and 1874. The report from the head physician, Doctor Kellor, is as follows:

> ***"Of children under 1 year old the mortality of the Vaccinated was 48%, of the unvaccinated 45%. Of children between 1 and 2 years the Vaccinated died at 46%, the unvaccinated at 41%.*** *In Birmingham, from 1871 to 1875, there were 1,270 deaths of people from small-pox,* ***of whom 840 had been Vaccinated. Of those who died of small-pox during the last epidemic, more than 80 out of every 100 had been Vaccinated. Knowledge of the failure has not made the slightest difference. When, 97% of Londoners are Vaccinated, yet small-pox makes deadly outbursts there."*** *- Professor F. Newman*

The Pall Mall Gazette, April 1877, **records 3 cases of small-pox amongst nurses who had not only been Vaccinated, but Revaccinated."** - H. Strickland Constable, in "Fashions of the day in medicine and science a few more hints", 1879.

Chapter 14

Aspirin

"Another bad habit the public got into is the "running over to the drug store" for "a little of this and a little of that." For example, many a woman will become a victim of Aspirin, which weakens the heart *when taken continuously." - Dr. Simon Louis Katzoff, MD "Timely Truths on Human Health", 1921.*

Aspirin and Pulmonary Edema

"In conclusion, though the lung is not a significant metabolic organ, derangements within its structure have marked consequences.

Due to the location of the pulmonary vascular network which is connected in series within the circulation, every marked elevation in pulmonary vascular resistance will tend to affect cardiac output and consequently blood flow within distant organs.

Furthermore, hypoxemia, which frequently develops in patients with lung diseases, has significant consequences on distant drug metabolizing systems and organs.

This may in part explain the still confusing field of drug pharmacokinetics in lung disease.

In such disease, caution should be exerted when prescribing widely used drugs such.

Non-steroidal anti-inflammatory drugs as well as aspirin are capable of inducing severe asthmatic reactions in particularly susceptible patients; interference of these compounds with prostaglandin metabolism is one possible mechanism. Non-cardiogenic pulmonary edema has been ascribed to several unrelated compounds such as aspirin, hydrochorothiazide, cytosine-arabinoside, haloperidol, and methotrexate.

Aminoside Antibiotics, particularly when inappropriately used in association with or during renal failure, can markedly depress the conduction through the neuromuscular plaque and promote alveolar hypoventilation; the same result is observed with drugs inducing myasthenia.

When prescribing a Drug to any patient some questions should be raised regarding the potential storage of the Drug used in the lung of the patient, the potential role of concomitant lung disease on the fate of the drug administered, and the possible deleterious consequences of this drug on the respiratory system." - Ph. Camus, L. Jeannin, in "The Diseased Lung and Drugs", Arch. Toxicol., Supp. 7, 1984.

"I had a package handed to me containing 1,000 Aspirin tablets, which was 994 too many. I think I gave about a half dozen. I could find no place for it. My remedies were few. I hardly ever lost a case if I got there first, unless the patient had been sent to a drug store and bought Aspirin, in which event I was likely to have a case of pneumonia on my hands." *- Dr J. P. Huff, MD, Olive Branch, Ky.*

"1,000 Eclectic Physicians were asked to name the remedies most useful in Influenza and in Pneumonia. Over 75% named Aconite in Pneumonia." *- Lloyd Brothers, Cincinnati.*

"To offset the high temperature, which was largely due to hypostatic condition, ***the use of aspirin or kindred drugs was naturally resorted to with gratifying results in so as the temperature was concerned, but as the lowering of the blood pressure counteracted natures efforts to correct the secretory disturbance, the patient was left to drown in his (or her) own secretions, usually terminating in cyanosis or empyema."*** *- Dr J.S. Allison, DO, in* ***"My Impression of the Flu"****, Journal of Osteopathy, July 1919.*

"Aspirin and the other coal tar products are condemned as causing great numbers of unnecessary deaths. The omnipresent Aspirin is the most pernicious drug of all. *It beguiles by its quick action of relief of pain, a relief which is but meretricious.* ***In several cases Aspirin weakened the heart, depressed the vital forces, increased the mortality in mild cases and made convalescence slower.*** *In all cases it masks the symptoms and renders immeasurably more difficult the selection of the curative remedy.* ***Apparently Aspirin bears no curative relation to any disease and it ought to be prohibited."*** *- Dr Guy Beckly Stearns, MD, New York, in "Journal of the American Institute of Homeopathy", May 1921.*

"The influenza pandemic occurred in 1889-1890. Fever and pain marked the malady and ***all over the world physicians prescribed antipyrine and acetanilid with disastrous results. In 1918-1919, Aspirin and acetphenatidin played the same harmful role as was played by antipyrin and antifebrin a generation earlier. The lesson had not been sufficiently impressed on the younger generation of physicians."*** *- Dr Solomon Solis-Cohen, MD, Dr Thomas Stotesbury Githens, MD, in "Pharmacotherapeutics, Materia Medica and Drug Action", 1928.*

"Recent investigations with artificial fever methods show that leucocytosis is produced by speeding up the output of white blood cells under the stimulus of heat. As the blood picture in influenza is a leukopenia and a shift to leucocytosis is clinically desirable, ***the use of antipyretics becomes not only illogical but definitely detrimental to the welfare of the patient."*** *- Dr Edward A. Ward, DO in "Journal of American Osteopathic Association", September 1937.*

The 1918 Flu Epidemic

In the 1918 Flu Epidemic many Deaths caused not by the "Virus", but by a Drug used to treat it: Aspirin

"The high case-fatality rate, especially among young adults, during the 1918–1919 influenza pandemic is incompletely understood. Although late deaths showed bacterial pneumonia, early deaths exhibited extremely "wet," sometimes hemorrhagic lungs.

The hypothesis presented herein is that **Aspirin contributed to the incidence and severity of viral pathology, bacterial infection, and death,** because physicians of the day were unaware that the regimens (8.0–31.2 g per day) produce levels associated with hyperventilation and pulmonary edema in 33% and 3% of recipients, respectively.

Recently, pulmonary edema was found at autopsy in 46% of 26 salicylate-intoxicated adults. Experimentally, salicylates increase lung fluid and protein levels and impair mucociliary clearance.

In 1918, the US Surgeon General, the US Navy, and the Journal of the American Medical Association recommended use of Aspirin just before the October Death Spike. If these recommendations were followed, and if pulmonary oedema occurred in 3% of persons, a significant proportion of the deaths may be attributable to Aspirin." - Dr Karen M. Starko in "Salicylates and Pandemic Influenza Mortality, 1918–1919 Pharmacology, Pathology, and Historic Evidence", Clin. Infect. Dis., 2009.

> ***"The reasons why children fared better than adults in the influenza epidemic, they were not drugged*** *with "sure cures",* ***they were not filled up with Aspirin;*** *they were put to bed; they were given the proper remedy, and had a fine chance." - Dr J. P. Cobb, MD, in "Journal American Institute of Homeopathy", May 1921.*

*"**All of the people under my care who died of influenza had of their own accord taken Aspirin** before I saw them." - Dr W. P. Best, MD, Indianapolis.*

***"There may be some hearts that can withstand Aspirin; there may be some hearts that can withstand influenza; but there are no hearts that can withstand both Aspirin and Influenza."** - Dr Taylor, MD, Philadelphia.*

*"Many patients had been advised to take Aspirin as a prophylactic against influenza and influenza pneumonia. One lady had taken 240 grains in 48 hours. She was sent, to the hospital diagnosed as scarlet fever because of the red spots on her body. **Many cases who came to the hospital (Haynes Memorial) were filled up with Aspirin, Codein, Morphine and Digitalis."** - Dr Samuel Clement, MD, Boston.*

***During the "flu" period almost every victim got his Aspirin.** Almost everybody believed in it because it relieved his distress and "couldn't do him any harm." The result was that thousands died who might have lived had they been willing to bear discomfort for a little while. **They died like flies around a plate of poison although "science" did all that could be done to "save" them."** - Dr A. F. Stevens, MD, St. Louis.*

***"Ne treated over 300 cases of influenza among the members of the Student Army Training Corps with no deaths. Only in those cases having had Aspirin was convalescence delayed and pneumonia produced."** - Dr C. B. Stouffer, MD, Ann Arbor.*

*"I treated over 100 cases of influenza and pneumonia, lost 2 cases, **one who had taken Aspirin for a week when pneumonia developed before I was called;** the other a very malignant case with very high temperature from the onset." - Dr C. P. Bryant, MD, Seattle.*

*"**I treated approximately 500 cases which included much Pneumonia, lost 2 cases; never used Aspirin nor permitted it to be used.**" - Dr A. B. Palmer, MD, Seattle.*

*"**In a plant of 8,000 workers we had only 1 death.** The patients were not drugged to death. **We used no Aspirin and no Vaccines. Absence of the customary drugging was also an element of the remarkable success in this plant.**" - Dr Frank Wieland, MD, Dr Burton Haseltine, MD, Chicago.*

*"One of the principal druggists of Montreal told Dr T. A. McCann, MD that **they had lost 900 patients from influenza. Being asked what drug they used most he replied that Aspirin was used more than all other drugs combined. The directions were to take a 5-grain tablet every 3 hours, but more took 10-grains every 3 hours. Comment is unnecessary.**"*

*"The mortality rate in a camp was for pneumonia 25.8%. **The lieutenant in charge was persuaded to discontinue Aspirin, Digitalis and Quinine and the mortality dropped speedily to 15% with no medicine whatever.** This was in one ward. **Where upon it was ordered in other wards and the mortality dropped to 15% with no medicine.**" - Dr W.A. Pearson, MD, Philadelphia*

*"**An appalling death rate comes from the baneful results of large doses of Aspirin**, salicylates and opium preparations." - Dr A. H. Grimmer, MD, Chicago.*

*"I remember Acetanilid in the epidemic of 1889 and its fatalities. **In this epidemic I knew that Aspirin and the coal tar products would kill more people than the disease itself and it has so proved. One physician told me that he had gotten wise to the fact that Aspirin was killing his patients and that he had stopped using it.**" - Dr E. B. Finney, MD, Lincoln, Neb.*

"There is one drug which directly or indirectly was the cause of the loss of more lives than was influenza itself. You all know that drug. It claims to be Salicylic acid. Aspirin's history has been printed. *Today you don't know what the sedative action of Salicylic acid is. It did harm in two ways. Its indirect action came through the fact that Aspirin was taken until prostration resulted and the patient developed pneumonia." - Dr Frank L. Newton, MD, Somerville, Mass.*

- All quotes gathered by Dr W. A. Dewey, MD, University of Michigan in "Influenza a chorus in harmony", Journal of the American Institute of Homeopathy, May 1921.

Harmful Medication

"When we stop to think how men and women, make invalids of themselves by running to the drug store for "a few aspirin tablets," "an acetanilid compound wafer," or "some headache powder," we realize how many human beings are still steeped in ignorance, or have little self-reliance and forethought.

They keep us physicians busy making feeble attempts to relieve, revive and restore them from the effects of such drugs. Such is the price suffering mankind must pay for its credulity and submissiveness to custom.

The truth is, that the abuse, the continuous use of dangerous drugs as aspirin, acetanilid and bromin, as a "cure" of headaches is more harmful to the human system than the headache itself.

What relief those drugs afford is usually obtained at the expense of vitality.

These heart depressants (aspirin, acetanilid and bromin), unless very carefully prescribed by a physician, serve to produce various derangements of the heart and other organs, eventually hastening death.

Another sad and deplorable fact about this "Headache

drugging" is that these drugs lose their effect (in time), while the victim suffers and continually becomes weaker.

Many, while suffering, then resort to narcotic drugs. If they cannot secure them from the druggist they will keep on coming to the physician, or go from physician to physician, finally getting prescriptions from different ones, which are filled at different drug stores.

In this manner many a good woman drifts unconsciously but gradually into being a "dope fiend", all because of the temporary, otherwise valueless, "headache powder."

All this could have been prevented if the victim had been taught the cause of the headache and could have used self-reliance and uncommonly good sense methods of procedure in a case of excruciating headache.

Further, the continuous use and pernicious misuse of these drugs blunt perception and destroys the nervous system, thereby causing organic lesions and death.

Many a death certificate that reads "Died of Heart Failure" should, instead, have appeared "Died of Aspirin Drugging," or "Died of Headache Powders and Stupidity," or "Died a Victim of Narcotics," or "Another Victim of Baccilli Ignoramus." - Dr. Simon Louis Katzoff, MD "Timely Truths on Human Health", 1921.

A Very Commonly Used Drug

"I do not know of any person living, and capable of thinking, in any city of the United States and many other cities of the world, who have not heard of it. It is known by the name, aspirin.

Eaten like candy, this drug is slowly but surely ruining the humans who are using it. I have preached this for years, but "medical science" shrugs its shoulders and keeps its mouth shut, for the sake of big business.

I have seen aspirin drug addicts, and possibly so have you. I have seen women's and men's nervous systems shattered for life through the use of it.

Persons heart shattered for life by it; and yet it is advertised that it will not harm the heart.

The Deadly Harm of Aspirin

We now see by the following that after all these years, aspirin is at last being realized as damaging and harmful. The extract from the article which follows here, is taken from the "Des Moines Tribune":

> *"Washington, D.C. — The Bayer Co., Inc., of New York, was ordered Wednesday by the Federal Trade Commission to cease 'unfair competitive practices'* ***in the sale of Aspirin. The company is prohibited from asserting without proper qualifications, that the product has no harmful after effects, does not depress the heart, and the like."***

This article was kept very quiet, and the people today still do not realize that Aspirin will cause great harm, and eventually death.

The authorities did not stop the manufacture of this drug, which is just as deadly as any other drug.

The dangers of its contests or its continued use are not printed on the box. It is not only allowed by prescription.

It is sold on any counter, whether drug, department magazine, candy or cigar store, in all cities of the United States. Some persons eating it by the box daily.

Not using it as an emergency, but as a habit.

Ignoring nature rather than find the cause which is creating the headache or pain in the system.

The Action of Aspirin

"The steady increase in deaths from heart disease since 1900 may in part be due to the free use of drugs derived from coal tar, in the opinion of Dr. H. C. Temple, writing in the Ohio State Medical Journal. He lays special stress on acetysalicylic acid, which has an enormous sale under the trade name of aspirin.

It may be obtained not only in drug stores, but at news stands and stationery shops.

People use it as a remedy for headaches and pains of all sorts. It belongs to the same group of coal tar derivatives as acetanilid antipyrin, acetophenacidin and other well known heart depressants.

> *"The physiologic action of any of this general class of drugs is to reduce arterial tension and weaken the contractibility or elasticity of the muscular fibres of the heart. By the continued use of aspirin, the heart muscles become soft and flabby, the heart valves relax and use their power to perform their normal function properly, and by degrees, the blood begins to regurgitate with each heart pulsation back into the blood vessels, thus gradually resulting in a valvular heart lesion. Once this is established, it is never cured, but continues to grow worse until death results. Yet this drug is advertised as being quite harmless." - Dr. H.C. Temple, in "Good Health Magazine".*

Just think of the millions of people using this drug daily. Picture the damaged hearts and other organs and nervous systems this drug is creating; then these same medical doctors want to know why there is so much heart disease today.

With such drugs as above, and vaccines, serums and toxins being pumped into the blood stream by the tons. They ask you to contribute millions to heart hospitals and heart laboratories yearly, to assist and discover why there is so much heart trouble, and why so many people are dying from it.

Dr. Temple came out and told them why. But his statements were confined to the Ohio State Medical Journal.

Why not come out in the daily papers in large headlines with such statements? The newspapers fear the loss of advertising from the drug manufacturers.

The people must die for the lack of knowledge, and big business, big business don't forget, must be preserved, even at the cost of thousands of lives yearly." - Dr James I. Bardsley, DC in "The Medical Herbalist", Vol. XI, 1937.

Aspirin "Salicylic Acid" or Common Aspirin

"Aspirin cannot be taken in any amount without causing some destruction in the system.

Moderate doses can cause a more rapid heart beat, a rise in blood pressure, flushing and warmth of the surface, perspiration, fullness in the head, ringing in the ears, deafness, impairment of vision and possibly temperature variations.

Larger doses may cause delirium, especially with visual hallucinations; respiration is disturbed; the heart is slowed and weakened; the vessels are relaxed, the blood pressure falls, and perspiration is increased.

Occasionally it induces an eruption or albumin or blood in the urine.

Aspirin also causes ulcers and irritates the delicate mucous membrane in the stomach.

The Medical Trade Doctors have been warned about aspirin for years. As early as 5th October 1940, an editorial in the Journal of the American Medical Association reasoned that the main safeguard against overdose lay in a ringing sensation in the ears of aspirin users, "So that the drug may be discontinued before these persons become seriously poisoned." - Dr Stan Malstrom, ND, and Jared Brown in "Roots of Disease", 1979.

Aspirin as a Poison

"Perhaps no drug is so well known to the public as ***Aspirin,*** *for it is advertised everywhere, and under many names* ***as a panacea for many ills."*** *- in "The Lancet", 3 June 1939.*

Aspirin Poisoning

"The minimal lethal dose seemed to be between 450 and 600 grains. Severe cases show the clinical features of: ***An Intense Acidosis with Cheyne-Stokes Respiration, Small Rapid Pulse, and Cold Sweat; there is great Prostration with Thirst, Vertigo, Vomiting, and Deafness. In fatal cases death occurs from Heart Failure."*** *- in "The Lancet", 3 January 1931.*

"In view of the promiscuous way in which Aspirin, often self prescribed, is taken by the general public, the following case is of considerable interest to the profession.

Patient, sergeant, USA, aged 24, was admitted to the Thetford Military Hospital on 25 October 1918, with the history of having been taken ill two days previously with influenza.

He was a powerfully built man and gave no history of previous gastric or intestinal trouble. He stated that he had been taking Aspirin capsules of his own in addition to 18, 5gr. tablets given to him by the medical orderly.

Instead of keeping to the prescribed dose, he had taken them all, together with a number of capsules in the course of 6 hours. He did this in order to get fit quickly.

On admission patient was markedly anaemic, temperature 101.4 F., pulse 120. On 26 October the anaemia was more profound. Pulse 150 weak and irregular.

The vomiting continued at intervals.

On the following morning, at 5 AM, a large quantity of blood was passed by the bowel and he rapidly became unconscious. No thought of an exploratory laparotomy could be entertained. **He died a few hours later.**

Post-mortem

There was no peritonitis, and no free fluid in the abdominal cavity.

The last 1.5 metres of the ileum was acutely congested, and the caecum and colon were loaded with blood clots.

The line of demarcation between healthy and congested bowel was very definite.

On opening the small intestine it was found to be uniformly inflamed.

The mucous coat had apparently disappeared, leaving the submucous coat and blood-vessels exposed and eroded.

Bleeding from this large area had evidently been the cause of death.

The other organs were in a healthy condition.

Remarks

Aceto-salicylic acid is known to pass unchanged through the stomach and upper portion of the small intestine, and is then converted into free salicylic acid.

It is probable that this man took nearly 200 gr. of the drug into an empty alimentary canal, and that the salicylic acid formed was responsible for the removal of the whole lining membrane of the bowel in the area described.

The mucous membrane of the caecum and colon appeared to be unaffected.

An inquest was held and a verdict of **"Death by misadventure through an overdose of Aspirin"** was returned." - Dr F. W. Lewis, MRCS, LRCP, in "The Lancet", 11 January 1919.

Diagnosis of Poisoning by Acetylsalicylic Acid

"The dose was 435 grains; the symptoms were those of profound Toxaemia with evidence of Hepatic, Renal, and Cerebral Damage.

Clinical Manifestations; these pointed to a: **Profound Disturbance of Metabolism, and to toxaemia with a heavy incidence on the Higher Nervous Centres.**

In the early stages the Extreme Hyperpnoea was a marked feature.

Quincke noted this as one of the symptoms of salicylic acid poisoning; he regarded it as being due to the direct action of the acid radicle of the compound on the respiratory centre, and called it "Salizyldyspnoe". - Dr S. C. Dyke, DM, FRCP, in "A Case of Acetylsalicylic Acid (Aspirin) Poisoning", The Lancet, 14 September 1935.

"**The features of the case which appear to be important are:**

1. Signs of very profuse perspiration.
2. Presence of blood, in the stomach, and petechial haemorrhages on the serous membranes.
3. The condition of the kidneys, amounting practically to a glomerulo-nephritis.
4. Presence of granules in the liver, and kidney cells probably representing an attempt to deal with the drug." - Dr Andrew M. Wyllie, MB, Pathologist, Crichton Royal Hospital, Dumfries, Scotland in "A Fatal Case of Aspirin Poisoning with Post-Mortem Findings", The Lancet, 5 October 1935.

"Mental changes (mentioned by Hopkins) are:

Drowsiness, Hallucinations, and Delusions.

Goodman and Gilman mention **the occurrence of the symptoms of "cerebral excitation."**

These are known as "salicylic jag" and are said to be "Restlessness, Incoherent Speech, Excitement, Mania, Delirium and Hallucinations."

The presence of Cyanosis (Blue skin or lips) is commented upon by Krasnoff and Bernstein.

Gross Pathological Changes in Aspirin Poisoning are said to occur in the:

1. Brain

2. Kidney

3. Liver." - Dr Ashley A. Robin, MB in "A Case of Aspirin Poisoning", BJP, 1951.

Drug Distribution-Blood and Viscera
(Mean Levels, mg/100 ml)

	Blood	Liver	Kidney	Brain
Barbiturates 28 cases	4.7	20.4	7.8	4.7
Salicylates 18 cases	81.2	43.6	37.4	13.1

- Dr Nelson S. Irey, MD, FACP in "Blood and Tissue Concentrations of Drugs Associated with Fatalities", Medical Clinics of North America, September 1974.

Suppression of Urine in Aspirin Poisoning

"A woman, aged 57, with salicylate poisoning developed extreme Oliguria (low output of urine).

Patients undergoing full salicylate therapy have often been reported to have albumin, red cells, and casts in their urine.

Biddle (1938), Krasnoff and Bernstein (1947), described glomeruli congested with red cells and tubular degeneration and necrosis in fatal poisoning.

Gross and Greenberg (1948) considered that salicylates in amounts sufficient to produce poisoning might cause Nephritis (inflammation to kidneys)." - Dr M. Rosemary Miller, MD in "Suppression of Urine in Aspirin Poisoning", The Lancet, 19 March 1955.

"Adult respiratory distress syndrome (ARDS) has now been described as a sequela to such diverse conditions as burns, amniotic fluid embolism, acute pancreatitis, trauma, sepsis and damage as a result of elective surgery in general. Patients with ARDS require immediate intubation, with the average patient now being ventilated for between 8 and 11 days." - Steven Cutts, et al., in "Adult respiratory distress syndrome", Ann. R. Coll. Surg. Engl., January 2017.

"Adult Respiratory-Distress Syndrome (ARDS) is a term used to describe a complex of symptoms, which may be observed in different pathological states.

It manifests as extravasation of protein-rich fluid in the lungs, decreased pulmonary compliance, hypoxaemia, and "white lungs" on chest X-ray.

The pathophysiology remains at issue, through shock and disseminated intravascular coagulation have been suggested as precipitating factors.

Pulmonary Oedema may be observed in acute salicylate poisoning and may be the cause of death.

A high concentration of salicylate may elicit the complex of symptoms as ARDS and, that the pulmonary oedema observed in acute salicylate poisoning is of the type observed in conjunction.

A 54 year woman was admitted with pulmonary oedema. She had felt increasingly dyspnoeic.

Had taken no medicines apart from acetylsalicylic acid (aspirin), ingested in large quantities for arthritic pain.

She was severely hypoxaemic.

During first week the thrombocyte-count, haemoglobin concentration fell, findings indicated activation of the coagulation system.

High concentration of salicylate in blood on admission.

Pulmonary oedema fluid in ARDS has a high protein content suggesting an increased pulmonary capillary permeability and indeed, acetylsalicylic acid has been shown to increase pulmonary capillary permeability.

Pulmonary complications in patients with salicylate poisoning should be treated in the same way as ARDS from other causes - i.e., by adding oxygen to inspired air, by ventilatory support with positive end-expiratory pressure or continuous positive airway pressure, and diuretics." - Dr Soren C. Sorensen, MD in "Adult Respiratory-Distress Syndrome in Salicylate Intoxication", The Lancet, 12 May 1979.

Acute Respiratory Failure in the Adult

"The yearly number of patients treated with prolonged artificial ventilation at the Massachusetts General Hospital, which in 1958 amounted to 66, is now 1,400 to 1,500. In 1971 such cases accounted for 7,230 patient days. Over the past decade more than 7,000,000 (7 Million) patients have been so treated." - Dr H. Pontoppidan, MD, Dr B. Geffin, MD, Dr E. Lowenstein, MD, in "Acute Respiratory Failure in the Adult", N. Engl. J. Med., 5 October 1972.

Renal Papillary Necrosis

"Aspirin, Amidopyrine and the other Antirheumatic Drugs usually present in analgesic mixtures can all produce Renal Papillary Necrosis (Parsons 1963; Nama 1980).

Even in therapeutic doses, **Aspirin produces acute tubular damage as indicated by the marked increase in urinary excretion of tubular cells and in enzymuria** (Dubach and Josch 1967; Burry and Dieppe 1976).

Numerous cases of **analgesic nephropathy with papillary necrosis have been reported in patients taking Aspirin without Phenacetin** (Nama 1980).

The question has recently been re-examined by Elizabeth

Molland (1978) who demonstrated in rats that **Aspirin alone produces papillary necrosis and has a greater nephrotoxic effect than phenacetin and paracetamol and that the earlier changes occurred in interstitial medullary cells."** - G. A. Cinotti in "Clinical Assessment of the Renal Toxicity of Antirheumatic Drugs", Arch. Toxicol., Suppl. 7, 1984.

Salicylate Hepatotoxicity, Differential diagnosis of Reye's Syndrome

"A 7-month-old boy with a diagnosis of bronchiolitis, was hyperventilating on admission he was afebrile and alert but very irritable.

The mother denied giving the child any drugs. Mass spectrometry revealed salicylic acid and metabolites.

When specifically questioned the mother admitted giving salicylates to the child in the form of 'Angiers' tablets, each tablet containing 81 mg acetylsalicyclic acid.

The mother did not mention giving the child any drugs because, she said, she had not considered Aspirin to be a drug." - Dr D. T. D. Bulugahapitiya, MD, Rotherham District General Hospital, United Kingdom in "Salicylate Hepatitis with Acidosis in an Infant", The Lancet, 16 June 1979.

Serious Adverse Reactions Caused by Commonly used Drugs

"Serious adverse reactions (sADRs) caused by commonly used drugs can elude detection for years.

Identification of Serious Adverse Drug Reactions (sADRS) associated with commonly used drugs can elude detection for years.

Reye's Syndrome (RS), Nephrogenic Systemic Fibrosis (NSF), and Pure Red Cell Aplasia (PRCA) among Chronic

Kidney Disease (CKD) patients were recognized in 1951, 2000, and 1998, respectively.

Reports associating these syndromes with Aspirin, Gadodiamide, and Epoetin, were published 29, 6, and 4 years later, respectively.

We obtained primary information from clinicians who identified causes of these Serious Adverse Drug Reactions and reviewed factors contributing to delayed identification of these toxicities.

Overall, 3,500 Aspirin associated cases in the United States, 1,605 gadolinium-associated Nephrogenic Systemic Fibrosis cases, and 181 epoetin-associated Pure Red Cell Aplasia cases were reported." - Dr Charles L. Bennett, MD in "Linking Drugs to Obscure Illnesses", Journal of General Internal Medicine 2012.

> ***"Taking a daily Aspirin is far more dangerous than was thought, causing more than 3,000 deaths a ye****ar, a major study by the Oxford University suggests. It has long been known that the pills carry a risk of gastro-intestinal bleeding." - The Telegraph", 13 June 2017.*

"Salicylate poisoning, also known as Aspirin poisoning, is the acute or chronic poisoning with a salicylate such as Aspirin.

The classic symptoms are:

1. Ringing in the ears
2. Nausea
3. Abdominal pain
4. A fast breathing rate

Early on, these may be subtle, while larger doses may result in fever. Complications can include swelling of the brain or lungs, seizures, low blood sugar, or cardiac arrest.

The Toxic Effects of salicylates have been described since at least 1877.

In 2004, more than 20,000 cases with 43 deaths were reported in the United States. (O'Malley, GF in "Emergency department management of the salicylate-poisoned patient", Emergency Medicine Clinics of North America, 2007) Older people are at higher risks of toxicity for any given dose. (Roland, Peter S.; Rutka, John A. in "Ototoxicity", 2004).

"One of the side effects of salicylates and many NSAIDs (Nonsteroidal anti-inflammatory drugs) is Ototoxicity manifesting as mild to moderate Hearing Loss and Tinnitus." - in "Ototoxicity", 2004.

Barbiturate Poisoning

"**In barbiturate poisoning respiratory failure is the chief danger.**

Aspirin Poisoning

Absorption of a large quantity of aspirin usually produces an Acidotic State with noisy Hyperpnoea (increased depth and rate of breathing).

This is easily identified as a sign of acute salicylism because of the other characteristic manifestations:

1. Tinnitus
2. Deafness
3. Congestion of the Skin
4. Sweating
5. Mental Confusion
6. Muscular Twitchings.

- Dr T. J. Thomson, MD, Dr Stanley Alstead, MD in "Emergencies in General Practice Barbiturate and Aspirin Poisoning", British Medical Journal, 23 April 1955.

Acute and Chronic Effects of Aspirin Toxicity

"Salicylate Poisoning remains a major clinical problem involving accidental ingestion in children, and intentional overdose in adults and as a result of **Therapeutic Intoxication in persons of all ages.**

Primary Effects: Direct Stimulation of the Central Nervous System Respiratory Center, uncoupling of oxidative phosphorylation, inhibition of Krebs cycle enzymes, stimulation of gluconeogenesis, increased tissue glycolysis, stimulation of lipid metabolism, inhibition of amino acid metabolism, and interference with hemostatic mechanisms.

Secondary and tertiary effects of salicylate intoxication: Respiratory alkalosis with excretion of base, metabolic acidosis with excretion of acid, impaired glucose metabolism, and water and electrolyte loss.

Signs and Symptoms of Salicylate Intoxication

Seen Clinically:

1. Nausea,
2. Vomiting,
3. Tinnitus,
4. Hyperpnea,
5. Hyperpyrexia,
6. Disohentation,
7. Coma,
8. Convulsions,
9. Oliguria.

Seen on Laboratory Examination:

1. Hypoglycemia,
2. Hyperglycemia,

3. Hyponatremia,
4. Hypernatremia,
5. Hypokalemia,
6. Acidemia,
7. Alkalemia,
8. Hypoprothrombinemia,
9. Abnormal Liver Function study results,
10. Altered Renal Function (there is increased renal excretion of bicarbonate and potassium).

Most illnesses for which the salicylates were given were either **Respiratory Tract Disease** or **Gastroenteritis**, the symptoms of which **(fever, nausea and vomiting, tachypnea, irritability, and disorientation) are similar to those of Salicylate Poisoning."** - Dr Anthony R. Temple, MD, in "Acute and Chronic Effects of Aspirin Toxicity and Their Treatment", Archives of Internal Medicine, February 1981.

"Treatment for Salicylate Poisoning is aimed at increased elimination.

This can be achieved by the use of activated charcoal, Sodium Bicarbonate to alkalinize the urine, and in serious cases, hemodialysis.

Although hemodialysis can be a lifesaving intervention, the procedure is an invasive one.

Patients with acute aspirin ingestion may present with a low or therapeutic salicylate level but can be at risk for rapid deterioration.

The absorption of aspirin is unpredictable because of bezoar formation and salicylate-induced pylorospasm, and therefore nomograms are no longer considered useful in predicting a patient's medical course.

The number of the frequency of adult aspirin fatalities persists." - Allison A. Muller, PharmD, in "Aspirin Poisonings: Challenges and Clinical Implications for ED Nurses", Journal of Emergency Nursing, April 2003.

Aspirin, like all other Drugs is a Poison

"Finally, there is a methodological message.

Derry and Loke in "An apple a day or an Aspirin a Day? (Arch. Int. Med., 1991), analysed data from almost 66,000 patients chronically exposed to a wide range of different doses of Aspirin.

In the light of analyses, it may be more appropriate for some people to eat an Apple rather than an Aspirin a day."
- Dr Martin R. Tramèr, MD, Staff Anaesthetist, Division of Anaesthesiology, Geneva University Hospitals, Geneva, Switzerland, in "British Medical Journal", 11 November 200.

Chapter 15

Influenza

"**Asiatic Cholera;** the disease is not similar. The mode of transmission is entirely different.

The infection is chiefly of the Gastro-Intestinal tract, while that in Influenza is chiefly respiratory.

Plague; The similarity in clinical symptomatology, in gross pathology and the apparent similarity in manner of spread and epidemic features between influenza and the pneumonic form of plague has suggested to some that the best comparison should be made with the latter disease." - Dr Warren Taylor Vaughan, MD in "Influenza: An epidemiologic study", The American Journal of Hygiene, July 1921.

"**Influenza:** Grippe, an acute, contagious disease characterized by fever, extreme prostration, pain in head and back, and generally by catarrh of respiratory or G**astrointestinal Tract** (Synonym: la grippe).

Aetiology: The causative agent is a virus, of which 3 types have been identified, types A, B and C.

A number of bacteria, esp. Pfeiffer's bacillus (Hemophilus influenzae), pneumococci, streptococci, and staphylococci have been found in the lungs in fatal cases.

Epidemiology: Usually more prevalent in winter and spring. Young adults, in robust health, appear to be particularly susceptible. This disease ls contagious and is spread, in all probability, by immune carriers. It may occur sporadically or epidemically, and pandemics have been witnessed.

Incubation: One to 3 days.

Symptoms: Begins abruptly with lassitude, malaise, chilliness, severe pain in head and back, fever from 101°-103° F. Prostration out of proportion to the fever.

Eyes injected, sneezing, hoarseness, and hard paroxysmal cough. In most cases, catarrh of respiratory tract is unusually marked.

Less frequently, gastrointestinal symptoms predominate.

With latter, there may be diarrhoea and abdominal pain.

Course: Ordinarily runs from 4 to 5 days [Editor Note: This is typical or any normal Fever it runs for a week, which then it resolves itself], and may terminate by crisis or speedy Lysis (breaking down of the membrane of a cell).

Pulse rate usually not increased in proportion to fever; may be 90 to 100. Blood pressure low; nosebleed not uncommon. Examination of blood demonstrates a Leukopenia (deficiency in the number of leukocytes, low white blood cell count).

Urinalysis generally demonstrates presence of albumen and casts. In some epidemics, a striking symptom is a peculiar cyanosis (abnormal bluish discolouration of the skin and mucous membranes; caused by high levels of deoxygenated (reduced) hemoglobin (or its derivatives) circulating within the superficial dermal capillaries and sub-papillary venous plexus), **which is, in all likelihood, of Toxic Origin.**

In addition to the respiratory and **Gastrointestinal forms referred to**, nervous and fulminating types are sometimes described. In the latter forms, terms used to designate them are suggestive of predominating symptoms encountered.

Complications: Pneumonia, Pleurisy (inflammation of the tissue (pleura) between the lungs and ribcage), Empyema (collection of pus, usually associated with pneumonia), Chronic Bronchitis (develops from a cold or other respiratory infection, and often improves within a few days), Abscess of lung, Sinusitis (swelling of the sinuses, usually caused by an infection.

It's common and usually clears up on its own within 2 to 3 weeks), Otitis media (middle ear infections, fills with pus (infected fluid), can occur when congestion from an allergy or cold blocks the Eustachian tub), Pericarditis (chest pain and a high temperature (fever), usually not serious, but can cause complications), Myocarditis (inflammation of the heart muscle, symptoms can include shortness of breath, chest pain, decreased ability to exercise, and an irregular heartbeat), very rarely Endocarditis; Peripheral Neuritis, Meningitis and Encephalitis are still more rare.

Differential Diagnosis: Typhoid Fever, Smallpox in the prodromal stage, Cerebrospinal Meningitis, and Pulmonary Tuberculosis.

Progress: As a rule, outcome is favourable in absence of pulmonary complications. In patients with Cyanosis, severe nerve disturbances, or bloody expectoration, prognosis must be extremely guarded." - Clarence Wilbur Taber, in "Taber's Cyclopedic Medical Dictionary", 1965.

*"**Influenza:** An acute, contagious respiratory infection **characterized by sudden onset, fever, chills, headache, and other symptoms; sometimes called grippe."** - Prentice-Hall in "Nursing: Levels of Health Intervention", 1978.*

*"Influenza a contagious respiratory infection characterized by sudden onset. **Fever, chills, headache, muscular pain, cough, and sore throat; it is a self-limited disease, lasting 2 to 7 days".** - Ellen Heath Grinney in "The Hospital", 1991.*

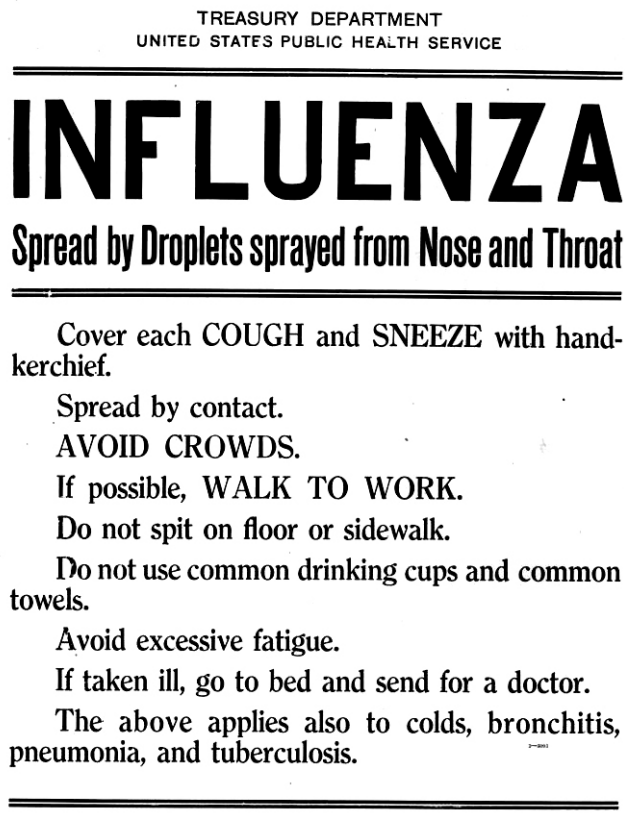
"I have now shown that Diphtheria, Influenza, and Rheumatic fever are all, in various measures, associated with acute dilatation of the heart." - Dr D. B. Lees, MD, FRCP, Examiner in Medicine for the University of Cambridge, in "An address on the Acute Dilatation of the Heart in Diphtheria, Influenza, and Rheumatic Fever", British Medical Journal, 5 January 1901.

Influenza, Diphtheria, Scarlet Fever,and Smallpox in Chicago

"I have the honour to make the following report relative to contagious diseases in this city during the week ended 11 March 1899, viz, 20 certificates of death were returned to the office of the commissioner of health giving **Influenza or la grippe** and its complications as the cause thereof, 6 to uncomplicated Influenza, and 14 to Influenza as the cause, complicated with other affections, **chiefly Pneumonia.**

During the same period, 9 certificates of death were returned, giving **Scarlet Fever** as the cause thereof, 100 cases being reported, also 14 giving **Diphtheria** as the cause, 71 cases being reported, and 1 case of **Smallpox**." - Dr Henry W. Sawtelle, Surgeon , U.S.M.H.S., in "Public Health Reports 1896-1970", Vol. 14, No.12, 24 March 1899.

> ***"Influenza: Acute, contagious respiratory infection characterized by sudden onset, chills, headache, fever, and muscular discomfort; it is caused by several different types of viruses. The H1N1 flu virus, like most influenza viruses."*** *- Peggy C. Leonard in "Quick and Easy Medical Terminology", 14 February 2013.*



TREASURY DEPARTMENT
UNITED STATES PUBLIC HEALTH SERVICE

INFLUENZA

Spread by Droplets sprayed from Nose and Throat

Cover each COUGH and SNEEZE with handkerchief.

Spread by contact.

AVOID CROWDS.

If possible, WALK TO WORK.

Do not spit on floor or sidewalk.

Do not use common drinking cups and common towels.

Avoid excessive fatigue.

If taken ill, go to bed and send for a doctor.

The above applies also to colds, bronchitis, pneumonia, and tuberculosis.

"The above applies also to Colds, Bronchitis, Pneumonia, and Tuberculosis".

U.S. Public Health Service poster, 1918

"The story of the 1918 influenza pandemic is as much the story of pneumonia as influenza, for almost everyone who died from the pandemic disease had a pneumonia of *viral, or,* ***bacterial origin."*** *- in "U.S. Department of the Army, The Medical Department of the United States Army in the World War", Board of Governors of the Federal Reserve System (U.S.), 1918.*

"Another mystery in 1918 was where and how the pandemic began. The earliest epidemics of the so-called Spanish flu seemed to erupt simultaneously or in rapid succession on 3 continents: Europe, North America, Asia. While these outbreaks were in process, highly contagious influenza was claiming many victims in France and in China. The earliest epidemics apparently occurred simultaneously in the United States and in France." - Dorothy Ann Pettit, in A Cruel Wind: America Experiences Pandemic Influenza 1918-1920", 1976.

Please note that these where the soldiers in the first world war which where exposed for the first time the use of mustard gas bombs, which damaged the soldiers lungs.

The next quote is serves to show the nonsensical stupidity of the Medical Trade, scaremongering:

"Here you can see that one thing that we know and that is that it spread all over the world, and remember there was no commercial air travel in these days so in no time a virus spread all over the world where the fastest mode of transport was the Train. I still find it remarkable how how fast a virus could spread all over the world just by air because people have to breathe in the absence of what the kind of travel that we have now." - Dr Peter Piot, MD in "Are We Ready for the Next Pandemic?", 29 June 2018.

"62 sailors from the U.S. Navy Training Station, Deer Island, Boston Harbor, having been convicted for crimes committed while in service. A group of Navy officials made these inmates an offer: Would they agree to be subjects in a medical study that might help scientists understand how the flu was spread?

If they said yes, they would be pardoned for their crimes. The 62 sailors agreed, and were transferred to Gallops Island, Boston Harbor.

The doctors did their best to give the men the flu.

The doctors collected mucus from men who were

desperately ill with the flu, gathering thick viscous secretions from their noses and throats. They sprayed mucus from flu patients into the noses and throats of some men, and dropped it into other men's eyes.

In one attempt, they swabbed mucus from the back of the nose of a man with the flu and then directly swabbed that mucus into the back of a volunteer's nose.

In another experiment, they forced mucus from sick men through a filter so fine that it trapped microscopic bacteria in its mesh, allowing only the submicroscopic viruses to pass through.

They took that filtrate and used it in their attempts to infect the healthy men with the flu.

They thought, that the infectious microorganism is in the blood. So they drew blood from a man who was ill with the flu and injected the blood directly under the skin of a volunteer.

Trying to simulate what happens naturally when people are exposed to flu victims, the doctors took 10 of the volunteers onto the hospital ward where men were dying of the disease.

The sick men lay huddled on their narrow beds, burning with fever, drifting in and out of sleep in a delirium.

The 10 healthy men were given their instructions: each was to walk up to the bed of a sick man and draw near him, lean into his face, breathe in his fetid breath, and chat with him for 5 minutes.

To be sure that the healthy man had had a full exposure to the sick man's disease, the sick man was to exhale deeply while the healthy man drew the sick man's breath directly into his own lungs.

Finally, the flu victim coughed five times in the volunteer's face.

Each flu patient had been seriously ill for no more than 3 days a period when the virus or whatever it was that was causing the flu should still be around in his mucus, in his nose, in his lungs.

But not a single healthy man got the flu.

Another group of doctors in San Francisco decided to try their hand at infecting military volunteers and once more sought men who might agree to take part in their experiments in return for a pardon for crimes they had committed while in the service.

The subjects were 50 sailors from the Naval Training Station, Island of Yerba Buena.

They had been isolated from the epidemic while it raged in the city.

They were taken to the Angel Island Quarantine Station, San Francisco Bay.

Once again, the doctors tried as hard as they could to give the men the flu.

The experiment was the same-inoculate the well with mucus from the sick, inoculate them with blood from sick men, put the healthy in close proximity to the ill.

Not one of the volunteers became ill.

Scientists were stunned. If these healthy volunteers did not get infected with influenza despite doctors best efforts to make them ill, then what was causing this disease." - Gina Kolata in "Flu: the story of the great influenza pandemic of 1918 and the search for the virus that caused it", 1999.

"It is highly interesting that attempts to transfer the disease from horse to horse experimentally met with the same degree of failure that was experienced in similar attempts to transfer influenza experimentally from man to man. In fact Lieut. Col. Watkins Pitchford of the British Army Veterinary Corps in a report in July 1917, stated that it was impossible to produce infection experimentally. Nose bags were kept upon horses with profuse nasal discharges and high temperature, and these nose bags were then used to contain the food of other horses without infection taking place." *- Dr Warren Taylor Vaughan, MD in "Influenza: An epidemiologic study", The American Journal of Hygiene, July 1921.*

"The postmortem samples we examined from **people who died of influenza during 1918–1919 uniformly exhibited severe changes indicative of bacterial pneumonia.**

Bacteriologic and histopathologic results from published autopsy series clearly and consistently implicated secondary **bacterial pneumonia caused by common upper respiratory–tract bacteria in most influenza fatalities.**

Conclusions: The majority of deaths in the 1918–1919 influenza pandemic likely resulted directly from **secondary bacterial pneumonia caused by common upper respiratory–tract bacteria.** Data from the subsequent 1957 and 1968 pandemics are consistent with these findings.

If severe pandemic influenza is largely a problem of viral-bacterial co-pathogenesis, pandemic planning needs to go beyond addressing the viral cause alone (e.g., influenza vaccines and antiviral drugs).

Prevention, diagnosis, prophylaxis, and **treatment of secondary bacterial pneumonia, as well as stockpiling of antibiotics and bacterial vaccines, should also be high priorities for pandemic planning.**" - David Morens, Jeffery Taubenberger, Anthony Fauci, National Institute of Allergy and Infectious Diseases, National Institutes of Health, in "**Predominant Role of Bacterial Pneumonia as a Cause of Death in Pandemic Influenza"**, The Journal of Infectious Diseases, 1 October 2008.

Pathologic Anatomy, and Bacteriology of Influenza

"The Conference of Bacteriologists at the British War Office under Col. Sir William Leishman, while not altogether satisfied as to the primary etiologic significance of B. influenzae, had no doubts as to its frequent presence in the epidemic and the great importance of the part it played in the production of symptoms and complications.

Synnott and Clark from Camp Dix report, "Bacillus of

Pfeiffer has been encountered in the majority of cases when looked for."

"It has been recovered from the lung substance, the bronchi, the trachea and sputum, but from none of over 300 blood cultures."

"In no case was it the sole invading organism", **"Whatever rôle influenzae plays in the present epidemic it does not invade the blood, and in all probability cannot solely be responsible for the fatal termination"**, with most of which, with the modification that it can and does invade the blood and is capable alone of forming a fatal pneumonitis, we are in accord.

Conclusions:

1. The anatomic and bactériologie findings vary with the stage of the epidemic and of the disease, **and Depend to a certain-extent on the Endemic Bacterial Flora.** Earlier in the epidemic the disease was more fulminating, and during this time the Bacillus influenzae was most often found; as the epidemic progressed and the attacks lengthened, **secondary invaders appeared more and more frequently and corresponding anatomical changes were found**.

2. Influenza produces widespread changes throughout the body, and while the lungs commonly present the most spectacular lesions, pronounced alterations are also encountered in the nervous, cardiovascular and other systems.

3. The most general changes produced by influenza are pronounced congestions, haemorrhages, **toxic degenerative lesions** and haemorrhagic inflammations. Hyperemia and haemorrhages are especially striking in the meninges, brain, serous membranes (petechial haemorrhages), skin (intense cyanosis, purpura hemorrhagica), lungs, spleen, liver and kidneys. **Examples of toxic degenerations are Zenker's hyaline degeneration of the rectus muscles, conglutination and hyaline thrombosis, hyaline degeneration of vascular**

walls, hyaline degeneration of germinal centers of splenic follicles, focal necrosis of the liver, pancreas and suprarenal, toxic ganglionic changes and edema in the nervous system, and cloudy swelling of parenchymatous organs. Hemorrhagic inflammations are exemplified in early pneumonitis and pachymeningitis; productive inflammations are uncommon and confined to the later stages of the disease.

4. The true pneumonitis of influenza is characterized by extreme proliferation of pulmonary epithelium, pronounced hyperemia and hemorrhages. The commonly present secondary invaders produced a pneumonitis which grossly and microscopically consists of a number of separate, dissimilar pathologic processes. Microscopically, a lobular pneumonia, with a tendency to become pseudolobar, and with a mixed, smooth and granular cut surface, is present. Microscopically, there are four distinct types of exudates, often within the same microscopic section, but distinctly independent. These are: catarrhal, fibrinocatarrhal, fibrinopurulent and purulent in type.

5. Throughout the disease there is a relative paucity of polymorphonuclear leukocytes and a proliferation of the lymphoid tissue; **this would seem to point to myeloid intoxication and to lymphoid stimulation.**

6. Chronic influenza is characterized by relative absence of vascular changes, connective tissue proliferation and diffuse suppuration.

7. The influenza bacillus, although not found in every case, was present in a sufficiently high percentage, and often enough in acute fatally ending infections to consider it, if not the prime cause, at least the most important indicator of epidemic influenza. At all events its appearance with the epidemic and its relative absence prior thereto, using the same cultural methods, strongly strengthens the assumption of its pathogenic rôle.

8. Bacillus influenzae was easily cultivated early in the epidemic and during the recrudescence of the last period, and this corresponded with the fulminating pathology of these stages.

9. The nonhemolytic streptococcus, it should be stated, was a frequent commensal in the earliest part of the outbreak.

10. It is noteworthy that all the above secondary invaders were more fatal in symbiosis than alone.

11. Later in the epidemic the hemolytic streptococcus assumed the ascendency, as a tertiary invader crowding out the secondary invaders, and was of especial importance in cases of long duration. Staphylococcus and M. catarrhalis made their appearance toward the end of the epidemic and to some extent modified the pathology.

We wish to enter a plea for the reading, and recording of total bacterial flora and their symbiotic relationships; by this means too great weight would not be placed on single observations, like typing of pneumococci.

Furthermore, in the study of this disease, observation should be made on the stage of the epidemic and the **individual cases.** By this method the proper relations of the various organisms can be calculated. We wish to express our grateful appreciation for the constant advice and constructive criticisms of Major Herbert Fox, Chief of the Laboratory Service, at whose request the writers pursued this investigation.

To Dr Fred Weidman, of the University of Pennsylvania, our thanks are due for the considerable pains he took in photographing our material." - Dr B. Lucke, MD, Dr T. Wight, MD, Dr E. Kime, MD in "Pathologic anatomy and bacteriology of influenza", Archives of Internal Medicine, August 1919.

"**Type of Disease:** There was only one type of influenza seen, namely, the respiratory type. The nervous, **the Gastro-intestinal**, and the febrile types, commonly described in previous epidemics, were conspicuous by their absence as special types. Nervous manifestations were prominent but always were associated with respiratory symptoms.

Bronchopneumonia was the one predominant complication. Bronchopneumonia with its complications, chiefly Empyema **(collection of pus in the pleural cavity caused by microorganisms, usually bacteria), was the sole cause of death.** Empyema was encountered in only 1.76%, of pneumonia cases. Toward the end of the epidemic of influenza there was added a new affection, occurring in epidemic form, that symptomically closely resembled influenza, needed careful differentiation, and led to much confusion and error in diagnosis - **a peculiar form of infectious tonsillitis, characterized particularly by swelling of the tonsils and a membranous deposit on them. This affection has been the chief cause of admission to hospital from late November to the present time (1 April 1919). A similar affection prevails widely in other places and is masquerading in vital statistics under the guise of influenza."** - Dr Irvin P. Lyon, MD, Dr Charles F. Tenney, MD, Dr Leopold Szerlip, MD, in "Some Clinical Observations on the Influenza Epidemic at Camp Upton, from 13 Sep. to 1 Dec. 1918", JAMA, 14 June 1919.

Pulmonary Tuberculosis

"I do contend that a great number of cases of pulmonary tuberculosis, the symptoms of which began with an apparent attack of the "flu," did not have influenza, but that the so-called influenza was an acute onset of pulmonary tuberculosis. My contention is simply this; That a great many patients never pass through the clinically early stage of pulmonary tuberculosis, and hence the physician is at a loss to detect the disease in this favourable early period." - Dr Charles E. Smith, MD, in "Pulmonary Tuberculosis with Acute Onset", The West Virginia Medical Journal, May 1930.

Spanish Influenza Precautions

"1. Make sure that you are properly clothed, in ac**cordance with the varying changes in temperature, prevalent at this time of the year.**

2. Fresh air is always good. Keep your bed room windows wide open, and secure as much sleep as possible.

3. Keep the Digestive Organs in good condition.

4. Drink water freely.

5. Wash your hands frequently.

6. Use a mild antiseptic as a nose spray or as a mouth gargle, especially if your throat is sore or there is tendency to sneezing." - Dr F. G. Pernoud, MD, Medical Advisor Southwestern Division, American Red Cross, in "Records of the American Red Cross", 1918.

Influenza And Diphtheria

"Other practitioners must have noticed that diphtheria is one of the occasional sequelae of influenza. The usual pallor of diphtheria is in marked contrast to the flushed facies of the initial influenza in my experience during the September-November 1918 epidemic.

The following are some of the cases:

Case 1 - Boy, aged 9 years, had typical influenza and very severe broncho-pneumonia. He was allowed up at the end of 3 weeks. Two days later he complained of "sore throat." There was a sloughing patch on one tonsil and the glands in the neck were enlarged.

Case 2 - Girl, aged 12 years, her mother and adult brother and sister, had all been under my care for typical influenza. About 2 weeks after convalescence the patient developed marked pallor and a nasal discharge.

Case 3 - Girl, 6 years of age, her father and brother all had influenza and bronchial catarrh. Two weeks after onset of influenza nasal discharge started.

Cases 4 & 5 - Man, aged 38, had typical influenza. One week later membrane developed on right tonsil, with enlargement of submaxillary glands. He became very pale and ceased sweating. One child, and later his wife, who had had a very mild attack of influenza, **developed a septic throat. Another child (aged 15) of this couple had Fever and Epistaxis. She was swabbed on 2 occasions with negative results; this was interesting.**

Her immunity was doubtless due to the fact that she had had diphtheria in infancy.

Case 6 - Boy, aged 8 years, **had influenza, followed 2 weeks later by pharyngeal diphtheria. Developed a systolic murmur at cardiac apex; eventually did well.**

Case 7 - A baby. **Whole family had influenza.** The baby developed membranous croup just after family were convalescent. Dr D. C. Kirkhope in this house discovered 2 other children with positive swabs, **in each case I found clinical diphtheria."** - Dr Evelyn A. Constable, MD, Late Surgical Registrar, London Temperance Hospital, in "The Lancet", 5 April 1919.

Antitoxin Treatment of Diphtheria in England and the Influenza

"Diphtheria is caused by Corynebacterium diphtheriae.

The organism infects primarily the respiratory tract, where it causes tonsillopharyngitis and/or laryngitis, classically with a pseudomembrane, and the skin, causing a variety of indolent lesions. If the infecting strain produces **Exotoxin, organ damage, especially myocarditis and neuritis,** may ensue." - Iain R. B. Hardy, in "Diphtheria", Bacterial Infections of Humans, 1998.

"Among the questions of practical medicine which at present engage the attention of the profession the principal are the antitoxin-treatment of Diphtheria, and the Influenza.

The former is being tried all over the Untied Kingdom, and, as far as present experience warrants a judgment, there is a pretty general agreement that the remedy, when used under proper conditions, is a real specific.

The disappointment that followed the tuberculin "fizzle", has made us rather shy of remedies belonging to the therapeutic regime - especially such as are "made in Germany". This makes the footing that antitoxin is gaining for itself all the firmer for it is conquering prejudice as well as scientific scepticism. The experiments are carried out in the light of day, and the results are faithfully reported, whether they make for or against the new remedy.

As regard the antitoxin prepared in this country by the British Institute of Preventive Medicine, and by Dr Klein, of St. Bartholomew's Hospital, no suspicion of any taint of commercialism is possible. It would be well if the same could be said as to the German supply; the price at which Behring's preparation was at first sold caused an outcry in the fatherland, and now a patent for the preparation of remedial and immunizing substances, "the so-called Antitoxins," in England has been applied for on behalf of "Hans Aronson, of II Fasanenstrasse, Charlottenburg, Germany, Doctor of Medicine".

This exploitation of scientific research for personal profit is an ugly feature in the more recent history of German discovery, which may help to explain Virchow's unfriendly and suspicious attitude toward it.

As for the influenza, we seem, unhappily, to be no better able to deal with it in this, the 5th epidemic since 1890, than we were on the first visitation. **It is to be feared that influenza has now taken its place as an "opprobrium medicina" (reproach medicine).** It is worthy of note that whereas in former epidemics, the medical journals used to be full of remedies, each more infallible than the other, this time, so far, no new specific has been propounded, and the advocates of the old ones are more modest in their claims.

Experience has, in fact, shown that the only remedy for influenza is to go to bed as soon as the disease has got one in its grip, and stay there till it has been shaken off.

One curious feature in this, as in some previous epidemics, is the partiality which the influenza-bacillus manifests for our legislators.

Lord Rosebery, the Prime Minister, and Mr Arthur J. Balfour, the leader of the opposition in the House of Commons, are among its victims.

At first the bacillus seemed to make a dead set at the supporters of the Government, and as the Liberals have a very narrow majority, it appeared not unlikely that they would be beaten by the influenza.

They were saved by the bacillus in the nick of time turning its attention to the Tories." - in "London Letter", Med. News, The New York Polyclinic, Vol. 5-6, 1895.

"Oh, yes. That was one of the things, and we of course, wanted to know, as everybody else here does, something about Influenza, and the Common Cold about which we are very ignorant." *-Dr. Julien E. Benjamin, MD, Professor of Medicine, University of Cincinnati, Director of Clinic, Cincinnati General Hospital; Past President of the Public Health Federation; Chairman of the Pneumonia Committee of the Public Health Federation, in "Investigation and Control of Pneumonia, Influenza, and the Common Cold", Hearing before a Subcommittee of the Committee on Education and Labor, United States Senate, May 1940.*

Epistaxis

Nasal Diphtheria and the Epidemic of Influenza

"It seems to have escaped the notice of those who have published notes on the prevailing epidemic of influenza that a large number of patients supposed to be suffering from that disease are in reality suffering from nasal diphtheria.

Feeling convinced that the heavy mortality during the epidemic could not be due to influenza pure and simple, I began to examine certain cases for nasal diphtheria, and found that many cases from which I took nasal swabs gave positive results.

In many a provisional diagnosis of influenza had been made, and they were apparently convalescent when the swabs were taken.

Others, at the onset, showed signs which indicated the trouble, and in others again the swabs were taken almost at random from patients who walked into my surgery complaining of "influenza" and not apparently very ill.

All the swabs were examined for me alone of two recognized pathological laboratories.

The following are short notes on a few selected cases:

Case 1 – Child, 2 years old. It was pale, listless, and evidently seriously ill. No physical signs could be found in the chest or throat. A swab from the nose was found to be positive for diphtheria.

Case 2 - A Royal Marine, who said he was suffering from "flu". I took a swab from his nose and told him to come to me again the next day. He did not return, but the swab was found to be positive for diphtheria.

Case 3 - A soldier, complained of headache and nose bleeding. There was considerable pyrexia. The throat was

red, but there were no physical signs in the chest. A swab was taken from the nose. After a day or two dullness and fine crepitations were found at the left base, and a positive report was returned by the pathologist with regard to the swab. The sputum was rusty and was found to contain Klebs-Loeffler bacilli, (B. Diphtheriae).

Case 4 - A soldier complained of pain in back and legs, and cough. There was a mitral systolic murmur and the heart was somewhat dilated. He had an up and down temperature (maximum about 102°) for a few days. A swab from the nose was found to contain diphtheria bacilli.

Case 5 - A soldier, who had been gassed, complained of sore eyes and throat; the tongue was furred and the breath foul. He was pale and very ill. He had an up and down temperature (maximum about 103°), and in a few days began to develop phlebitis in the left leg. A swab from the nose was found to contain Klebs-Loeffler bacilli, (B. Diphtheriae).

Case 6 - A soldier, who had been gassed and was suffering from ophthalmia, had pyrexia reaching 104°. A swab was taken from the nose and diphtheria bacilli found.

Case 7 - A soldier, complaining of influenza, had a mitral systolic murmur. There were a few rales (abnormal lung sounds characterized by discontinuous clicking or rattling sounds), in the lungs, and expectorated rusty sputum. There was moderate pyrexia which subsided after a few days. A swab was taken from the nose and diphtheria bacilli found.

Case 8 - Man, whose illness had been diagnosed influenza, complained of sore throat. A swab taken was found to contain Bacterium Diphtheriae, (also known as Klebs-Löffler bacillus).

These are a few typical cases, out of a large number of similar ones, which have come under my notice, and **I am persuaded that a large number of the deaths recorded as**

being due to influenza during the present epidemic were due to diphtheria.

Some show a tendency to make light of nasal diphtheria, but there can be no doubt that it is a condition which is fraught with grave danger, not only to the patient, but also to others with whom he may come into contact, and it is all the more dangerous because, as I gather, there are comparatively few practitioners who **look for it**." - Dr F. Parkes Weber, MD, MA, FRCP in "British Medical Journal", 4 January 1909.

> *"**Epistaxis may be attributed to many causes during the winter including dry mucous membranes from low indoor humidity from heating.** However, epistaxis may also be due to thrombocytopaenia. Immune Thrombocytopaenia Purpura (ITP) an autoimmune disorder causing thrombocytopaenia. Viral infections sometimes lead to ITP. **Vaccines, predominantly the measles-mumps-rubella Vaccine, have been associated with the development of Immune Thrombocytopaenia Purpura. There are several published case reports regarding influenza Vaccine induced ITP. We report the case of an adult with 3 episodes of epistaxis, each within 1 week of receiving a yearly influenza trivalent inactivated Vaccine,** the last episode being more severe and also featuring gross haematuria." - in "Epistaxis and gross haematuria with severe thrombocytopaenia associated with influenza Vaccination", British Medical Journal, 6 May 2019.*

> *"**Epistaxis is the most common otolaryngologic emergency requiring hospital admission.** Data from the USA suggest that Epistaxis accounts for approximately 1 in 200 visits to the Emergency Department. In the UK the rate of Emergency Department attendance with Epistaxis is around 100 per 100,000 population." - in "Epidemiology of epistaxis in US emergency departments, 1992 to 2001", Ann. Emerg. Med., July 2005.*

Septic Infections

"Chart VI gives a general summary of the Septic Infections, arranged according to the various systems involved, and in the last column a statement in regard to Septic Thrombosis, and generalized Septic Infections.

The total number of cases in this group is 1,288 or nearly 43% of all cases.

The number of septic infections of various parts of the alimentary canal was 137 (4.4% of all cases, representing 10% of all septic cases).

The total number of cases of Myocarditis with definite inflammatory lesions in the interstitial tissue, in our entire series, was 56; of these, 10 were acute, 12 subacute, and 34 chronic.

Of the 10 acute cases, 3 had developed in connection with Diphtheria, 2 in connection with Tonsillitis, one in connection with Endocarditis, 1 in a case of Cellulitis, 3 in connection with Acute Pneumonia (Acute Pericarditis was present in 2 of these cases).

In 1 case of Chronic Pneumonia the lesions were very severe, and typical "Rheumatic" nodules were present.

The patient had died of Acute Dilatation of the Heart.

Of the 12 subacute cases, 5 had occurred in connection with Tonsillitis, 3 in cases of Subacute Ulcerative Endocarditis, 1 in connection with Pneumonia, and one with Chronic Nephritis.

The great frequency and high fatality of lobar pneumonia in alcoholics is well known.

No count was kept of the slight pleuritic involvement which is found so frequently in connection with various forms of pneumonia.

Old adhesions in the pleura resulting from healed infections were recorded so commonly that it seemed hardly worth while to enumerate them separately.

Of the 108 acute cases, 83 were due to Pulmonary lesions:

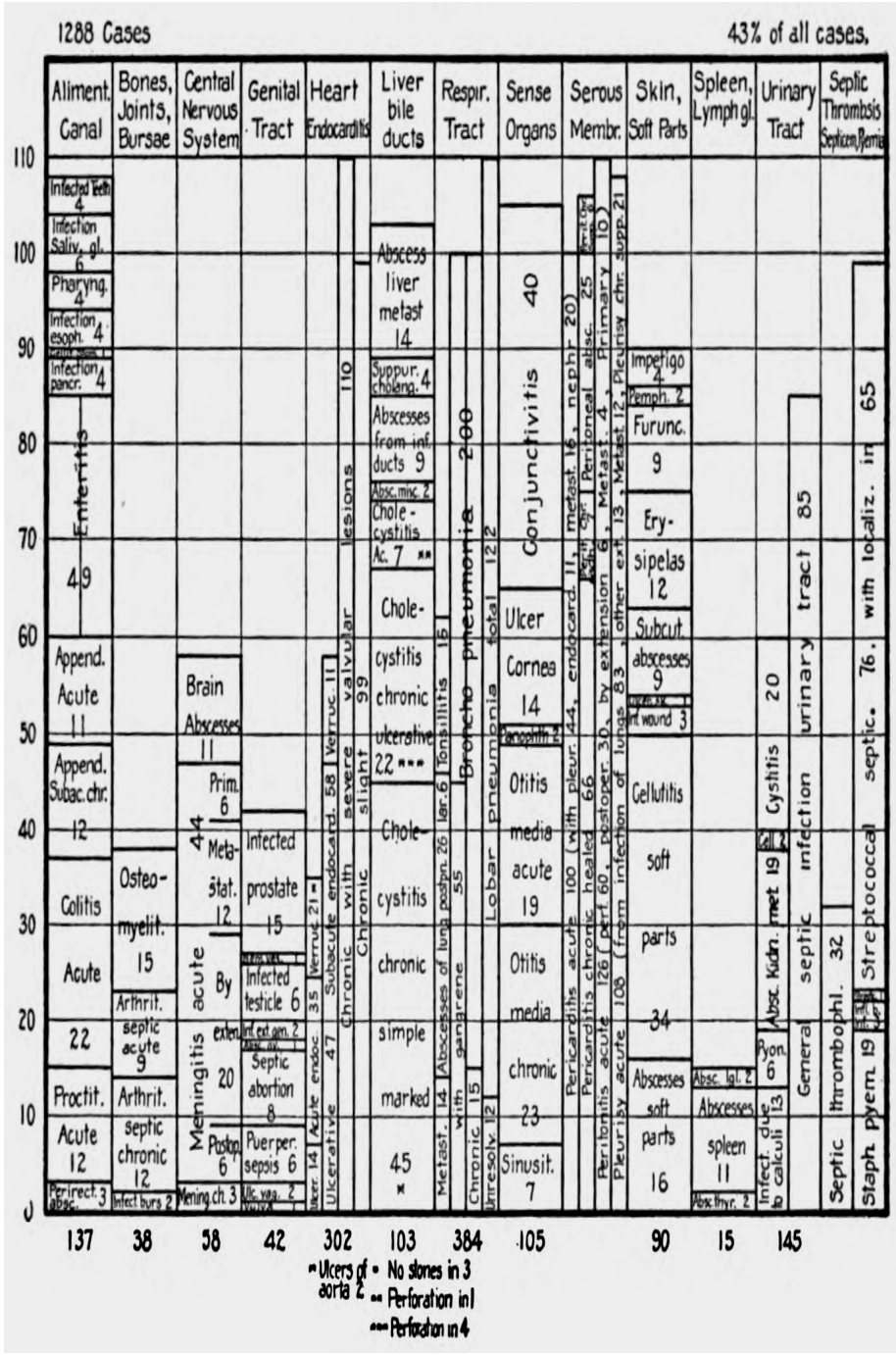
Bronchopneumonia in 33, Bronchopneumonia with gangrene in 6, Lobar Pneumonia in 11, Pulmonary Abscesses following Pneumonia in 11, infected simple Hemorrhagic

Infarcts in 7, Septic cases of Pulmonary Tuberculosis in 11 cases.

The number could have been still further increased by counting mixed infections in tuberculosis, local infections associated with the presence of malignant tumours, terminal infections, focal infections about the teeth, in tonsils, and so forth. All these have been excluded.

Chart VI

Distribution and Frequency of Septic Infections in Various Organs or Systems


1288 Cases
43% of all cases.
Aliment. Canal
Bones, Joints, Bursae
Central Nervous System
Genital Tract
Heart Endocarditis
Liver bile ducts
Respir. Tract
Sense Organs
Serous Membr.
Skin, Soft Parts
Spleen, Lymph gl.
Urinary Tract
Septic Thrombsis Septicem/Pyemia
Enteritis 49
Append. Acute 11
Append. Subac. chr. 12
Colitis Acute 22
Proctit. Acute 12
Perirect. absc. 3
Osteo-myelit. 15
Arthrit. septic acute 9
Arthrit. septic chronic 12
Infect. burs. 2
Brain Abscesses 11
Meningitis acute 44
Prim. 6
Meta-stat. 12
By extens. 20
Postop. 6
Mening. ch. 3
Infected prostate 15
Infected testicle 6
Septic abortion 8
Puerper. sepsis 6
Ulc. vag. 2
Acute endoc. 35
Verruc. 21 -
Subacute endocard. 58
Verruc. 11
Ulcerative 47
Chronic with severe valvular lesions 110
Chronic slight 99
Abscess liver metast 14
Suppur. cholang. 4
Abscesses from inf. ducts 9
Absc. mic. 2
Chole-cystitis Ac. 7 **
Chole-cystitis chronic ulcerative 22 ***
Chole-cystitis chronic simple marked 45 *
Metast. 14
Abscesses of lung postpn. 26
Tonsilitis 15
Broncho pneumonia 200
Lobar pneumonia total 122
Conjunctivitis 40
Ulcer Cornea 14
Otitis media acute 19
Otitis media chronic 23
Sinusit. 7
Pericarditis acute 100 (with pleur. 44, endocard. 11, metast. 16, nephr. 20)
Pericarditis chronic healed 66
Peritonitis acute 126 (perf. 60, postoper. 30, by extension 6, Metast. 4, Primary 10)
Pleurisy acute 108 (from infection of lungs 83, other ext. 13, Metast. 12, Pleurisy chr. supp. 21)
Impetigo 4
Furunc. 9
Ery-sipelas 12
Subcut. abscesses 9
Cellutitis soft parts 34
Abscesses soft parts 16
Abscesses spleen 11
Cystitis 20
Absc. Kidn. met 19
Infect. duct. to calculi 13
General septic infection urinary tract 85
Septic thrombophl. 32
Staph. pyem. 19
Streptococcal septic. 76. with localiz. in 65
137
38
58
42
302
103
384
105
90
15
145
* Ulcers of aorta 2
** No stones in 3
** Perforation in 1
*** Perforation in 4

Influenza

Considering the great mortality during the influenza pandemic of the year 1918-1919, the number of cases examined by us is small. In this and the following years we have records of 38 cases only (1.3% of all cases).

The failure to obtain autopsies at the time of the pandemic was due to the sudden and overwhelming character of the epidemic, which made it practically **impossible to go through the routine necessary to obtain permits for autopsies.** All efforts were directed toward saving as many patients as possible.

The cases examined were distributed in the various age groups as follows:

Age Group	No. of Cases
1-10	2
10-20	2
20-30	7
30-40	12
40-50	4
50-60	8
60-70	1
70 - +	2
Ages Above 30	**72%**

Acute Meningitis was found in 3 cases.

This was due to infection with influenza bacilli in 2 cases and with diplostreptococci in 1 case. Under the heading of Septic Infection I have referred to several cases of infection with bacteria which showed the closest resemblance; both microscopically, and culturally to the bacillus influenzae.

The bacteriological examination of the respiratory tract in these cases of influenza, imperfect as it was, left with us the impression that **the bacillus influenzae was an important and very frequent secondary invader in this disease but was not the cause of it.** It was totally absent or present in

very small numbers only in the early pulmonary lesions and could be demonstrated much more readily in older lesions, especially in those in which there was a marked purulent bronchitis. Even more important in the later stages of the disease was the invasion of the damaged pulmonary tissue by pyogenic cocci, mostly streptococci. In several cases they eventually found their way to the pleura and had caused at first serofibrinous and later suppurative pleurisy." - Dr William Ophols, MD, in "A Statistical Survey of Three Thousand Autopsies", Department of Pathology of the Stanford University Medical School, 1926.

In the following reports, we can see that Influenza can be anything. Thus, if influenza is caused by a "virus" like the Medical Trade claims it to be. Then, how come the "virus", produces a different affection, on a different organ, or system, in the anatomical body. This are the findings of the autopsies. It is also curious to see, that in 1918 like in 2020, the Medical Trade & "Health Authorities", prohibited or difficulted the realization of autopsies. The following article shows the Farcical aspect of the ever diversity symptoms from the "Virus" Covid-19.

Covid Infection Can Feel Different Every Time

"Cases are rising across the United States. Here's what to know about **how symptoms of an infection can shift.**

By this point in the Covid-19 pandemic, most people have had at least one brush with the virus.

Those of us who have been infected again (and again) may think we know the drill.

But symptoms can vary from one infection to the next.

The virus has felt like an entirely different illness each time I've tested positive: The first go-round, a fever flattened me. Once, I had barely any symptoms.

No two Covid infections really have behaved the same." - in "A Covid Infection Can Feel Different Every Time", New York Times, 11 July 2024.

General Statistics Influenza Cases Johns Hopkins Hospital

"The statistical facts of the epidemic summarized in the following table are based on the study of 268 patients admitted between 24 September and 20 October 1918.

Total Number of Cases 268	**No.**	**%**
Total deaths:	13	4.8
Total number developing pneumonia:	41	15.3
Total deaths among pneumonia patients	13	32%
Total deaths among patients In hospital: from start of disease:	7	2.7
Total patients in hospital from start of disease developing pneumonia:	28	11%
Total of patients admitted with frank pneumonia:	13	
Total deaths among patients admitted with pneumonia:	6	46%
Total deaths among patients developing pneumonia in the hospital:	7	25%
Total number of nurses admitted:	123	
Total number developing pneumonia:	12	9.8
Total deaths:	3	2.4
Total deaths of patients developing pneumonia:	3	25%

Conclusions

1. Epidemic Influenza in 1918 is clinically identical with the disease as seen in previous pandemics.

2. It is not primarily a local disease of the respiratory tract.

3. It presents a definite and characteristic clinical picture quite apart from the pulmonary complications.

4. The main features of the uncomplicated disease are a constant set of symptoms, characteristic **Erythema (redness of the skin) and appearance of the mouth, Fever of determinate duration, and Leucopenia (reduction number white cells in the blood).**" - Dr Arthur Bloomfield, MD, Dr George A. Harrop, MD, in "Clinical Observations on Epidemic Influenza", Johns Hopkins Hospital Bulletin, January 1919.

"The general clinical picture in the cases of Bronchopneumonia occurring during the recent epidemic of Influenza is too well known to need detailed restating.

Outstanding features, which bear on the present discussion, are as follows: frequently an insidious onset towards the end of the acute influenza; **cyanosis, often blended with the intense, dusky erythema** of the uncomplicated influenza; absence during the early part of the attack of any marked respiratory distress; and, until the moment of collapse, good circulation.

The pulse is often but little accelerated, and is nearly always of good quality. In most of the fatal cases, during a period of from 24 to 36 hours before death, the patient's condition is profoundly changed.

The respirations are accelerated, the pulse becomes rapid and weak, and a most striking cyanosis rapidly develops.

The patient may become unconscious, but frequently remains perfectly alert and apprehensive almost to the moment of death.

The peculiar colour of these patients suggested an examination of the oxygen content of the blood." - Dr George A. Harrop, MD in "The Behavior of the Blood Toward Oxygen in Influenza Infections", Johns Hopkins Hospital Bulletin , January 1919.

"In New York City the **3 weeks of highest influenza mortality in 1918 were those ending 2 of November.**

During this period the reported influenza-pneumonia deaths were 13,851, and the total deaths from all causes 18,265, or, deducting the influenza-pneumonia component, a total death roll of 4,417.

In the corresponding 3 weeks in 1917 the total deaths after the influenza-pneumonia deaths had been deducted, amounted to only 3,365.

This excess in the 1918 deaths (1,052—about 30%) must undoubtedly in large part be laid at the door of the influenza.

The increase in death rate in New York City over and above that attributable to the influenza-pneumonia component is distributed among certain other reported causes of which the following are noteworthy:

1. Organic Heart Disease
2. Tuberculosis Pulmonalis
3. Congenital Debility and Malformations

The chief symptoms accompanying onset were 100 cases:

1. Headache 66
2. Muscle pains 56
3. Sore throat 37
4. Cough 34
5. Nosebleed 8

" - Dr Edwin O. Jordan, MD in "Proceedings of the Institute of Medicine Chicago", 1919.

Chapter 16

New and Emerging Respiratory Virus Threats Advisory Group

"The role of the New and Emerging Respiratory Virus Threats Advisory Group (NERVTAG) is to act as an Advisory Group to provide the Chief Medical Officer (CMO) and the Department of Health (DH) and other Government departments, with scientific risk assessment and mitigation advice on the threat posed by new and emerging respiratory viruses and on options for their management.

The scope of the group includes **New and Emerging Respiratory Virus Threats to Human Health** including strains of influenza virus (regardless of origin), and other respiratory viruses with potential to cause epidemic or pandemic illness, or severe illness in a smaller number of cases.

The group draws on the expertise of scientists and health care professionals, including clinicians, microbiologists and public health practitioners, and colleagues in related disciplines.

The group is supported by a scientific secretariat from Public Health England (PHE), and is scientifically independent." - in "The New and Emerging Respiratory Virus Threats Advisory Group (NERVTAG), Code of Practice for Members Version 1.0, November 2015.

In the natural world, in Nature, there are no "viruses", thus thus the existence of "New and Emerging Respiratory Virus Threats", is farcical.

There is nothing new on a planet million years old!

The New and Emerging Respiratory Virus Threats Advisory Group

1st Annual Report December 2014-December 2015

"Since the influenza A(H5N1) "bird flu" virus re-emerged as a human pandemic threat in 2003 and up until the start of the 2009 A(H1N1) "swine flu" pandemic, a great deal of time was rightly spent by the UK Government, the Health Protection Agency and the NHS in preparing for a future pandemic. In the post-pandemic period we have seen further emerging respiratory virus threats with potential consequences for humans; Influenza A(H7N9), A(H5N8) and A(H5N6), and the Middle East Respiratory Syndrome coronavirus (MERS Co-V). The above events have set the stage for the establishment of a new independent advisory committee: NERVTAG (New and Emerging Respiratory Virus Threat Advisory Group), which replaces the former UK Scientific Pandemic Influenza Advisory Committee (SPI) and extends the role, rationally, to cover not only pandemic influenza, but any new, emerging (or re-emerging) respiratory virus threat to the UK. NERVTAG operates under the umbrella of the Department of Health (DH).

It provides scientific risk assessments and advice over a wide range of subjects relevant to the threats posed by new and emerging respiratory viruses. Its membership currently comprises a wide range of scientific disciplines including: clinical medicine (predominantly respiratory medicine, infectious diseases and paediatrics), epidemiology and public health, virology, vaccinology, health emergency preparedness and response, and bio-statistical modelling.

In future behavioural sciences and animal health experts will also be co-opted to support the committee in its work. The underpinning ethos of NERVTAG will always be that it exists to service the Government's need for timely, independent, scientific and clinical advice; and that it should

be task-oriented, responding to requests from DH, Public Health England (PHE) and the NHS, by creating outputs and deliverables to meet these needs. In the first year of its being, NERVTAG has been especially busy.

1. Firstly, bedding down and learning to play its role in a substantially reformed DH structure for pandemic preparedness and response.

2. Secondly, **responding to specific Governmental needs for scientific guidance about pre-pandemic vaccines, antiviral drugs and antibiotics for stockpiling purposes.**

JS Nguyen-Van-Tam MBE, DM, FFPH, FRCPath, Hon FFPM

Summary

NERVTAG monitors respiratory viruses that threaten human health, such as strains of influenza virus or other respiratory viruses with potential to cause an epidemic or pandemic illness. We also include illnesses that may result in a small number of cases but still have a severe impact, such as Middle East Respiratory Syndrome, known as MERS.

MERS was first recognised in 2012 and causes a severe respiratory infection and in many cases death, particularly in older people with underlying medical conditions, such as diabetes and high blood pressure.

The majority of MERS cases have been in people who live or have travelled in the Middle East, but in 2015 there was an outbreak associated with a number of hospitals in South Korea, involving 185 confirmed cases and 36 deaths. This was triggered by an individual who had travelled to the country from the Middle East, and is the only outbreak to date occurring outside the Middle East. Last year NERVTAG assessed the risk of MERS to the UK, as well as assessing the risk of avian influenza viruses A(H7N9), A(H5N1) and

A(H5N8) and enterovirus D-68, with the support of Public Health England. In addition to these risk assessments, NERVTAG also advised the Department of Health on pre-pandemic influenza vaccine and the influenza antivirals and antibiotics to be used in the event of an influenza pandemic.

As we move forward, NERVTAG has also identified some areas where there are gaps in emerging respiratory infections research, and will provide advice on areas where more research efforts may be needed.

Meetings

NERVTAG held full meetings on 2 occasions in its first year. In addition, 2 subcommittees met in 2015 to consider:

1. **Pandemic vaccines.**
2. The antibiotics stockpiled for use in the event of an influenza pandemic.

Two other subcommittees were convened, to consider:

1. The personal protective equipment (PPE), particularly facial/respiratory protection, such as **Face Masks** and respirators, stockpiled for use in the event of an influenza pandemic.
2. The clinical algorithms underpinning the National Pandemic Flu Service (NPFS) which would be re-activated in the event of an influenza pandemic.

Subcommittees:

Joint NERVTAG and Joint **Committee on Vaccination and Immunisation** (JCVI) **pandemic vaccine subcommittee** (meetings 20 Feb and 23 April, 2015)

Short term

The committee recommends that potency testing of the current H5N1 PPV stockpile is undertaken as a priority.

The results of this **testing would inform further testing e.g. cross-reactivity testing** against other newly emerged H5 sub-type viruses, and help plan if and how the existing stockpile could be used in a **Future Pandemic.**

Mid-term

Prioritising Investment in Future Pandemic Vaccines

There is support for the UK to develop a risk-assessment based approach to Prioritising Investment in Future Pandemic Vaccines.

This approach could be used to determine the level of investment in developing a national library of viruses suitable for rapid use in Vaccine Manufacture.

The committee noted that currently they do not have enough information on the benefits of seed lots vs. larger amounts of ready-made vaccine to make firm recommendations around the establishment and composition of a national seed lot library.

The committee considered that exploring seed lots, and if funding allows, some larger batches and trials would be a good investment. In terms of technology, the committee agreed that the range of viable commercial partners with the ability to deliver commercial –scale quantities of pandemic vaccine is currently confined to the existing EU influenza vaccine manufacturers.

The committee also acknowledged that there is potential for development in the area of live attenuated influenza vaccine (LAIV).

A discussion may be required between NIBSC/Medicines and Healthcare products Regulatory Agency (MHRA) around the new European Medicines Agency (EMA) licensure regulations and the impact for developing future pandemic vaccines.

Long Term

The committee agreed there is a strong need for a research agenda and a long term UK strategy.

1. As a long-term strategy, the committee believed it would be advantageous for the UK government to develop plans for inward investment in vaccine development, including universal influenza vaccines.

2. Such a strategy should be aligned with work that is being led by the Chief Medical Officer (CMO) around vaccine technologies that is following the Ebola outbreak.

Annex C- NERVTAG forward work plan: areas/future subcommittees

Ongoing work areas commenced upon in 2015

NERVTAG was asked to review its advice on the stockpiling of antivirals following consideration of the most recent available evidence on the use of antivirals in a pandemic (including the Academy of Medical Sciences and the **Wellcome Trust report**).

This topic was covered in the November 2015 meeting, recommendations made to DH and, acting on that advice, **Ministers have agreed to the replenishment of the remaining "Tamiflu" stock expiring in 2016/17.**

This continues to be an ongoing or "live" issue as DH will review the position again in 2018/19 in advance of a planned major replenishment of both the **Tamiflu** and **Relenza Stockpiles**." - in "The New and Emerging Respiratory Virus Threats Advisory Group (NERVTAG)", 1st Annual Report December 2014-December 2015.

New and Emerging Respiratory Virus Threats Advisory Group

"The New and Emerging Respiratory Virus Threats Advisory Group (NERVTAG) advises the government on the threat posed by **new and emerging respiratory viruses.**

Membership

Current members are:

1. Dr Matthew Donati: Public Health England, Bristol Public Health Laboratory and University Hospitals Trust

NERVTAG Register of Member's Interests (Nov. 2018)

Abbott Diagnostics; Azure PCR Ltd; BD UK Ltd; Biolegio B.V.; Biomerieux UK Ltd; Cepheid UK Ltd; ELItech UK Ltd; Hologic Ltd; Qiagen Ltd; R-Biopharm Rhone Ltd; Roche Diagnostics Ltd. Commercial partners of the UK Clinical Virology Network, for which I am chair.

2. Professor John Edmunds: London School of Hygiene and Tropical Medicine

Professor John Edmunds is the Dean of the Faculty of Epidemiology and Population Health at the London School of Hygiene and Tropical Medicine. Has published over 250 peer-reviewed articles on topics ranging from HPV **Vaccination to the economics** of measles eradication. He is a member of a number of national and international committees including WHO's Polio Research Committee and is on the Scientific Advisory Committee of the Coalition for Epidemic Preparedness Innovation (CEPI). Is member of the UK's SPI-M (which provides **modelling advice** on pandemic influenza) and various subcommittees of the **Joint Committee of Vaccines and Immunisation** (JCVI – the UK's Vaccine policy advisory body).

NERVTAG Register of Member's Interests (Nov. 2018)

Janssen Crucell "Crucell is a **biotechnology company specializing in vaccines and biopharmaceutical technologies. In September 2009 Johnson & Johnson bought 18% stake in Crucell for €302 million in order to collaborate on the development of a flu vaccine.** J&J acquired the rest of the company in October 2010)

London School of Hygiene & Tropical Medicine, LSHTM has IMI (EU) grant with them to evaluate **Ebola Vaccine.** Partner works for GSK. (GlaxoSmithKline plc is a British **multinational Pharmaceutical Company**).

3. Professor Neil Ferguson: Medical Research Council, Imperial College London

Neil Ferguson is director of the MRC Centre for Outbreak Analysis and **Modelling** and the NIHR Health Protection Research Unit for Modelling Methodology. Prof **Ferguson advises the UK and US governments, WHO and the EU on emerging infections and modelling.**

4. Professor Wei Shen Lim: Nottingham University Hospitals NHS Trust

He is Chief Investigator of a NIHR-funded pandemic influenza trial investigating Adjuvant Steroids in Adults with Pandemic Influenza (ASAP trial).

NERVTAG Register of Member's Interests (Nov. 2018)

Pfizer (Pfizer Inc. is a multinational pharmaceutical corporation). Unrestricted investigator-initiated research grant to my Trust; for a pneumonia study.

5. Dr Jim McMenamin: Health Protection Scotland

Jim acted as an external advisor to the ECDC for the risk assessment of the 2011/12 and 2012/13 influenza season.

Has secured in excess of £5 Million of research and service development monies over the past 7 years.

NERVTAG Register of Member's Interests (Nov. 2018)

I. European Centre for Disease Prevention and Control

Seasonal influenza severity assessment (non-renumerated)

II. I-Move (Epi-concept co-ordinator)
(The I-MOVE+ Consortium includes European Union Public Health Institutes, SME and Universities. It aims at measuring and comparing the effectiveness and impact of influenza and Pneumococcal **Vaccines and Vaccination** strategies a in the elderly population in Europe).

Vaccine effectiveness (influenza and pneumococcal)

III. University of Edinburgh
Data linkage projects on seasonal influenza vaccine effectiveness.

6. Professor Peter Openshaw: Imperial College London

He conducts studies of human volunteers experimentally infected with RSV and influenza and leads an MRC-funded consortium HIC-vac, which promotes the use of infection challenge to accelerate vaccine development.

NERVTAG Register of Member's Interests (Nov. 2018)

I. Mucosis BV (Netherlands)
Current collaborative grant application to Wellcome Trust.

II. GlaxoSmithKline (GSK)
BBSRC joint industrial studentship and current collaborative grant application to MRC.

III. Member of European Scientific Working group on Influenza (ESWI) **Unrestricted funds from European Vaccine and Antiviral Manufacturers.**

IV. GlaxoSmithKline (GSK) & Medical Research Council (MRC)

The EMINENT project. A partnership between MRC, 5 UK Universities and GSK. The MRC provide £8 Million and **GSK an additional £8 Million grant-in-kind. The initiative is led by University College London.**

(The Medical Research Council is responsible for co-coordinating and funding medical research in the United Kingdom).

(GlaxoSmithKline plc is a multinational pharmaceutical company).

V. Mucosis BV (Netherlands)
Scientific advisory board (ongoing)

(Mucosis B.V. is a Dutch biotechnology company developing innovative mucosal vaccines that can be applied needle-free via the nose or mouth. In June 2017 the biotech vaccine company Mucosis filed for bankruptcy, following a discontinuation of funding by its owners. By then, Mucosis had developed Vaccines for over 10 years against against various diseases such as RSV, pneumococci and influenza. These technologies are now made available by Virtuvax on behalf of the Trustee, including full IP rights, extensive know-how and materials).

VI.

a) Sanofi (Sanofi S.A. is a French multinational pharmaceutical company headquartered in Paris);

b) Janssen (Janssen Pharmaceutica is a pharmaceutical company headquartered in Beerse, Belgium and owned by Johnson & Johnson);

c) Novartis (Novartis is a Swiss multinational pharmaceutical company based in Basel, Switzerland. It is one of the largest pharmaceutical companies by both market capitalization and sales)." - in "New and Emerging Respiratory Virus Threats Advisory Group", 23 April 2020.

Chapter 17

Pfeiffer's Bacillus

"In 1892 Richard Friedrich Johannes Pfeiffer isolated what he thought was the causative agent of influenza, a small rod-shaped bacterium that he isolated from the noses of flu-infected patients.

He named it Bacillus Influenzae (or Pfeiffer's bacillus), which was later called Haemophilus influenzae.

The first blow to Pfeiffer's theory came from Peter Olitsky and Frederick Gates at The Rockefeller Institute.

Olitsky and Gates took nasal secretions from patients infected with the 1918 flu and passed them through Berkefeld filters, which exclude bacteria.

The infectious agent — which caused lung disease in rabbits — passed through the filter, suggesting that it was not a bacterium.

Although **the duo had perhaps isolated the Influenza Virus** (which they nevertheless referred to as an atypical bacterium called Bacterium pneumosintes), O**ther Researchers Could Not Reproduce Their Results."** - in Wikipedia, May 2020.

> *"In a series of reports in this Journal (Experimental Medicine), and in The Journal of the American Medical Association, we have described the changes in the blood and lungs of rabbits and guinea pigs which follow the intratracheal injection of unfiltered and filtered nasopharyngeal secretions, obtained within 36 hours after onset, from patients ill with uncomplicated epidemic influenza.* ***The activity of the injected material*** *was traced to the presence of* ***a substance possessing characters which could only be attributed to a living agent, not, however, of the nature of ordinary bacteria."*** *- Dr Peter K. Olitsky, MD, Dr Frederick L. Gates, MD, from the Laboratories of The*

Rockefeller Institute for Medical Research, in "Experimental Studies of the Nasopharyngeal Secretions from Influenza Patients; IV Anaerobic Cultivation", Journal of Experimental Medicine, Vol. 33, Iss. 6, 1921.

A letter to the British Medical Journal on the 18 February 1933, stated:

*"Sir, **In view of the widespread difference of opinion regarding the part played by Pfeiffer's bacillus in influenza** the following brief example may be of interest. On 24 January a laboratory worker was attacked with symptoms of influenza." - M. M. Barritt, L.M.S.S.A., B.Sc., Dp.Bact., Assistant Bacteriologist, West Riding County Council, Public Health Laboratory, Wakefield*

It describes that a swab from the nasopharynx was cultivated, and influenza bacilli of the cocco-bacillary type where isolated.

The culture where emulsified and injected into 2 guinea-pigs; A and B, both of the same weight and type.

The first guinea-pig died after 36 hours, and **the other was ill for 5 days , and survived.**

Both showed signs of Toxaemia, and had considerable Rhinorrhoea (excessive discharge of mucus from nose). Cultures from guinea-pig A showed: Nose, pneumococci; throat, Streptococcus viridans; lung, pneumococci. Guinea-pig B: Nose, influenza bacilli; throat, pneumococci.

Editor Note: that 5 days is the time of the duration of a fever.

Journal of Experimental Medicine

"The Journal of Experimental Medicine is a medical journal published by Rockefeller University Press that publishes research papers and commentaries on the **physiological, pathological, and molecular mechanisms that encompass the host response to disease.**

The journal prioritizes studies on intact organisms and has made a commitment to publishing studies on human subjects.

Topics covered include immunology, inflammation, **infectious disease**, hematopoiesis, **cancer**, stem cells and vascular biology.

History

The journal was established in 1896 at the Johns Hopkins School of Medicine by William H. Welch, the school's founder and also the first **president of the Board of Scientific Directors of the Rockefeller Institute** (since renamed Rockefeller University).

From its inception, Welch edited the journal by himself, even editing manuscripts.

By March 1902, the editorial burden became too great for Welch, who stopped publishing papers and began stockpiling manuscripts and unanswered correspondence in his office, explaining the conspicuous absence of published papers from 1902 to 1904.

In October 1902, Welch appealed to the board of the Rockefeller Institute to take over the journal.

The transfer of ownership and publication responsibilities required the physical transfer of manuscripts from Welch's office, which fell to the director of the Rockefeller Institute, Simon Flexner, who carried the abandoned manuscripts from Baltimore to New York City in a suitcase.

The first issue published by the Rockefeller Institute appeared in February 1905, with Flexner serving as editor, and the journal has been published regularly since then." - in "Wikipedia", 7 May 2020.

Journal Articles

Their first article published in the Journal of the American Medical Association on the 29 May 1920 entitled:

"Experimental Study of the Nasopharyngeal Secretions from Influenza Patients, Preliminary Report", by Dr Peter K. Olitsky, MD, Dr Frederick L. Gates, MD, The Rockefeller Institute for Medical Research New York.

This article was followed by a series of 12 Articles entitled: "Experimental Studies of the Nasopharyngeal Secretions from Influenza Patients I to XII".

All published in the Journal of Experimental Medicine between 1 February 1921 and 1 April 1923.

This was followed by the articles:

"Studies on the Nasopharyngeal Secretions from Patients with Common Colds", Peter K. Olitsky, James E. McCartney, Journal of Experimental Medicine, 1 October 1923.

"Isolation of Bacterium Pneumosintes from Influenza Patients during the 1923 Epidemic", Peter K. Olistsky, MD, James E. McCartney, MD, From the Laboratories of the Rockefeller Institute for Medical Research, New York, JAMA, 1 September 1923.

> *"From the nasopharyngeal secretions of 6 patients in the early hours of typical, uncomplicated epidemic influenza during the epidemic of January and February 1923, we observed in 5 instances an active agent, pathogenic for rabbits. On culture of the filtered secretions and of the lungs of rabbits inoculated intratracheally with these materials, 4 new strains of Bacterium pneumosintes have been isolated, one directly from the secretions and 3 from the rabbits lungs. All the strains have been identified as agreeing with those of the 1918-1919, 1920 and 1922 strains in morphology, cultural properties and serologic reactions. Agglutinins against Bacterium pneumosintes were demonstrated in 6 of 10 patients who had recovered from an influenzal attack."*

Bacterium Pneumosintes

"Dialister pneumosintes (formerly named Bacteroides Pneumosintes, Bacterium Pneumosintes) is a nonfermentative, anaerobic, gram-negative rod that grows with small, circular, transparent, shiny, smooth colonies on blood agar.

D. pneumosintes has been recovered from deep periodontal pockets, but little is known about the relationship between the organism and destructive periodontal disease

History: Dialister pneumosintes, originally described by Olitsky and Gates as Bacterium pneumosintes in 1921, was first isolated from nasopharyngeal secretions of patients with influenza during the epidemics of 1918 through 1921.

The species was later placed in the genus Dialister and subsequently transferred to the genus Bacteroides in 1970.

During the 1980s, the genus Bacteroides underwent major taxonomic revisions, with many of the species being transferred to new genera. Shah and Collins in 1989 proposed that the genus Bacteroides be restricted to the saccharolytic, nonpigmented species of the Bacteroides fiagilis group. B. pneumosintes differs from this genus as defined by Shah and Collins, and its true taxonomic affiliations remained uncertain. On the basis of phenotypic criteria, Moore and Moore have recently resurrected the genus Dialister, to accommodate B. pneumosintes.

Genome: Dialister Pneumosintes has been difficult to identify and culture. Difficulties in isolation of D. pneumosintes may be the result of its strict anaerobic requirement and slow growth, its **unreactivity in most conventional bacteriologic tests, the difficulty of distinguish it from the Eubacterium species in primary culture.** The partial 16s rRNA gene sequence of D. pneumosintes ATCC 33048T consisted of 1,504 nucleotides (corresponding to positions 29 to 1504 of the Escherichia coli 16s rRNA).

Sequence similarity calculations revealed that the closest known phylogenetic relatives of D. pneumosintes are the gram-negative organisms of the Sporomusa subbranch of the gram-positive bacteria (approximately 81 to 88% sequence similarity). Members of the B. fiagilis group of species were phylogenetically far removed from D. pneumosintes, exhibiting approximately 70 to 72% **sequence similarity. The sequence** divergences observed between D. pneumosintes and M. elsdenii (approximately 11.5%) and between D. pneumosintes and Veillonella species (12.2 to 12.8%) are clearly indicative of separate genera.

Role in Disease: Dialister Pneumosintes has shown pathogenic potential in various sites of the body including the lung, brain, and dental root canals. It has been isolated from several human infections. The species was first isolated from nasopharyngeal secretions of patients during the flu epidemic of 1918 to 1921. It has been identified in children with gingivitis and young adults with periodontitis. D. pneumosintes has also been recovered from pus and body fluids and from human bite wounds."- in "Wikipedia", 7 May 2020.

Insights from Pigs

"Olitsky and Gates would not be vindicated until a decade later, when Shope, a physician from Iowa working on hog cholera at the **Rockefeller Institute, turned his attention to swine influenza.**

Pig farmers in Iowa had reported 2 outbreaks, 1918 and 1929.

Both Shope and the British trio later demonstrated that sera from humans that were infected with the 1918 flu could neutralize the pig flu, leading them to **conclude that the swine flu was a surviving form of the 1918 human pandemic flu."** - Heather L. Van Epps, in "Journal of Experimental Medicine, 17 April 2006.

> ***"Richard Edwin Shope (1901–1966) was an American virologist who at the Rockefeller Institute identified influenzavirus*** *A in pigs in 1931. Using Shope's technique, Smith, Andrewes, and Laidlaw of England's Medical Research Council cultured it from a human in 1933. They and Shope in 1935 and 1936, respectively, identified it as the virus circulating in the 1918 pandemic. In 1933, Shope identified the Shope papillomavirus, which infects rabbits.* ***It was the first human virus discovered."*** *- in "Wikipedia", 7 May 2020.*

On the 20 February 1931, Shope publishes an article in "Science", entitled "The Etiology of Swine Influenza", he says:

> ***"Eight strains of the disease have been established.*** *In these experimental infections as well as in diseased animals studied in the field an organism, first isolated by the late Dr Paul A. Lewis, with whom this investigation was started, has been found constantly present. This organism is very similar if not identical to non-indol-producing strains of Pfeiffer's bacillus." - Richard E. Shope, Department of Animal Pathology, The Rockefeller Institute for Medical Research*

The Word Virus Appears

It's First Mention

The next article that Shope publishes was written by the 6 May and published in the "Journal of Experimental Medicine, 31 July 1931, "SWINE INFLUENZA I.

Experimental Transmission and Pathology" in this article makes the first mention to the word virus, none of the preceding papers mentions the word virus, and the word virus is mentioned one time only, and no explanation is given.

*"**Eight strains of the virus have been established** experimentally during 3 epizootic periods. The clinical disease induced by these 8 strains has been in general the same although its **severity and mortality have varied.** The principal features of the pathology of swine influenza are an exudative bronchitis accompanied by marked damage of the bronchial epithelium and its cilia, a peribronchial round cell infiltration, and massive pulmonary atelectasis. The latter is modified somewhat by a round cell infiltration of the alveolar walls. The lymph nodes, especially the cervical and mediastinal ones, are hyperplastic and edematous. There is usually a mild to moderate, acute splenic tumor. The mucosa of the stomach and colon is congested."*

The following article by Shope, written by the 6 of May entitled: "SWINE INFLUENZA II. A Hemophilic Bacillus from the Respiratory Tract of Infected Swine", Journal of Experimental Medicine, 31 July 1931.

The word virus is again mentioned only once.

He States:

*"Swine 507 and 826 are noteworthy in that both animals became ill after intranasal inoculation with H. influenzae suis and, in both, the picture presented could readily have been confused with swine influenza. Swine 507 was infected during the early part of the 1st year's work with the disease and at the time was considered to be a fairly typical although mild case of swine influenza. Since H. influenzae suis was obtained in pure primary culture from both the bronchial exudate and lung of this animal at autopsy, **Koch's postulates had apparently been fulfilled for the organism**, and the writers at first believed that it was the inciting agent of the disease. **Subsequent work has indicated the mistaken nature of this view but no certain and acceptable explanation of this one experiment, provided Swine 507 actually had influenza, can be offered.***

It may be that the 4 transfers on artificial media to which the organism was subjected before its use in inoculating Swine 507 were insufficient to remove mechanically any accompanying ***virus****."*

Koch's postulates: Please see chapter that makes mention of the Koch Postulate.

The next article the Shope writes he mentions the word virus 28 times. This article was also written by the 6 May and was published in the Journal of Experimental Medicine, 3 July 1931. SWINE INFLUENZA III. Filtration Experiments and Etiology.

Shope states in Summary and Conclusions:

"The clinical picture of swine influenza, characterized by fever, anorexia, extreme prostration, leucopenia, and evidence of respiratory involvement and of muscular tenderness, is strikingly suggestive of human epidemic influenza. **The onset is sudden, the course short, and convalescence usually uneventful.**

Death, when it occurs, is the result of an Edematous type of Pneumonia. Probably the most significant similarity concerns the predominant bacterium encountered in the 2 conditions; **H. influenzae suis is indistinguishable morphologically and culturally from H. influenzae.**

The frequency with which H. influenzae has been encountered in careful bacteriological studies of human influenza parallels the frequency of occurrence of H. influenzae suis in swine influenza, and, as in the case of the latter organism, has suggested an etiological significance.

Without drawing analogy too far, **the irregularity in the outcome of the filtration experiments reported, especially by French and English investigators, in attempting to determine whether a filtrable virus causes human influenza, is very similar to the experience of the writer in the early filtration experiments with swine influenza.**

The preliminary obstacles encountered in studying the nature of the etiological factors in swine influenza have had much in common with those met by investigators of human influenza.

A careful investigation would seem warranted of the possibility that Pfeiffer's bacillus and a filtrable agent act in concert to cause influenza in man.

> ***The data presented indicate that the filtrable virus of swine influenza and H. Influenzae suis act in concert to produce swine influenza and that neither alone is capable of inducing the disease.***

One attack of swine influenza usually renders an animal immune to reinfection. Blood serum from an animal made immune in this way neutralizes infectious material from swine influenza in vitro, as shown by **the failure of the mixture to produce disease in a susceptible animal.**"

"On the 15 October, 1936, from Leningrad et al., in "Clinical and Laboratory Observations on Persons Infected with Pfeiffer's Bacillus", Sovet. Vrach. Zhur., came the results of an attempt artificially to provoke infection in 110 volunteer subjects by placing pure cultures of the influenza bacillus in their nasal passages.

The cultures were placed on cotton tampons and not only were introduced into the nasal passages but also were rubbed into the tonsils.

This part of the experiment having failed to produce the disease, the subjects then inhaled a spray of live cultures into the deeper respiratory passages.

Whereupon all the 110 subjects developed in from 4 to 6 hours a clinical picture of a toxic infectious state, which persisted from 1 to 2 days.

All of these persons exhibited at the earliest moment of infection a definite leukocytosis whereas in true epidemic influenza leukopenia is found.

The incidence of the hemolytic streptococcus and the pneumococcus was not affected and remained at the same level as before the experiment.

There was not a single case of contagion among the hospital personnel favouring contact infection.

These investigators reached the quite obvious conclusion that: true epidemic influenza cannot be provoked in healthy persons by the bacillus of Pfeiffer.

Recent research to discover an etiologic virus for this disease is much more promising.

In 1933-34 Laidlaw, Andrewes, and Smith, collaborating in London, discovered that ferrets can be infected by material from the mucous membrane of patients suffering from influenza.

It has also been found that mice can be infected by nasal inoculation, the illness.

No virus was recovered from sporadic cases diagnosed as influenza.

It therefore becomes a matter of supreme importance, according to these investigators, to differentiate clinically between the disease caused by a ferret-pathogenic virus and other conditions resembling it." - Dr Edward A. Ward, DO in "Journal of American Osteopathic Association", September 1937.

"It is of interest, if only one of coincidence, that in The Lancet exactly 39 years ago to the month the late Dr John Matthews reported finding H. Influenzae in cultures-just prior to the major outbreaks of the 1918 influenza epidemic. Though long universally agreed that it plays no symbiotic aetiological role with human influenza virus - does H. Influenzae suis with swine influenza virus – why does the Bacillus of Pfeiffer still persist in cropping up so regularly in association with human influenza?" *- Dr David Harley", in The Lancet", 27 July 1957.*

Chapter 18

COVID-19

THE UN-TOLD STORY

"Whilst Professor Tyndall and his school seem to think that nearly every variety and shade of fever, even down to such a trivial affection as hay asthma, is caused primarily by its own special parasite, we must remember that other teachers tell us very different stories." *- H. Strickland Constable, in "About Sir Thomas Watson,* ***His Nine Fevers, and Contagion****", Fashions of the day in Medicine and Science; A Few More Hints, 1879.*

"In the last analysis, we see only what we are ready to see, what we have been taught to see. We eliminate and ignore everything *that is not a part of our prejudices." - Dr Jean Marie Charcot, MD*

"While the clinical symptoms are varied and a number of different types of the disease have been distinguished by some observers*, the pathological lesions present a close agreement in cases studied in Austria, France, England, and the United States, and are sufficient in the opinion of most writers to establish lethargic or epidemic encephalitis as a distinct disease." - S. Flexner in "Epidemic encephalitis", New York State Department of Health Quart., 1924.*

"I have been an epidemiologist for 35 years, and I have been modelling epidemics for 35 years. Nature doesn't jump, as people have known for a long time, the course of an epidemic is always smooth, there is never a tenfold increase in number

of cases from one day to the other, *there is nothing to be scared about.* ***This is the flu epidemic like every other flu.***
With all respiratory diseases, the only thing that stops the disease is herd immunity." - Prof Knut Wittkowski, researcher and professor of epidemiology. Worked 15 on the Epidemiology of HIV before heading for 20 years the Department of Biostatistics, Epidemiology and Research Design at The Rockefeller University in New York, in "Perspectives on the Pandemic", Ep. 2, 3 April 2020.

A Cold by Any Other Name Is Still a Cold

"Doctors sometimes call colds acute coryza, from the Greek koryza, which means "nasal mucus", or catarrh from the Greek katarrhein, which means "to flow down."

Other names include Rhinitis for inflammation of the nose and pharyngitis when the upper throat or pharynx is affected.

The flu seems to spread quickly each year during the winter "flu season".

The common cold is not a life-threatening.

Most people get over them in about a week.

But colds make us feel miserable.

The common cold is the world's most common illness.

Sometimes it's even hard to tell whether what you really have is a cold, allergies, the flu, or something else.

They may all have similar symptoms, such as a stuffed-up, runny nose, watery eyes, coughs, sneezes, and headaches; but their causes are quite different.

Flu complications, and Pneumonia and Influenza together are the 6th leading cause of death in the U.S..

The cost of colds is high for individuals: Each year Americans spend $5 Billion Dollars on Doctor's visits, and Medicines to treat colds Influenza, or "the flu", is very similar to the common cold.

The flu usually feels a lot worse.

It makes the body so weak that some people become susceptible to other serious illnesses, such as Bronchitis or Pneumonia." - Alvin Silverstein in "Common Cold and Flu", 1994.

> ***"Common Cold (1 Billion cases in the United States every year, doctors still know very little about the nose-running, cough-inducing cold, whose root causes number in the hundreds. Time and chicken soup, not antibiotics, is often the only prescription that helps)".*** *- in "Top 10 Mysterious Diseases", Live Science, 30 May 2006*

What Causes the Flu? How is it Different from a Cold?

"The flu is a viral infection caused by the influenza virus, a respiratory virus.

The common cold is also a viral infection caused by the Adenovirus or Coronavirus.

Colds tend to produce runny nose, congestion, sore throat.

Influenza infects the lungs, joints and causes pneumonia, respiratory failure and even death.

It tends to infect the Intestinal Tract with diarrhoea and vomiting." - in "Scientific American", 12 December 2008.

Clinical Progress of Severe Acute Respiratory Syndrome (SARS)

"SARS coronavirus (CoV) causes a spectrum of disease ranging from Flu-like symptoms and Pneumonia to Acute Respiratory Distress Syndrome (ARDS).

1. Incubation Period of SARS CoV infection: ranges from 2 to 10 days but may last as long as 16 days.

2. Initial Symptoms of SARS are non-specific, and include Influenza-like Symptoms such as:

a. Fever (the most common symptom upon presentation)
b. Chills rigour
c. Headache
d. Dizziness
e. Malaise
f. Myalgia

3. Respiratory phase of SARS begins 2–7 days after the prodrome period.

4. Early respiratory stage of SARS includes: a dry, non-productive cough and mild dyspnoea.

5. At the onset of fever 70–80% of SARS patients have abnormal chest radiographs.

6. After the onset of SARS, cases may progress to a non-severe variant of the disease characterized by **relatively Mild Respiratory Symptoms with Fever or a "cough variant"** characterized by Persistent Intractable Cough. More commonly, cases progress to a moderate to severe variant characterized by the development of Dyspnea (shortness of breath), and Hypoxia (not being able to absorb enough oxygen), 8–12 days post onset of symptoms.

7. Recovery Phase of SARS typically begins ~14–18 days after the onset of symptoms; however, symptoms may worsen in 10–20% of hospitalized patients to the point where mechanical ventilation is necessary. In the latter group of SARS patients, progressive immune infiltration of the lungs and diffuse alveolar damage with unresolved viral burden may culminate in Acute Respiratory Distress Syndrome, a severe form of pulmonary failure." - Mark J. Cameron, in "Human immunopathogenesis of severe acute respiratory syndrome (SARS)", Virus Research, April 2008.

Characteristics of 2019 Novel Coronavirus

"Coronaviruses belong to the family of Coronaviridae, of the order Nidovirales, comprising large, single, plus-stranded RNA as their genome. Currently, there are 4 genera of coronaviruses: α-CoV, β-CoV, γ-CoV, and δ-CoV15,16.

The α-CoV and β-CoV mainly infect the respiratory, **Gastrointestinal**, and central nervous system." - in "Transmission routes of 2019-nCoV and controls in dental practice", International Journal of Oral Science, 3 March 2020.

Ringing Bells

Thus it is important to understand that:

"Everything that is claimed by the Medical Trade, must be challenged, it should and must be independently checked, independently verified, and confirmed! The Medical Trade is Untrustworthy, Deceitful and Malignant to both Human and Animal health. Thus we find; that the majority of the Medical Trade Claims, are False & Deceitful. False Claims, False Theories, and False Teachings. Those who believe in the Medical Trade perish at its hands. All the Books we have edited, each and every single one, prove this very point; beyond any doubt." *- Rui Alexandre Gabirro, Emunctologist*

This independent verification processes, must be in place, and confirmation must be performed by individuals which by the sake of independence, they must not be: trained nor involved or tainted previously by The Medical Trade.

This is both crucial and fundamental, in order to safeguard and guarantee, thus avoiding, any cross contamination from the "ideas" and "ideals" of the Medical Trade.

In this chapter while mentioning "Virus", and "Viruses" it is of the utmost importance to understand that this information, and much of the information comes from those in the Medical Trade, it is thus similar to the Genetics Medical Trade Field of Science, this are "field of sciences" where very small groups of individuals work and oversee Scientific Theoretical Claims, whereby an almost absolute Monopoly by the Medical Trade exists, and thus you will find that these are normally the same individuals popping up (like wild mushrooms) everywhere in regards to both the Theoretical fields of "Genetics" and "Viruses".

How many individuals non Medical Trade trained have access to an Electron Microscope for Detection of Viruses (with a resolution high enough to identify amino acid side-chains of the coat protein that interact directly with the encapsidated RNA)?

Also, have you ever thought; How?, and Why? Epidemics seem to appear in locations; Far, Far Away, in extreme remote areas, of very difficult access.

Then, as if to make things even more complicated, these new infections, are claimed to be in origin from either Monkeys or Bats!

And in places where neither are available, has you have guessed; it needs to be either from Camels, Pigs or Birds specially Bats. Thus the lecture: **"Are We Ready for the Next Pandemic?"**, by Dr Peter Piot, MD at The Royal Institution of Great Britain, on the 29 June 2018, **was; a big eye opener, there claims where made which made bells ring.**

"The most commonly reported epidemic outbreaks in Africa include: Cholera, Dysentery, Malaria and Haemorrhagic Fevers (e.g. Ebola, Rift Valley fever, Crimean-Congo fever and Yellow fever).
The cyclic meningococcal meningitis outbreak that affects countries along the "meningitis belt" (spanning Sub-Saharan Africa from Senegal and The Gambia to Kenya and Ethiopia) accounts for other major epidemics in the region." - in "Trends of Major Disease Outbreaks in the African region, 2003-2007", East Africa Journal of Public Health, March 2010.

"Dr Peter Karel, Baron Piot, MD, KCMG, FRCP, FmedSci, Belgian microbiologist known for his research into Ebola, and AIDS.

After helping **discover the Ebola virus** in 1976 and **leading** efforts to contain the **first-ever recorded Ebola epidemic** that same year, **Mr Piot became a pioneering researcher into AIDS.** He has held key positions in the **United Nations, and World Health Organization, involving AIDS** research and management.

He has also **served as a professor at several universities worldwide.** Author of 16 books and 550 scientific articles.

In the 1980s, Dr Piot participated in a series of collaborative projects in Burundi, Côte d'Ivoire, Kenya, Tanzania, and Zaire.

Project SIDA in Kinshasa, Zaire in 1984 was t**he first international project on AIDS in Africa** and is acknowledged as **having provided the foundations of science's understanding of HIV** infection in Africa. Was professor of microbiology, and of public health at the Prince Leopold Institute of Tropical Medicine, in Antwerp, and at the University of Nairobi, Vrije Universiteit Brussel, the Lausanne, and a visiting professor at the London School of Economics.

Was also a Senior Fellow at the University of Washington, Seattle, a Scholar in Residence at the Ford Foundation, and a **Senior Fellow at the Bill & Melinda Gates Foundation**.

Dr Peter Piot, MD was the **Director of the Institute for Global Health at Imperial College,** from 2009 to 2010.

In 2014, in the face of an unprecedented Ebola epidemic in western Africa, Dr **Piot, and other scientists called for the emergency release of the experimental ZMapp vaccine for use on humans before it had undergone clinical testing on humans.** That year, he was **appointed** by Director General Margaret Chan to the **World Health Organization's Advisory Group on the Ebola Virus Disease Response**, co-chaired by Sam Zaramba and David L. Heymann.

In 2020, was **appointed** to the **European Commission's advisory panel on COVID-19**, co-chaired by Ursula von der Leyen, and Stella Kyriakides." - in "Wikipedia", March 2020.

Declarations of Interest

"Name: Peter Piot

1. Please list all MRC bodies you are a member of: E.g. Council, Strategy Board, Research Board, Expert Panel etc., and your position (e.g. chair, member).
R: Chair MRC Strategy Board, member MHC **Global Health Group.**

2. Main form of employment
R: Director, London School of Hygiene & Tropical Medicine.

3. Personal Remuneration
R: **Biocartis** NV.

4. Research Income during current session (1 April 2012-31 March 2013): Declare all research income from bodies supported by the MRC and research income from other sources above the limit of £50k per grant for the year.
R: **Bill & Melinda Gates Foundation, UNAIDS, WHO, Internal Market Information system (European Commission), Department for International Development (UK).**" - in "Medical Research Council", 2016.

"In 1920 the **London School of Tropical Medicine** moved, with the Hospital for Tropical Diseases, to Endsleigh Gardens in central London, taking over a former hotel which had been used as a hospital for officers during the First World War. In 1921 the Athlone Committee recommended the creation of an institute of state medicine, which built on a proposal by the **Rockefeller Foundation** to develop a London-based institution that would lead the world in the promotion of public health and tropical medicine.

This enlarged school, now named the "London School of Hygiene & Tropical Medicine", was granted its Royal Charter in 1924." - in "Wikipedia", 2020.

> ***"Biocartis serves the pharmaceutical and healthcare industries worldwide."*** *- Bloomberg*

> ***"Prof. Piot has been a member of the Board of Trustees of the Novartis Foundation since June 2015."*** *- in The Novartis Foundation, 3 August 2018*

"The 10 largest funding organizations together funded research for $37.1 Billion, constituting 40% of all **Public & Philanthropic Health Research Spending Globally.**

The largest funder was the:

United States National Institutes of Health (NIH) ($26.1 Billion)

European Commission ($3.7 Billion)

United Kingdom Medical Research Council ($1.3 Billion)

The largest philanthropic funder was the Wellcome Trust (GSK) ($909.1 Million), **the largest funder of health research through official development assistance was USAID** ($186.4 Million), and the largest multilateral funder was the **World Health Organization (WHO)** ($135.0 Million). Funding distribution mechanisms and funding patterns varied substantially between the 10 largest funders." - in "The 10 largest public and philanthropic funders of health research in the world", Health Res. Policy Syst.", **2016.**

Project SIDA

"Headquartered in Kinshasa, Zaire, Project SIDA was scientific organization to study AIDS in Africa.

Designed as a **collaboration between foreign scientists with experience studying epidemics**, and local scientists familiar with the local culture and customs.

Initiated in 1984, with funding from the **US Centers for Disease Control and Prevention (CDC)** and the direction of Jonathan Mann.

Scientific outcomes:

Project SIDA **operated successfully and generated over a thousand scientific abstracts**.

In particular, Project SIDA scientists were among the first to document Heterosexual transmission of AIDS and the existence of AIDS outside of developed countries.

Project SIDA also **developed and supported local scientists and scientific infrastructure**, in contrast to many scientists from the developed world who collected samples in Africa but did not attempt to train local staff.

In addition to **Jonathan Mann**, prominent scientists involved with Project SIDA include **Joseph McCormick** and **Peter Piot**.

Dr Jonathan Max Mann, MD was an administrator for the World Health Organization, and spearheaded early AIDS research in the 1980s.

Mann joined the Centers for Disease Control in 1975. Gained the degree of Master of Public Health from the Harvard School of Public Health in 1980.

He moved to Zaire in March 1984 as a founder of Project SIDA, after being recruited by fellow epidemiologist Joseph B. McCormick. **In 1986 he founded the WHO's Global Programme for AIDS, resigning this post in 1990 to protest the lack of response from the United Nations with regard to AIDS. Dr Joseph B. McCormick, MD,** received his Master of Science in Public Health from the Harvard School of Public Health in 1970.

McCormick **studied patients with Lassa fever** while in Africa. **After clinical testing, he found that prompt and aggressive treatment with ribavirin significantly improved patient survival.**

The medication has two FDA "black box" warnings: One raises concerns that use before or during pregnancy by either sex may result in birth defects in the baby, and the other is regarding the risk of red blood cell breakdown.

Lassa fever, is a type of viral hemorrhagic fever **caused by the Lassa virus**. **Many of those infected by the virus do not develop symptoms. When symptoms occur they typically include fever, weakness, headaches, vomiting, and muscle pains. Less commonly there may be bleeding from the mouth or gastrointestinal tract." -** in "Wikipedia", 26 May 2020.

Coromandel Hospital Board

Influenza Epidemic - Advice to Sufferers
- Course of Treatment

"A list of instructions for the guidance of persons who are attacked by influenza, or, who suspect they have contracted the complaint:

1. Go to bed directly you feel symptoms like pain, in the head and limbs, or a "cold".

2. Go to bed in a room not occupied by a person who is well, and stay there until the temperature returns to normal.

3. On going to bed take a drink of any kind as hot as possible, remove sheets, and lie between blankets.

4. Take light diet, such as milk, beef tea, soups, and gruel.

5. Don't depress yourself by looking at the bad side.

6. Remember the large majority of persons who take ill get well.

7. Only one member of the family of the house should visit the patient's room.

8. Don't allow people to come into your room and loiter there.

9. If no doctor has prescribed for you, take ammoniated quinine in a ½ to 1 teaspoonful dose in plenty of water every 4 hours.

10. Add 1 teaspoonful of boric acid or borax, **1 tablespoonful of Bicarbonate of Soda, and 1 teaspoonful of salt to a large tumblerful (250ml) of hot water. Sniff up this solution as hot as can be borne through the nose, then gargle the throat with the solution as hot as can be borne. Brush the teeth with the same solution, or with any antisepetic tooth-paste. Do all these 3 times a day.**

11. If you sneeze or cough, try to put your handkerchief before your nose or mouth. Remember, the minute droplets passing from you in sneezing or coughing carry the germs of infection to others.

12. Keep in bed till you feel you are quite able to get about; this will be when your temperature is down to normal.

13. Don't go outdoors, except into direct sunshine, until the catarrh or "cold in the head", (if you have this symptom) is quite gone." - S. James, Chairman in "Coromandel Hospital Board", New Zealand, 1918.

Note Concerning The Virus Theory

In this present section, and specially when dealing with subject matters such as the Medical Trade Theory of "Viruses", "Genetics", and any, and everything related to DNA or RNA these subjects among others, must be taken into consideration that; the information been published has not been verified by any other body (non Medical Trade, related or funded body), to verify the Farcical, Nonsensical and outright Fraudulent Claims made by The Medical Trade "scientists", all versed in something called "medical wisdom".

The entirety of the Medical Trade Theory of "Virus", and "Genetics", begs belief (this half baked Theories, simply don't add up).

"Biologists have a pronounced tendency to: Name, Classify and Order, their organisms of interest. This compulsion has been dignified by coiling it taxonomy or systematics, and has evolved into a science all of its own. ***There are often violent disagreements as to assignments of organisms, which have often been resolved (as much by force of personality, as, by use of quantifiable data).*** *Much has been written on the relative merits of the use of morphological and biochemical criteria for biological classification (Crowe in "Molecules vs. morphology in phylogenetics: a non-controversy", Trans. R. Soc. South Africa, 1988). Evolutionary and biogeographic* ***speculations, are being made with increasing regularity, especially for viruses*** *important to humans;* ***like influenza and dengue fever viruses.*** *The first major problem is: that viruses are, in all probability, polyphyletic in origin, that is, several major groups of viruses arose by several different routes, independent of each other, at different times, and have separate evolutionary histories.* ***Thus, it would be impossible to have a "virus evolutionary tree"."*** *- Edward Rybicki, in "The classification of organisms at the edge of life or Problems with virus systematics", Academy of Science for South Africa, April 1990.*

"The nucleocentric origin-of-life theory became "virocentric". Most of the data on viral genetics and biochemistry that have accumulated over the past 50 years strongly oppose this view, and support the idea that viruses are not alive. Furthermore, that viruses are not alive was officially acknowledged by the International Committee on Taxonomy of Viruses in 2000.

1. It is hard to accept that the definition of an organism necessarily requires portions of another organism. This would be akin to defining a tapeworm as the assembly of the parasitic flatworm and the human body that it requires for growth and reproduction.

2. No virus contains all the genes required to build a virus factory, as most of those genes, as well as the machinery to express the virus own genes, are provided by the host.

3. The use of the apparently appealing analogy of a virion as a spermatozoid, and a viral factory as a human is untenable. Viruses do not have sex and do not split any diploid genetic content into haploid gametes that, combined, have all the genes needed to develop the diploid stage of the Homo sapiens species.

Taken together, their inability to self-sustain and self-replicate, their polyphyly, the cellular origin of their cell-like genes and the volatility of their genomes through time make it impossible to incorporate viruses into the tree of life." - David Moreira, Purificación López-García, in "Ten Reasons to Exclude Viruses from the Tree of Life", Nature Reviews Microbiology, 7 April 2009.

"I propose an eleventh reason to exclude viruses from the tree of life: There is no such thing as a tree of life.
It is difficult to differentiate the "life" of viruses from many proteins, RNA and genes, and to differentiate the same genetic code from that of intracellular Bacteria.
Moreover, large viruses have a similar size and life cycle, within a created vacuole, as intracellular bacteria." *- Dr Didier Raoult, MD in "There is no such thing as a tree of life (and of course viruses are out!)", Nature Reviews Microbiology, August 2009.*

What is a Virus?

"Earth's most abundant and simplest organisms: Viruses." - Biology Professor Ken Stedman, Virus Hunter, Portland State University, 2020.

Description of Viruses

Viruses contain Nucleic acid which are pieces of DNA or RNA, that can move between cells. Have exceptionally high rates of genetic mutation that are difficult to track. Fast-mutating microbes. Viruses are larger than proteins and smaller than bacteria. Thus in comparison viruses are sub-microscopic, and bacteria are microscopic in size.

Viruses are so small that they cannot reflect visible light.

Viruses do not have their own metabolism, thus science cannot say state if viruses are alive. Viruses cannot naturally reproduce without a host cell.

"If you get sick with the flu, for example, every infected cell in your airway produces about 10,000 new viruses. The total number of flu viruses in your body can rise to 100 Trillion within a few days. That's over 10,000 times more viruses than people on Earth." - Carl Zimmer in "An Infinity of Viruses", National Geographic Society, 20 February 2013.

"There are an estimated 1,031 viruses on Earth.

That is to say: there may be a hundred million times more viruses on Earth than there are stars in the universe.

The majority of these viruses infect microbes, including bacteria, archaea, and microeukaryotes, all of which are vital players in the global fixation and cycling of key elements such as carbon, nitrogen, and phosphorus.

These two facts combined — the sheer number of viruses and their intimate relationship with microbial life — suggest that viruses, too, play a critical role in the planet's biosphere." - in "The Scientist", 30 June 2013.

"There are more viruses on Earth, 10 to 100 times more than any other cellular organism." - Biology Professor Ken Stedman, in "Science Daily", 18 January 2018.

"Viruses are the most abundant, and one of the least understood biological entities on Earth. They are highly diverse, both in structure and genomic sequence, play critical roles in evolution, strongly influence terran biogeochemistry, and are believed to have played important roles in the origin and evolution of life. Viruses arguably have coexisted with cellular life-forms since the earliest stages of life, may have been directly involved therein, and have profoundly influenced cellular evolution." - Biology Professor Ken Stedman, in "Astrovirology: Viruses at Large in the Universe", Journal Astrobiology, February 2018.

"Increasing prevalence and severity of multi-drug-resistant (MDR) bacterial infections has necessitated novel antibacterial strategies. Ideally, new approaches would target bacterial pathogens while exerting selection for reduced pathogenesis when these bacteria inevitably evolve resistance to therapeutic intervention. One alternative for treating MDR bacterial infections is phage therapy: the use of lytic (virulent) bacteriophages (bacteria-specific viruses) as self-amplifying 'drugs' that specifically target and kill bacteria." *- in "Phage selection restores antibiotic sensitivity in MDR Pseudomonas aeruginosa", Scientific Reports, 26 May 2016.*

Problems of Virus Multiplication

"Viruses are recognized operationally as infectious agents by their ability to produce recognizable alterations in living cells and tissues.

The field of virus biology, and especially of virus multiplication, reflects the methodological consequences of the operational definition of viruses as infectious agents.

Even when we study the reproduction of viral materials in a more-or-less persistent non-infectious form (such as the "prophage" form of bacteriophage) we depend, for proof of the presence and multiplication of the viral material, on the ultimate production of some infectious virus.

Only occasionally can we infer complete or partial phenomena of viral multiplication by indirect observations, such as multiplication of elements resembling known virus particles in morphological or physico-chemical properties.

Viral multiplication is strictly intracellular.

Hence, we must consider as its essential process the production of viral materials within virus-infected or virus-carrying cells.

Viruses multiply not as organisms, but as subcellular entities, more on a level with organized, non-independent cell constituents." - S. E. Luria, Department of Bacteriology, University of Illinois, in "The Multiplication of Viruses", 1958.

"No DNA polymerase can start a de novo DNA chain." - *Sankar Mitra, in "DNA Replication in Viruses", Ann. Rev. Genet., 1980.*

29 January 2018

"Viruses are by far the most abundant microbes on the planet,with estimated 1030 virus particles in the oceans alone.

They encompass much of the biological diversity on the planet, catalyze nutrient cycling, and affect the microbial makeup of communities through selective mortality.

We quantified the wet and dry deposition of (free and attached) Viruses, and Bacteria above the atmospheric boundary layer at the Sierra Nevada Observatory and Veleta Peak, Sierra Nevada in Spain, and demonstrated that: in each square meter, Tens of Millions of Bacteria, and Billions of Viruses are deposited each day.

The impact on the recipient ecosystems of the long-distance transport and **relevant deposition rates will depend on viability of these microbes, and in the case of viruses, the presence of suitable hosts for replication, as well as many other factors.**

There is evidence that bacteria, and viruses can remain viable after atmospheric transport, which is consistent with the wide dispersal of microbes across very distant ecosystems.

Hence, significant downward fluxes of bacteria and viruses from the atmosphere may have effects on the structure and function of recipient ecosystems.

Rather than being a negative consequence, this deposition provides a seed bank that should allow ecosystems to rapidly adapt to environmental changes." - in "Deposition rates of viruses and bacteria above the atmospheric boundary layer", International Society for Microbial Ecology Journal, 29 January 2018

6 February 2018

> *"Every day, more than 800 Million Viruses are deposited per square metre above the planetary boundary layer, that's 25 Viruses for each person in Canada." - Professor Curtis Suttles, FRSC, Virologist, in "Viruses-lots of them-are falling from the sky", University of British Columbia, 6 February 2018.*

"When we listens to the explanation of how a "virus" works, we generally don't really place too much attention on it, thinking that we might not understand it anyway.

But **if we study, and read exactly what the theoretical conception of a "virus" is, and return to listen to what the Medical Trade Science is trying to sell to us, then it becomes clear that it is both illogical and absurd.**

The more you think about it, and the more you know about the so-called "virus concept", the more you know that the concept; more than a "virus" it is a miracle.

Because, **for something, which is not even a thing (but only a fragment), for this fragment to become a thing, but only when inside of something else, is absurd.**

Now, I am prepared to accept that pre-existing

1. Cellular Waste,

2. Metabolic Waste from Digestion, and

3. Toxic Excrement from Bacteria, the same one which the Medical Trade claims to be "viruses", thus Body Tissue Cells in contact with this Debris Particles, so-called "viruses", these in contact with the body living cells, by their Toxic Effect upon them, make the Living Tissue Cells Virulent, in the sense that, this Microscopic Metabolic Waste Debris, become in their action, what today is referred to, as having a Virulent Capacity.

"As most of the micro-organisms which cause what I term "infections from within" (and it is from these that viruses would most readily develop) do not directly cause or invade the lesions for which they are responsible, ***another factor enters.***
This factor is the most important of all, as it reveals that the host's main defensive mechanism is the chief invader.
In other words, ***the manifestations of disease and the lesions which are formed result from the abnormal chemico-physical changes to which the protein in the sap and blood have been subjected by the primary invaders, which can be separated into chemical, physical, and microbial. The so-called "virus diseases" are best prevented and combated by mitigating the action of the primary invaders."*** *- Dr J.E.R. McDonagh, MD in "Virus Diseases", British Medical Journal, 25 February 1939.*

Therefore, this concept, is the only one that any logical mind can accept.

The present conception of what constitutes a "virus", and that: such "viruses" are not complete, but partial things only, that are neither dead nor alive, is a fallacy.

The False Theoretical Invention of "viruses", proposed by the Medical Trade, and freely entertained by Politicians, if the same is allowed to be maintained can only lead our present Civilization into a path of Fear and Chaos." - Rui Alexandre Gabirro, Emunctologist, 14 May 2020.

Pre-Coronavirus Epidemic

"In the midst of chaos, there is opportunity." *- Sun Tzu, in "The Art of War", 496 BC*

1948

The Book is Published: **Bacterial and Virus Diseases**: Antisera, Toxoids, Vaccines and Tubereulins in Prophylaxis and Treatment. By H. J. Parish, MD, F.mC.P.E., D.e.H., 1948.

"This admirable little book by the Clinical Research Director of the Wellcome Foundation, presents clear and authoritative descriptions of the essential principles of immunology and their practical application in human medicine*. Then follow sections on particular antisera for passive immunisation whether for prophylaxis or therapy and on serological products for conferring active immunity (Toxins, Toxoids and Vaccines)." - in "Public Health", July, 1948.*

"It is a pity that there was not a little more room for describing some of the evidence on which claims for beneficial results are based. This applies in particular to subjects about which there is still considerable controversy such as B.C.G. vaccination and vaccination against whooping cough." *- in "Post Graduate Medical Journal", October 1948.*

26 August 1998

"PATH is an international, nonprofit global health organization, with 1,600 employees in more than 70+ offices around the world. Its president and CEO is Nikolaj Gilbert, who is also the Managing Director and CEO of Foundations for Appropriate Technologies in Health (FATH), PATH's Swiss subsidiary. PATH focuses on: Vaccines, Drugs, Diagnostics, Devices." - in "Wikipedia", 3 May 2020.

PATH

"**26 August 1998**
Purpose: to support the Children's Vaccine Program
Amount: US$124,864,000
Topic: Delivery of Solutions to Improve Global Health
Program: Global Development
Grantee Location: Seattle, Washington
Grantee Website: www.path.org" - in "How We Work Grant", Bill & Melinda Gates Foundation, 26 August 1998.

2 December 1998

Bill and Melinda Gates Announce $100 Million Gift Establish Bill & Melinda Gates Children's Vaccine Program

"The program will begin immediately with a focus on several new vaccines that protect children against respiratory and diarrheal disease, including Hib, pneumococcus and rotavirus vaccines, and against liver cancer through increased use of hepatitis B vaccine. More than two million children die each year from diseases that these vaccines could prevent." - in "Bill & Melinda Gates Foundation", 2 December 1998.

PATH Drug Solutions

"**1 April 2004**
Purpose: to support the development of an attenuated Plasmodium falciparum sporozoite vaccine to reduce malaria infection, morbidity, and mortality
Amount: US$1,429,611
Topic: Malaria
Program: Global Health
Grantee Location: San Francisco, California
Grantee Website: http://sites.path.org/drugdevelopment/" - in "How We Work Grant", 1 April 2004.

PATH Vaccine Solutions

"**9 October 2006**
Purpose: to accelerate the development of a safe, affordable and efficacious rotavirus vaccine for the developing world
Amount: US$18,957,824
Topic: Enteric and Diarrheal Diseases
Regions Served: GLOBAL, ASIA
Program: Global Health
Grantee Location: Seattle, Washington
Grantee Website: www.path.org" - in "How We Work Grant", 9 October 2006.

"**16 November 2006**
Purpose: to conduct a landscape analysis of potential pandemic flu vaccine technologies
Amount: US$2,182,670
Topic: Pneumonia
Program: Global Health
Grantee Location: Seattle, Washington
Grantee Website: www.path.org" - in "How We Work Grant", 16 November 2006.

"**15 August 2007**
Purpose: to develop Shigella and ETEC vaccines that induce potent, broadly reactive, and persistent immunity and are effective in preventing disease in populations most at risk, especially young children
Amount: US$50,000,000
Topic: Enteric and Diarrheal Diseases
Regions Served: GLOBAL, AFRICA, ASIA
Program: Global Health
Grantee Location: Seattle, Washington
Grantee Website: www.path.org"- in "How We Work Grant", 15 August 2007.

January 2000

International Vaccine Institute

Seoul, Korea

"Initially, the United Nations Development Programme (UNDP) proposed the formation of IVI in Kyoto, Japan. However, following a competitive bidding process among 6 Asian countries vying to serve as IVI's host, the UNDP Site Selection Committee **recommended that IVI be based in the Republic of Korea.**

October 1996

Republic of Korea and WHO sign the IVI Establishment Agreement at the UN headquarters in New York City.

October 1997

IVI is officially established under the Vienna Convention as an independent and autonomous international organization.

July 1999

Inauguration of the first Director General, Dr John Clemens, at the IVI interim office at Seoul National University.

International Vaccine Institute

"**22 November 1999**
Purpose: to **develop, evaluate, and introduce Vaccines** against diseases of the most impoverished including cholera, shigellosis, and typhoid
Amount: US$37,261,201
Topic: Enteric and Diarrheal Diseases
Regions Served: GLOBAL, ASIA
Program: Global Health; Grantee Location: Seoul
Grantee Website: www.ivi.org" - in "How We Work Grant", Bill & Melinda Gates Foundation, 22 November 1999.

Jan 2000

The Bill & Melinda Gates Foundation (BMGF) awards IVI its first grant, the Diseases of the Most Impoverished (DOMI) Program, to generate scientific evidence on the burden of cholera, typhoid fever, and shigellosis.

International Vaccine Institute Receives $40 Million Grant from the Bill & Melinda Gates Foundation

Funds to help D**evelop New Improved Vaccine**

"The funds will be used for the **development and introduction of new and improved vaccines** against 3 diseases B cholera, dysentery, and typhoid B scourges for the worlds most impoverished.

The generosity of Bill and Melinda Gates will surely lead to the saving of many of these lives, said **Professor Barry Bloom, dean of the Harvard School of Public Health and Chairman of the Institute Board of Trustees.**

Specifically, the grant will support the DOMI Program (Diseases of the Most Impoverished).

The Program will conduct research and development of a number of promising V**accine candidates** against the 3 target diseases. DOMI will be carried out in collaboration with Harvard University, the University of Gothenburg, the University of Maryland, the Pasteur Institute, and the London School of Hygiene and Tropical Medicine.

In addition to launching DOMI, the Institute will continue its involvement in the Bill & Melinda Gates Children's Vaccine Program (CVP).

CVP is managed by the Program for Appropriate Technology in Health (PATH) in Seattle, Washington and is a $100 Million fund to advance the introduction of existing **Vaccines that are not yet available in developing countries.**" - in "Bill & Melinda Gates Foundation", 18 January 2000.

1999

"Unrestricted Warfare", Warfare beyond bounds, a book by Colonel Qiao Lian and Colonel Wang Xiangsui, from the "People's Liberation Army", *China, 1999.*

20 November 2000

Global Fund for Children's Vaccine Approve Support to 8 More Countries 5 Year Commitment Now Exceeds $250 Million

"To improve immunization programs in Africa, Asia, Europe, and Latin America. Countries approved in this round include Armenia, Azerbaijan, Bhutan, Côte d'Ivoire, Haiti, Liberia, Pakistan Rwanda, Sao Tome, and Uganda.

Coupled with a disbursement in September of $150 Million over 5 years, these funds will enable countries to immunize millions of children against hepatitis B and other deadly diseases. The announcement was made as more than **300 Vaccine advocates from industrialized and developing countries gathered in the Netherlands on 20-21 November for the first biannual meeting of the partners of the Global Alliance for Vaccines and Immunization (GAVI), a coalition of public and private institutions.**

The Netherlands' Minister of Health, Welfare, and Sport, Dr. Els Borst-Eilers, opened the meeting with the announcement that the Dutch government would contribute US$100 Million over 5 years to support **GAVI and the Global Fund in their mission to strengthen immunization services in low-income countries.**

The Global Fund was launched in November 1999.

To date it has secured over US$1 Billion, with commitments from the Bill & Melinda Gates Foundation (BMGF) and the Governments of Norway, Netherlands, United Kingdom, and United States.

The Global Fund received an initial US$750 Million grant from the Bill & Melinda Gates Foundation and has since received support from governments and other donors.

In the future, Global Fund resources may also be used to accelerate the development of Vaccines for diseases responsible for significant mortality in developing countries, such as **HIV/AIDS, Tuberculosis, Malaria, and Acute Respiratory Diseases**.

While the Global Fund has its own Board and management for fiduciary and fundraising responsibilities, decisions about programs to receive support will be made on the recommendation of GAVI.

The GAVI partners include:

1. National Governments
2. Gates Children's Vaccine Program at PATH
3. International Federation of Pharmaceutical Manufacturers Associations (IFPMA)
4. Research & Public Health Institutions,
5. Bill & Melinda Gates Foundation (BMGF)
6. Rockefeller Foundation
7. United Nations Children's Fund (UNICEF)
8. World Bank Group
9. World Health Organization (WHO).” - in “The Bill & Melinda Gates Foundation”, 20 November 2020.

Jun 2003

“The Bill & Melinda Gates Foundation (BMGF) awards a grant to launch the Pediatric Dengue Vaccine Initiative (PDVI) to accelerate the development and introduction of new dengue Vaccines in dengue-endemic countries.

International Vaccine Institute

1 June 2003
Purpose: to fund effective and affordable dengue Vaccines for children in dengue-endemic areas
Amount: US$49,680,146
Topic: Development of Solutions to Improve Global Health
Program: Global Health
Grantee Location: Seoul
Grantee Website: www.ivi.org" - in "How We Work Grant", Bill & Melinda Gates Foundation, 1 June 2003.

"**1 June 2006**
Purpose: to accelerate the introduction of cholera Vaccines in endemic countries and evaluate their use for the prevention and control of epidemics
Amount: US$14,902,759
Topic: Enteric and Diarrheal Diseases
Program: Global Health
Grantee Location: Seoul
Grantee Website: www.ivi.org" - in "How We Work Grant", Bill & Melinda Gates Foundation, 1 June 2006.

Oct 2007
The Bill & Melinda Gates Foundation (BMGF) awards a grant to launch the Vi-based Vaccines for Asia (VIVA) Initiative to develop and introduce new and improved Vi-based typhoid Vaccines.

Oct 2008
Establishment of Biosafety Level 3+ (BSL3+) laboratories at IVI headquarters that allow for research on pathogens such as those that cause Avian Influenza and Tuberculosis.

Feb 2009
The killed whole-cell oral cholera vaccine developed through IVI and produced by Shantha Biotechnics is licensed in India (Shanchol™), making it the first Vaccine developed through IVI to achieve licensure.

Mar 2009

Inauguration of IVI-NICED (National Institute of Cholera and Enteric Diseases) immune-monitoring laboratory in Kolkata, India for GCLP training and Vaccine clinical trials. Supported by the Swedish International Development Cooperation Agency (Sida), the facility received WHO-TDR certification in June, 2010.

Apr 2010

Launch of the Typhoid Fever Surveillance in sub-Saharan Africa Program (TSAP), supported by The Bill & Melinda Gates Foundation (BMGF), to assess the burden of typhoid in 10 countries in Africa.

Jan 2011

Launch of the Dengue Vaccine Initiative (DVI), a continuation of PDVI, with support from The Bill & Melinda Gates Foundation (BMGF).

Sep 2011

WHO prequalification of the IVI-developed oral cholera Vaccine (ShancholTM) – IVI is 1 of only 2 Gates Foundation supported nonprofit organizations to achieve this milestone.

Dec 2012

IVI and SK Chemicals establish a partnership to collaborate on the development of a new typhoid conjugate Vaccine. This is IVI's first partnership with a major Korean company for vaccine technology transfer and clinical development.

Oct 2013

Results from 5-year follow-up of a Phase III trial of the oral cholera vaccine (ShancholTM) show protective efficacy of about 65% for 5 years. This is the first time an oral cholera Vaccine had been proven to provide strong and sustained protection.

Dec 2013

IVI, through the Dengue Vaccine Initiative (DVI), initiates a project to support dengue Vaccine development in Brazil and Vietnam with funding from the German Federal Ministry of Education & Research (BMBF).

Dec 2014

The Bill & Melinda Gates Foundation (BMGF) awards a grant to IVI for the clinical development of a new typhoid conjugate **Vaccine in collaboration with SK Chemicals and PT BioFarma.**

Feb 2015

Euvichol receives licensure and is the first cholera Vaccine developed and produced in Korea for use in developing nations.

Feb 2015

The Korean Ministry of Food & Drug Safety grants an export license to EuBiologics' oral cholera Vaccine, Euvichol. IVI, with local health authorities and LG Electronics, conducts a cholera vaccination campaign in the Oromia Region of Ethiopia.

Mar 2015

IVI, with Korea's Ministry of Foreign Affairs, Malawi's Ministry of Health, and the WHO, conduct emergency cholera Vaccinations in the flood-stricken Nsanje District of Malawi in response to concerns over a cholera outbreak.

May 2015

IVI's International Advanced Vaccinology Course in the Asia-Pacific Region celebrates its 15th year. This annual course has trained more than 1,200 Vaccine professionals over the past 18 years.

Jan 2016

Severe Typhoid in Africa Program starts, funded by The Bill & Melinda Gates Foundation (BMGF).

Sept 2017

Research Investment for Global Health Technology (RIGHT) Fund, a new public-private-partnership fund for global health R&D announced to be established in Korea by the Korean government, Bill & Melinda Gates Foundation (BMGF), leading Korean pharma companies, and IVI.

Board of Trustees

Members-at-large

Mr. George Bickerstaff (Chairperson)
Partner and Managing Director, M.M. Dillon & Co., USA

Prof. Gordon Dougan
GSK Professor, Department of Medicine, University of Cambridge Innovations Strategy Expert in Residence, **Wellcome Trust,** United Kingdom

Dr. Melanie Saville
Director, Vaccine Development, CEPI, United Kingdom".
- in "International Vaccine Institute" 2 May 2020.

"George Bickerstaff was a founding partner of M.M. Dillon & Co. in 2009.

Prior to that, he was a Managing Director at CRT Capital Group specializing in healthcare banking from 2005.

Prior to joining CRT Capital Group, was Chief Financial Officer of Novartis Pharma AG located in Basel, Switzerland.

He has been instrumental in establishing the strategic, operating and financial direction of numerous private and public companies.

During his career he has provided financial leadership for mergers and acquisitions valued at more than $50 billion and has funded and operated various venture capital businesses. George has a broad range of operating and finance experiences.

After receiving engineering and business degrees, he started his career at General Electric in manufacturing and then moved into finance.

He subsequently joined The Dun & Bradstreet Corporation where he held various senior finance positions including Chief Financial Officer of **IMS Health the largest global publicly traded healthcare information services provider (largest vendor of US physician prescribing data).**

He has been on the board of directors and board of trustees of more than a dozen **international private and public companies and philanthropic organizations.**" - in "M.M. Dillon & Co.", 2018.

2005

"Top medical officer Sir Liam Donaldson added that its spread could echo that of the deadly Spanish flu outbreak of 100 years ago.

He cautioned that the bug could strike more than once, re-emerging again and again to sweep through the population in "waves".

Sir Liam said the arrival of the infection was "inevitable", but said no one knew when it would strike or how it will act.

He said: "The evidence from the past is that we won't just have one wave of infection, we will have subsequent waves as well, which may be as intense or even more intense than the initial wave." - in "The flu scare of 2005 led to the government issuing apocalyptic warnings that hundreds of thousands could die", The Daily Mail", 10 April 2014.

7 September 2005

Sabin Vaccine Institute

Receives US$150,000 Grant to Strategize for Introduction and Sustainable Use of Vaccines in Developing Countries

"The Albert B. Sabin Vaccine Institute (SVI), a leader in promoting the development and use of safe and effective Vaccines to prevent disease, announced receipt of a grant of US$150,000 from the Bill & Melinda Gates Foundation (BMGF) for the sponsorship of a Vaccine policy colloquium to be held at Cold Spring Harbor, Long Island, New York, 19-21 October 2005.

The SVI will use this grant to convene a meeting of international **Public Health, Government, and Industry Experts on the "Introduction and Sustainable Use of Vaccines in Developing Countries."**

For each of the past 11 years the Institute has organized a high-level meeting where experts consider a **Vaccine policy issue of global importance.**

Subjects will include developing country challenges for long-term immunization programs, Vaccine financing, Vaccine supply, political commitment, and how best to coordinate the working relationships and responsibilities among the myriad of programs that provide assistance." - in "The Bill & Melinda Gates Foundation", 7 September 2005.

12 January 2006

"The U.S. faces a new threat environment unlike any we have previously experienced.

This multi-faceted threat has several unique characteristics in addition to a highly dynamic environment.

These changes in traditional conflicts were recognized and given the name **"Unrestricted Warfare." Colonels Qiao Liang and Wang Xiangsui of China first identified this new style of conflict in their book, Unrestricted Warfare.**

They were the first to voice concerns about the use of unconventional attacks. This book was written in 1999, 3 years before the 11 September 2001 attacks on the U.S.

These concepts were further expanded by the Johns Hopkins University Applied Physics Lab and have been discussed within the Department of Defense." - Kevin Coleman in "The Challenge of Unrestricted Warfare; A Look Back and a Look Ahead" 12 January 2006.

14-15 March 2006

The Unrestricted Warfare Symposium 2006

"In his address, Mr Thomas summarizes the conference and proposes several ways to reassess our efforts in defining, measuring, and countering the unrestricted warfare challenge. The first notion is that our understanding of unrestricted warfare is still quite limited, which makes it difficult to define and measure success. Instead of using a mechanical approach to define a formula for winning and thinking of winning as an end state, we may need to define success as not losing.

A biological model may be more appropriate as an analogy to the current threat, which is like a mutating virus." - James Thomas in "Urestricted Warfare - Senior Perspectives", Unrestricted Warfare Symposium 2006: Proceedings, March 2006.

What is Unrestricted Warfare?

The United States is presently encountering a national security threat different than the conventional warfare for which we have become pre-eminent in the world.

This new threat is becoming known as "Unrestricted Warfare" and spans two of the four "security environments" identified by DoD for use in strategic planning:

Irregular and Catastrophic, as contrasted with Traditional and Disruptive challenges.

The first rule of Unrestricted Warfare is that there are no rules; nothing is forbidden.

Unrestricted Warfare involves multi-dimensional, asymmetric attacks on almost every aspect of the adversary's social, economic, and political life.

Unrestricted Warfare employs surprise and deception, and uses both civilian technology and military weapons to break the opponent's will.

The book "Unrestricted Warfare" by Col. Qiao Liang and Col. Wang Xiangsui, offers an overview of unrestricted warfare, utilizing "unrestricted employment of measures, but restricted to the accomplishment of limited objectives."

Among the many means cited in their description of unrestricted warfare are integrated attacks exploiting diverse areas of vulnerability:

1. Cultural warfare: influencing, or controlling cultural viewpoints within the adversary nation.

2. Drug warfare: targeting an adversary nation with illegal drugs.

3. Economic Aid warfare: using aid dependency to control a targeted adversary.

4. Environmental warfare: despoiling the natural environment of the adversary nation.

5. Financial warfare: subverting the adversary's banking system and stock market.

6. International Law warfare: subverting the policies of international or multinational organizations.

7. Media warfare: manipulating foreign news media.

8. Network warfare: dominating or subverting transnational information systems.

9. Psychological warfare: dominating the adversary nation's perception of its capabilities

10. Resource warfare: controlling access to scarce natural resources or manipulating their market value.

11. Smuggling warfare: flooding an adversary's markets with illegal goods.

The National Critical Challenge

The United States must adapt its national security focus to fighting and defending itself against future adversaries who choose catastrophic terrorist attacks as their weapon of choice. This involves development of strategy, concepts and capabilities appropriate to protracted conflicts of an unrestricted nature.

Unrestricted Warfare will manifest itself across the full spectrum of political, social, economic, and military networks, blurring the distinction between war and peace and between combatants and bystanders." - in "Unrestricted Warfare Symposium 2006: Proceedings", March 2006.

Jul 2006

The Bill & Melinda Gates Foundation (BMGF) awards a grant to launch the Cholera Vaccine Initiative (CHOVI) to develop and introduce new oral cholera Vaccines in countries afflicted by cholera.

20-21 March 2007

Unrestricted Warfare Symposium, 2007

The Johns Hopkins University's Applied Physics Laboratory and Paul H. Nitze School of Advanced International Studies are sponsoring 2nd Annual Symposium on "Meeting the Unrestricted Warfare Threat: Integrating Strategy, Analysis, and Technology.

"This year's follow-on symposium will include more nuanced aspects of URW, such as economic, information, and network warfare. And we are engaging the whole national security community to prepare new strategies, analyses and technologies, for the next set of threats, not just the ones we face today.

Featured speakers:

- Gen. James Cartwright, commander of U.S. Strategic Command, to provide the war fighter's perspective on the integration of strategy, analysis and technology.
- Alfred Berkeley, chairman and CEO of Pipeline Trading Systems and former vice chairman of the NASDAQ, to discuss URW threats that impact the private sector.
- Tony Tether, director of the Defense Advanced Research Projects Agency, to explore ways to adapt advanced technologies to defeat URW adversaries.
- Michael Bauman, director of the U.S. Army TRADOC Analysis Center, to address the analytic agenda needed to support combating URW." - in "Johns Hopkins University Applied Physics Laboratory", 21 February 2007.

> ***"This is another type of war,*** *new in its intensity, ancient in its origins, war by guerrillas, subversives, insurgents, assassins; war by ambush instead of by combat; by infiltration, instead of aggression, seeking victory by eroding and exhausting the enemy instead of engaging him.* ***It requires in those situations where we must counter it, a whole new kind of strategy, a wholly different kind of force, and therefore a new and wholly different kind of military training."*** *- John F. Kennedy, USMA Graduation Speech, 1962.*

July 2007

The Molecular And Cellular Basis For How SARS CoV Impacts the Host Immune System Resulting in Severe SARS

"A novel coronavirus (CoV), infecting over 8,422 people during the epidemic of 2002 and 2003, caused Severe Acute Respiratory Syndrome (SARS) illness with a 11% fatality rate.

Old age (over 60 years) was found to be significantly associated with SARS-related deaths.

Death from SARS-CoV infection is most often due to rapidly progressive respiratory compromise Acute Respiratory Distress Syndrome and subsequent failure of multiple organs.

Lung histopathology

Interestingly, the most severe, viral infection-induced lung lesions were present in mice that were infected with strain icGZ02 or icHC/SZ/61/03. At 2 days p.i., these mice exhibited marked necrotizing bronchiolitis.

This lesion was characterized by degeneration, necrosis, and exfoliation of the luminal surface epithelium lining preterminal and terminal bronchioles accompanied by a mixed inflammatory cell infiltrate of mainly large and small lymphocytes, lesser numbers of neutrophils, and only occasional eosinophils.

This intramural inflammatory cell response was present in the peribronchiolar interstitium, surface epithelium, and airway lumens.

Large, vacuolated airway macrophages, many laden with phagocytic cellular material, were often present along with exfoliated, necrotic, cellular debris within the lumens of these affected small conducting airways.

By 4 days p.i. the necrotizing bronchiolitis in the lungs of

these 12-month-old mice was still present, with marked loss and/or attenuation of the bronchiolar epithelium.

This was accompanied by widespread injury of the alveolar parenchyma.

The histopathology of this injury to the gas exchange region of the lung consisted of: Diffuse Acute Alveolitis, Interstitial Edema, and Congestion in the Alveolar septa and around small blood vessels, scattered microthrombi in septal Capillaries, and conspicuous deposition of eosinophilic fibrinous material both in the alveolar septal walls and organized as hyaline aggregates in the alveolar air spaces (hyaline membranes).

Diffuse Alveolar Damage, Interstitial Edema, and hyaline membrane formation are characteristic of acute respiratory distress syndrome." - Mark J. Cameron, University Health Network, University of Toronto, Canada, in "Synthetic Reconstruction of Zoonotic and Early Human Severe Acute Respiratory Syndrome Coronavirus Isolates That Produce Fatal Disease in Aged Mice", July 2007.

"Progressive immune-associated injury is a hallmark of severe acute respiratory syndrome.

Viral evasion of innate immunity, hypercytokinemia and systemic immunopathology in the SARS coronavirus (SARS CoV) infected host have been suggested as possible mechanisms for the cause of severe pathology and morbidity in SARS patients.

Viral evasion during SARS infection may benefit in part by downregulation of type I interferon-directed innate immunity as has been proposed in in vitro studies (Castilletti, Cheung, Ziegler 2005).

Our results argue that SARS patients mount robust type I and II interferon responses and even express innate antiviral interferon-stimulated genes, such as MXA, during acute illness. Type I and II interferon-responses may therefore act to **maintain homeostasis between the development of effective versus auto-inflammatory innate and adaptive immune responses.**

Cytokine and chemokine levels subside in the vast majority of SARS patients after acute infection and a critical switch from interferon-driven innate immunity to protective adaptive immunity and viral clearance occurs as patients recover.

Conversely, the prolonged burden of SARS CoV in the lungs of at-risk patients, i.e. those with **comorbidities (particularly diabetes mellitus and cardiac disease), may be the event that breaks down this homeostatic regulation."** - Mark J. Cameron, University Health Network, University of Toronto, Canada, in "Human immunopathogenesis of severe acute respiratory syndrome (SARS)", Virus Research, April 2008.

> ***"Interferons are a family of naturally-occurring signaling proteins that are made and released, secreted by the host cells of the immune system (for example white blood cells, natural killer cells, fibroblasts, epithelial cells)****, in response to the presence of several viruses. In a typical scenario, a virus-infected cell will release interferons causing nearby cells to heighten their anti-viral defences." - in "Wikipedia", April 2020.*

2008

In the United Kingdom the Department of Health issued a sobering contingency plan document, entitled "Pandemic Flu: UK Influenza Pandemic Contingency Plan", warned that 1 in 4 persons could be infected, and around 50,000 would be killed if the flu outbreak occurred.

10-11 March 2008

The 3rd annual Unrestricted Warfare Symposium, 2008.

2 January 2009

"An Influenza Pandemic is a Global Health Risk and many solutions are being developed to attempt to address this serious threat.

Vaccination is thought to be a preferred solution.

Today, the vast majority of influenza Vaccines are made by growing the target influenza virus in fertile chicken eggs.

The eggs are infected with the virus, the virus is allowed to grow for several days, and then the virus is removed from the egg, purified, inactivated, and treated with detergent to remove most egg and influenza proteins other than the hemagglutinin (HA) protein. (Antibody to HA from immunization will neutralize a similar virus on infection and is thereby correlated with protection from disease risk)." - James M. Robinson in "BioPharm International", 2 January 2009.

24-25 March 2009

Unrestricted Warfare Symposium, 2009

The 4th Annual Unrestricted Warfare Symposium. This year, the theme is "Imperatives for Interagency Action"

"**What is certain, however, is that we will be confronted with other emerging infectious diseases in the decade ahead, and that most of these diseases will arise from an animal reservoir.** Thus, the mechanisms of the emergence of SARS serve as an excellent case-study **to better understand how viruses jump species-barriers to cause disease outbreaks in humans. The synthetic reconstruction of an infectious bat-SARS-like precursor virus**, the largest life form to be created by synthetic biology to date, has provided an excellent model for understanding such mechanisms." - J. S. Malik Peiris, University of Hong Kong, Pasteur Research Centre Hong Kong, China, in "Molecular Biology of the SARS-Coronavirus", 2010.

11 June 2009

WHO Announces First Global Pandemic in 40 Years

"**The WHO declaration means the world is now in the grip of the first pandemic for 40 years, marking the spread of the virus to 74 countries** since it first emerged in Mexico in April.

Over the next 3 to 4 months up to 35% of the population could be affected, said Mr Ferguson, an Epidemiologist from Imperial College London." - in "Thousands of schools could be closed down for weeks to contain swine flu", Daily Mail, 11 June 2009.

18 December 2009

"In order to promote their patented drugs and vaccines against flu, pharmaceutical companies have influenced scientists and official agencies, responsible for public health standards, to alarm governments worldwide. They have made them squander tight health care resources for inefficient vaccine strategies and needlessly exposed millions of healthy people to the risk of unknown side-effects of insufficiently tested vaccines. The "birds-flu"-campaign (2005/06) combined with the "swine-flu"-campaign seem to have caused a great deal of damage not only to some vaccinated patients and to public health budgets, but also to the credibility and accountability of important international health agencies. The definition of an alarming pandemic must not be under the influence of drug-sellers." - in "Faked Pandemics - A Threat for Health", Motion for a recommendation, Doc. 12110, Parliamentary Assembly, Council of Europe, 18 December 2009.

The motion was introduced by Dr Wolfgang Wodarg, MD, former SPD Member of the German Bundestag, and now chairman of the Health Committee of Parliamentary Assembly of the Council of Europe.

Dr Wodarg is an epidemiologist, specialist in lung disease and environmental medicine, he considers the "pandemic" Swine Flu campaign of the WHO to be "one of the greatest medicine scandals of the Century."

5 January 2010

"Western European countries, including Switzerland, are queuing up to shift surplus stocks of the H1N1 Flu Vaccine after low public demand. Switzerland, which has a population of 7.7 Million, ordered 13 million doses of vaccine from GlaxoSmithKline and Novartis, worth US$81 Million. In December the government said it planned to donate to the World Health Organization (WHO) or sell to other countries some 4.5 million excess doses of the swine flu vaccine due to the low uptake" - Simon Bradley in "Europe seeks to offload flu vaccines", SWI Swissinfo, 5 January 2010.

8 January 2010

"German Health Officials have cancelled part of its order of GlaxoSmithKline's swine flu Vaccine, just 3 days after France indicated that it would also be paring back the number of doses it would be ordering." - Alistair Dawber, in "Germany cancels part of GSK swine flu vaccine order", 8 January 2010.

10 January 2010

We're Being Played

"It's just a normal kind of flu. It does not cause a tenth of deaths caused by the classic seasonal flu. The great campaign of panic we have seen provided a golden opportunity for representatives from labs who knew they would hit the jackpot in the case of a pandemic being declared. There is worse to come. The Vaccine developed by Novartis was produced in a bioreactor from cancerous cells, a technique that had never been used until now.

This was not necessary. It has also led to a considerable mismanagement of public money." - Dr. Wolfgang Wodarg, MD in "L'Humanite", 10 January 2020.

11 January 2010

"In the UK the nation was thrown into a panic with the threat that swine flu would kill 65,000 people. The total, so far is 350. The scare has cost the UK dear. There is a report that £1 Billion worth of Tamiflu are unused and impossible to sell. The levels of national stress and anxiety were raised sky high in the summer. At what cost to our national well being? The priorities of the health service were distorted to deal with this non pandemic.

But there are the winners.

The Pharmaceutical Companies are rolling in profits.

We want to clarify everything that brought about this massive operation of disinformation. Who made decisions, on the basis of what evidence, and precisely how was the influence of the Pharmaceutical Industry used in the decision-making. The Government will say they have to err on the side of safety. **But this is the second time that the nation has had a nervous breakdown and spent a fortune on a Non-Threat. It was the same story with Avian Flu.**

The Pharmas have influence in high places.

They are laughing all the way to the bank." - Paul Flynn, MP in "A false pandemic", 11 January 2010.

16 January 2010

"Wolfgang Wodarg, the chairman of the Council of Europe's health committee, that Global Drugs Companies had influenced the WHO's assessment of the dangers of the **H1N1 virus, calling the outbreak a "False Pandemic, one of the greatest medicine scandals of the century". The WHO declared that H1N1 Swine Flu met the criteria for a Pandemic."** - Alistair Dawber, in "Nations scrap orders for GSK swine flu jab", The Independent, 16 January 2010.

14 September 2010

The Guardian launches Global Development Website with Gates Foundation

"The Guardian today has launched a new website in partnership with the Bill & Melinda Gates Foundation to help focus the world's attention on global development.

The site will provide a new space for discussion and interaction on the biggest challenges affecting the lives of billions of people across the developing world, including poverty, hunger, infant mortality, **adaptation to climate change** and economic development.

One aim of the website, which launches just a week before **a major UN summit, is to hold governments, institutions and NGOs accountable for the implementation of the United Nations millennium development goals (MDGs), which 192 countries signed up to in 2000.**

Huge advances have been made with many of the MDGs, and the new site will enable people around the world to better monitor how each country is performing." - in "Bill & Melinda Gates Foundation", 14 September 2010.

Guardian News & Media Ltd

"**10 August 2011**
Purpose: to support an online micro-site focused on providing compelling, evidence-based content, discussion and debate on **the Millennium Development Goals and related health and development themes**
Amount: US$5,686,494
Topic: Inform and Engage Communities
Program: Advocacy
Grantee Location: London
Grantee Website: www.guardian.co.uk" - in "How We Work; Grant", Bill & Melinda Gates Foundation, 10 August 2011.

The Guardian
British Daily Newspaper

"Traditionally affiliated with the centrist to centre-left Liberal Party, and with a northern, non-conformist circulation base, the paper earned a national reputation and the respect of the left during the Spanish Civil War (1936–1939). With the pro-Liberal News Chronicle, the Labour-supporting Daily Herald, the Communist Party's Daily Worker and several Sunday and weekly papers, it supported the Republican government in Spain. Then Guardian features editor Ian Katz asserted in 2004 that "it is no secret we are a centre-left newspaper." - in "Wikipedia", 3 May 2020.

April 2011

Examples of Corporate Strategies to Influence Public Health Promotion

"1. Distortion of Science: Divert attention from health effects of their product or practices to other matters. Publish journal articles and book chapters, make presentations at scientific meetings, host conferences and workshops for professionals that give the appearance of objective science in order to convey an image of credibility, but do not present the entire dataset, or misrepresent or distort data about the corporation's harmful operations, products or policies.

2. **Financial Tactics: Set up or fund foundations that support the corporation's agenda.**

3. **Products and Services: Emphasize technological solutions to health problems to generate profit.**

Where Does the Money Come From?

The Bill & Melinda Gates Foundation's endowment mainly comes from Bill Gates' personal fortune and stock in Berkshire Hathaway given to the Foundation as a gift from Hathaway's CEO Warren Buffett.

In 2006, Buffett made a pledge to gradually give away all of his Berkshire Hathaway stock to the Bill & Melinda Gates Foundation, most recently with an additional 24.7 Million shares in July 2010.

Currently, the Bill & Melinda Gates Foundation is listed with the SEC as a 10% owner of the Berkshire company.

The Bill & Melinda Gates Foundation's corporate stock endowment is heavily invested in food and Pharmaceutical Companies, directly and indirectly.

The Foundation holds significant shares in McDonald's (9.4 Million shares, 5% of the Gates' portfolio), and Coca-

Cola (0.15 Million shares, over 7% of the Foundation's portfolio, not counting Berkshire Hathaway holdings).

In 2009 the Bill & Melinda Gates Foundation sold extensive Pharmaceutical Holdings in Johnson & Johnson (2.5 Million shares), Schering-Plough Corporation (14.9 Million shares), Eli Lilly and Company (about 1 Million shares), Merck & Co. (8.1 Million shares), and Wyeth (3.7 Million shares).

About half of the Bill & Melinda Gates Foundation's stock holdings are already invested in Berkshire Hathaway, a conglomerate holding company owning several subsidiary companies, including banks, railroads, candy production, retail, and utilities.

Berkshire Hathaway's largest investment is in Coca-Cola.

It owns an additional 8.7% of Coca-Cola (Warren Buffett's firm is the largest shareholder in Coca-Cola, having stock worth $10 Billion dollars) and 6.3% of Kraft (Buffett is also the largest shareholder of Kraft).

Berkshire Hathaway also has significant ownership in GlaxoSmithKline, Sanofi-Aventis, Johnson & Johnson, Procter & Gamble, and is one of the main global investors in the latter 2 Pharmaceutical Companies.

Since Buffett is gradually transferring ownership of Berkshire Hathaway stock to the Bill & Melinda Gates Foundation, the Foundation will soon be the largest stakeholder of Coca-Cola and Kraft in the world.

Endowment investments in Pharmaceutical and food companies were similarly observed among the Ford, Rockefeller, W. K. Kellogg Foundation, and Robert Wood Johnson Foundations.

The invested companies included, to name a few, Coca-Cola, Kellogg (a leading producer of snacks and breakfast foods and the main investment of Kellogg Foundation), PepsiCo, **Pfizer, GlaxoSmithKline,** McDonald's, Nestle (a company with 6,000 brands mainly in food and beverage including coffee, water, chocolate, confectionery, ice cream, ''health-care nutrition'', and frozen foods, among others); NovoNordisk, YumBrands (the world's largest restaurant company, operating:

Pizza Hut, Kentucky Fried Chicken, Taco Bell, among others), **Johnson & Johnson (main investment of Robert Wood Johnson Foundation), and Sanofi-Aventis,** in addition to several mining, petrochemical, and alcohol companies.

Additionally, the Ford Foundation had holdings in the tobacco company Lorillard, while W.K. Kellogg and Rockefeller Foundations were indirectly invested in tobacco corporations through conglomerate equity funds such as Cedar Rock Capital, and Adage Capital Partners, respectively.

Who Benefits? Where Does the Money Go?

The bulk of the Bill & Melinda Gates Foundation's financial transfers in global health have been to programs developing Medical Technologies: more than 97% of its financial disbursements are directed to infectious diseases, and less than 3% to chronic non-communicable diseases.

In addition, many of the Foundation's Pharmaceutical Development grants may benefit leading Pharmaceutical Companies such as Merck and GlaxoSmithKline, for example via partnerships to Test Pneumonia and rotavirus Vaccines (such as the ROTATEQ partnership and the Merck Vaccines network partnership with the Global Alliance for Vaccines and Immunizations network), experimental malaria Vaccines (through Medicines for Malaria Venture, an NGO), cervical cancer Vaccines (through PATH, an NGO, and Merck's Vaccine Gardasil), and HIV interventions (**through the Africa Comprehensive HIV/AIDS partnership**).

Johnson & Johnson has entered a clinical partnership to develop new HIV-prevention technology, noting ''**the work between Johnson & Johnson and the Gates Foundation is a strong, strategic, comprehensive relationship**'','' - David Stuckler, Sanjay Basu, Martin McKee, in "Global Health Philanthropy and Institutional Relationships", PLoS Medicine, Vol. 8, Iss. 4, April 2011.

3 June 2011

New Vaccines: Gates Foundation's Philanthropy or Business?

"Earlier the Universal Immunisation Programme (UIP) was introduced in India during 1985-86 with the objective to cover at least 85% of all infants against the 6 Vaccine preventable diseases which include diphtheria, pertussis (whooping cough), tetanus, polio, measles and tuberculosis.

Of these 6, the first 3 are given together as Injections, known as DPT or Triple Injection.

Now, the recent National Vaccine Policy draft, submitted by the government of India, strongly favours inclusion of New Vaccines in the UIP of the country without doing a cost-benefit analysis and substantiating it with proper scientific evidence to suggest the prevalence of the diseases.

The New Vaccine that is being promoted is the pentavalent (a combination of 5 vaccines in 1 shot) Vaccine to protect children against hepatitis B and haemophilus influenza type B (Hib) in addition to diphtheria, pertussis and tetanus (DPT), which are already covered under the UIP.

Costly for Poor People

The New Vaccines do not find adequate scientific ground.

If the 3rd dose of hepatitis B is given earlier than 4 months of age then the antibodies (antibodies are proteins that are produced in our body as a result of the Vaccination and in turn they assault the invading organisms and prevent them from attacking us) reached are very inadequate and hence may be ineffective over long period of time.

Hence giving hepatitis B at 6, 10 and 14 weeks of age along with DPT is largely a waste of money.

Given separately hepatitis B vaccine costs hardly Rs 10, but combining it as pantavalent would costs Rs 525.

The other Vaccine Hib has never been a big public health problem to warrant a national immunisation programme.

No study has ever been able to show it, and in fact most studies have demonstrated a very low prevalence.

Global Alliance for Vaccines and Immunisation (GAVI), a Global Health Partnership of Public & Private Sectors, has committed $165 Million grant for the phased introduction of pentavalent Vaccine in India and provides a subsidy of Rs 145 per injection for 5 years.

But after that the government will have to pay the total cost of the vaccines.

This is despite the fact that overall immunisation coverage is on the decline in India; there is irregular Vaccination or no Vaccination in most parts of the country.

The Vested Interests

The Bill Melinda Gates Foundation (BMGF) is a founding partner of the GAVI Alliance. Its initial grant helped establish GAVI and it continues to support its work.

Some of the Pharmaceutical Companies have affiliation with BMGF to Manufacture the Vaccine.

For instance, BMGF has $0.12 Billion shares in Sanofi-Aventis, which owns Shantha Biotech, a pentavalent Vaccine manufacturer in Hyderabad. **BMGF also has links with Merck, another pentavalent Vaccine Manufacturer."** - Dr Gopal Dabade in "Deccan Herald", 3 June 2011.

2012

Decade of Vaccines: The Global Vaccine Action Plan

"The Global Vaccine Action Plan (GVAP), endorsed by the 194 member states of the World Health Assembly (WHA) in 2012, provides a framework for achieving **the vision of the Decade of Vaccines—delivering full access to immunization by 2020** and extending the full benefits of

immunization to all people, regardless of where they are born, who they are, or where they live.

The GVAP sets out strategic objectives, recommends actions and stakeholder responsibilities for achieving the objectives, and provides for monitoring and evaluation of the plan's implementation.

All WHA countries now report annually on progress against GVAP indicators.

The plan was the result of a global collaboration involving:

1. Governments and Elected Officials
2. Health Professionals
3. Academic Institutions
4. Vaccine Manufacturers
5. Nongovernmental Organizations (NGO)
6. Civil Society Organizations

If the global community meets the plan's objectives, childhood mortality around the world will be reduced below the targets set by the United Nations Millennium Development Goals." - in "Bill & Melinda Gates Foundation", 14 March 2016.

15 February 2012

Unrestricted Warfare

"In 1999, 2 Chinese Colonels published a concept paper which advocated that China adopt an "Unrestricted Warfare" strategy to respond to U.S. power and military superiority.

Over the last 10 years, the Chinese government seems to have implemented elements of this strategy to erode U.S. world power and influence.

Due to its cultural, doctrinal, and legal biases and constraints, the United States has experienced difficulty in recognizing and responding effectively to URW practices.

If the U.S. hopes to deter, prevent, and/or respond to all forms of current and future URW threats, it must make policy and organizational changes within its government and the military.

A primary reason why the U.S. is experiencing difficulty in adapting to URW practices is the difference in the thoughts and approach to warfare by the U.S. and the Chinese.

The American way of conducting warfare has been greatly influenced by European authors and militaries that advocate that warfare as a physically violent action to compel an enemy to bend to your will and agree to your terms.

As with America and the West, the Chinese way of war is greatly influenced by its history and culture.

The teachings of Confucius and Sun Zi, are of particular significance.

These men taught **obedience to the state, the primacy of relationships over law, and the importance of deception and surprise in warfare and the affairs of state.**

As a result, Chinese military and civilian leaders often prefer an indirect approach in warfare and in its dealings with other nations.

Since the publication of the URW concept paper, Chinese leaders seem to have adapted and implemented many of the author's ideas in its dealings with the U.S.

Although the concept contains 26 forms of URW (which include both military and non-military forms), the non-military forms of URW are the ones the U.S. has experienced most difficulty." - Bryan K. Luke, Colonel USA, in "Recognizing and Adapting to Unrestricted Warfare Practices by China", 15 February 2012.

1 April 2012

The Flip Side to Bill Gates Charity Billions

"Microsoft's former CEO has made record-breaking donations to Global Health Programmes – but an investigation by Andrew Bowman reveals some unpleasant side-effects.

In 2010, the Gates Foundation gave in grants $2.5 Billion. The World Health Organization, meanwhile, operates on less than a year $2 Billion.

In total it has disbursed over **$26 Billion, most of it to global health.**

Foundation's annual global health funding goes directly to lobbying and advocacy, over $100 million.

To put these figures into perspective; since 1914 the Rockefeller Foundation has given $14 Billion.

Only the US and UK governments give more to global health today.

Appealing to the mega-rich to be more charitable is not a solution to global health problems.

This kind of philanthropy is either a distraction or potentially harmful." - Andrew Bowman, in "New Internationalist", 1 April 2012.

27 February 2013

"**Our Strategy**

At the Bill & Melinda Gates Foundation, all of our investments in Vaccines and immunization contribute to the goals of the Decade of Vaccines.

As one entity within the greater Vaccine community—which includes national governments, other donors, international organizations, the private sector, academia, civil society organizations, faith-based organizations, and local communities—we are working to ensure that existing life-saving Vaccines are introduced into countries where

people need them most, and we support the innovation needed to **Develop New Vaccines and delivery technologies and approaches.**

Vaccine Introduction

One of our most important collaborations is with the GAVI Alliance, a global public-private partnership of scientists, health experts, government leaders, businesspeople, and philanthropic organizations whose goal is to Vaccinate All the World's Children.

GAVI provides funding to buy Vaccines for and provide technical support to countries with the greatest needs.

Since 1999, the foundation has committed US$2.5 Billion to the GAVI Alliance.

GAVI is helping countries introduce Vaccines against pneumococcal disease and rotavirus, the main causes of pneumonia and severe diarrhea, respectively.

GAVI also supports pilot projects to plan for the introduction of the HPV Vaccine.

Innovative and Market-Based Approaches

Along with supply and demand, price is a critical element in the successful launch and sustainable use of any **New Vaccine.**

Without a clear idea of the demand for a Vaccine and how it might be delivered, manufacturers have little incentive to invest in product development and manufacturing.

We are addressing this challenge by working with private industry on innovative, market-based financing mechanisms to ensure that Vaccines are developed at the lowest possible cost. These financing mechanisms have lowered prices for rotavirus and pneumococcal Vaccines as well as pentavalent Vaccine, which protects against five deadly diseases through one injection. **We are working to ensure sufficient supplies of these Vaccines to meet the demand from countries around the world.**

Evidence-Based Decision Making

Officials in developing countries must consider a number of factors before deciding which New Vaccines to introduce and when.

They must study the impact of the disease in their country, whether a new Vaccine will be effective in a given population, and what its benefits will be compared to other health interventions.

We invest in providing reliable information and analysis to help officials review New Vaccines and thereby speed up their decision making.

Accurate data on the financial burden of disease is essential to accurately calculating the cost-effectiveness of immunizations.

Countries also need accurate price and product information to purchase the best product at the lowest possible price.

Our partners can then assist decision makers in planning for Vaccine introduction.

Advocacy

We work at the international, national, and local levels to make sure that Vaccination remains a priority." - in "What We Do Vaccine Delivery Strategy", Bill & Melinda Gates Foundation, 27 February 2013.

Immunization Systems

"**We work to strengthen country immunization systems by supporting the collection, analysis, and use of high-quality Vaccine-related data,** improving the measurement and evaluation of **Vaccination efforts, and developing new diagnostic tools** to help health workers assess population immunity to disease.

Another priority is strengthening vaccine-related supply chains and logistics.

We support the development of new ways to help countries improve the storage, transportation, and distribution of Vaccines.

This is particularly crucial as countries prepare to deliver a greater volume of Vaccines to a greater number of people." - in "What We Do Vaccine Delivery Strategy", Bill & Melinda Gates Foundation, 6 February 2020.

8 October 2013

FRED - A Framework For Reconstructing Epidemic Dynamics

"Mathematical and Computational Models provide valuable planning tools for public health challenges, especially for novel circumstances that cannot be examined through observational or controlled studies, such as **pandemic influenza.**

The development of models ideally involves a close working relationship between the modeling team and the decision-maker using the model.

While mathematical models have a long history of providing solid foundations for understanding disease dynamics, the tractability of analytic models may require neglecting heterogeneities in the population that may have important impacts on epidemic dynamics and on the effectiveness of possible interventions.

For example, it has been suggested that attack rates for the 2009 H1N1 pandemic exhibited a high degree of spatiotemporal heterogeneities among different regions due to regional differences in socio-demographic factors.

In particular, the spread of infectious disease such as influenza depends on the mixing patterns within the population, and these patterns are in turn determined by numerous factors, including: population size and density, the age structure of the population, the size and composition of households, school sizes and schedules, demographic and

socioeconomic risk factors including access to health care facilities, employment patterns and policies, travel and commuting patterns, and local behavioral practices including Vaccine acceptance and personal hygiene.

With these considerations in mind, public health officials may have particular interest in planning tools that take into account the specific characteristics of the local population of the region under their responsibility and that permit them to compare expected outcomes within their jurisdiction with expected outcomes in surrounding communities, or across an entire state.

While originally designed to study influenza, FRED can be adapted to other infectious diseases, such as measles, by modifying configuration files characterizing the natural history of the disease.

Other user-modifiable parameters include the initial immunological profile of the population, **the availability and efficacy of Vaccine and anti-viral drugs, and a flexible set of intervention policies regarding Vaccine distribution, school closures** and other non-pharmaceutical interventions.

In addition, human behaviors in response to an epidemic can also be modeled in a variety of ways, from specifying simple probabilities that certain groups will **get a Vaccine or stay home from work or school** when sick, to more sophisticated behavioral dynamics such as being influenced by concerns over a spreading epidemic." - in "FRED (A Framework for Reconstructing Epidemic Dynamics): an open-source software system for modeling infectious diseases and control strategies using census-based populations", BioMed Central Public Health, 8 October 2013.

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Vaccine Modelling Initiative

"The Vaccine Modelling Initiative is a university-based, international interdisciplinary research consortium designed to generate new computational models and simulations to improve decision-making in Vaccine Research & Development; These models, based on incidence, prevalence and disease transmission patterns of real-world epidemic diseases, will help predict and prevent future infectious disease epidemics. **Public health officials across the globe need guidance on the selection of new Vaccine candidates and on epidemic control procedures.**

By using sophisticated Models and Supercomputers, Computational Modelling and simulations can help prioritize Vaccine research and control strategies by running worst/best case scenarios based on available data such as:

1. Population size and demography.
2. Distribution of certain diseases.
3. Likelihood of a particular disease to spread.

The VMI has been actively engaged in the development of Computational Models and simulations of H5N1 and H1N1 pandemic influenza dynamics to help country governments and the World Health Organization (WHO) with policy making on pandemic control strategies.

Investigators of the VMI have a longstanding experience in the development of Computational Models and simulation of influenza dynamics to support public health policy making Various models have been published on potential spread of H5N1 pandemic influenza in Thailand and the US and **a range of control policies have been evaluated including school closures,** antiviral medication **and Vaccination.**

The VMI was heavily involved in real-time analysis and Modeling of the H1N1 influenza pandemic and advising on control measures (including Vaccines, antivirals, Face Masks and School Closure).

The group worked closely with the WHO, the UK Government, the CDC and the U.S. government more generally, the EU and the Chinese Centers for Disease Control.

In collaboration with the UK Health Protection Agency, early stages of UK H1N1 epidemic were assessed and epidemic indicators estimated that assisted policy making on control strategies.

Prompt antiviral treatment/prophylaxis significantly reduced the probability of influenza like illness in contacts of confirmed cases.

An analysis of household transmission in the U.S. found

an average secondary attack rate for influenza like illness in household contacts of 13% with one week of follow-up, with a strong dependence on household size. The mean serial interval was estimated to be 2.9 days.

Children ≤18 yr were estimated to be two-fold susceptible to infection than 19-50 yr old adults, and adults over 50 were estimated to be less than half as susceptible.

Leadership

The 3 Primary Investigators of the Vaccine Modelling Initiative have world-class expertise in epidemic theory, field research on infectious diseases, Vaccines and Computational Modelling and simulation. In partnership with the Bill & Melinda Gates Foundation, over the next 4 years these investigators will use Computer Simulations of Epidemics to evaluate new Vaccine technology and optimum ways of providing Vaccinations.

1. Donald S. Burke, MD

Principal Investigator, University of Pittsburgh: Director of the Pittsburgh Center for Vaccine Research, Associate Vice Chancellor for Global Health. Served as consultant to the WHO, Institute of Medicine, UNAIDS and multiple national governments.

2. Neil Ferguson, PhD

Co-Principal Investigator, Imperial College London: Director of MRC Centre for Outbreak Analysis and Modelling, Department of Infectious Disease Epidemiology at Imperial College London.

3. Bryan Grenfell, PhD

Co-Principal Investigator, Princeton University: He and colleagues at the Center for Infectious Disease Dynamics (CIDD) at Penn State have pioneered the field of phylodynamics, which explores the feedback between epidemic dynamics and pathogen evolution at the heart of many disease control problems. He is a consultant to the WHO, CDC and a number of other bodies." - in "Vaccine Modeling Initiative", 2017.

January 2014

Middle East Respiratory Syndrome Coronavirus

"The novel Middle East Respiratory Syndrome Coronavirus (MERS-CoV) had, as of Aug 8, 2013, caused 111 virologically confirmed or probable human cases of infection worldwide. MERS-CoV cases continue to be reported (150 confirmed cases at the time this Article was going to press on 5 Nov. 2013), largely in Middle Eastern countries, but by far, the largest number of cases have been reported in Saudi Arabia. Evidence is growing that the MERS-CoV virus, or **a closely related virus, has infected camels in Egypt and Qatar,** and probably in many other countries throughout the affected region.

Without finding the virus in animals, it is impossible to know the reservoir(s) of this virus and stop transmission from animals to man.

We conclude that a slowly growing epidemic is underway, but current epidemiological data do not allow us to determine whether transmission is self-sustaining in man.

Improved surveillance, international collaboration, and data-sharing are therefore crucial to refining our understanding of the transmission dynamics and epidemiology of this novel human virus and of the risk it poses.

The time window might be short for doing so: current selection pressures on the virus to evolve increased transmissibility in man are likely to be intense.

Acknowledgements: This study was funded by the Medical Research Council, the Bill & Melinda Gates Foundation, EU FP7 (grants 278433-PREDEMICS and 223498-EMPERIE), and the National Institute of General Medical Sciences through its Models of Infectious Disease Agent Study (MIDAS) initiative." - in "Middle East Respiratory Syndrome **Coronavirus: quantification of the extent of the epidemic, surveillance biases, and transmissibility", Lancet Infectious Diseases, January 2014.**

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14 February 2014

Five-in-one Pentavalent Vaccine

"The Pentavalent Vaccine that was introduced in India's Universal Immunization Program (UIP) in December 2011, has claimed 54 lives so far.

Five-in-one Pentavalent Vaccine, that claims to save children from 5 killer diseases i.e., Diphtheria, Pertussis, Tetanus, Hepatitis B & Hib Meningitis, has been introduced in 9 states under UIP (Universal Immunization Program) of India. Government first introduced Pentavalent in Kerala & Tamilnadu as a pilot project in 14 December 2011.

But within the first year of its introduction, 19 Infants Died Following Adverse Effects after immunization in both the states.

Such high toll & 2 PILs filed in the Supreme Court seeking ban on Pentavalent, failed to stop government from scaling up this Vaccine in another 7 states namely Goa, Haryana, Gujrat, J&K, Pudduchery, Karnataka & Delhi.

As a result, these states also started registering cases of Infant Deaths.

1. A girl child Ancy died within hours of Vaccination on 15 December 2011 in Kerala, next day of introduction of Pentavalant in TN & Kerala.

2. Within a year of this Program, from December 2011 to February 2013, 19 Children Died and 60 were hospitalized.

3. Pentavalent was inducted in Haryana's immunization schedule in December 2012 and within a month, on 9 January 2013, a Child Died shortly after receiving Vaccine in Jasaur Kheri village of Jhajhajhar district, 5 children have Died so far in the state.

4. Kashmir also reported 8 Infant Deaths from September 2012 to October 2012 which led state doctors to demand a pull back of Pentavalent from the state's immunization program. An expert team also visited Kashmir's GB Pant hospital to investigate these deaths and

dismissed any role of **Vaccine in casualties.** The team declared that the deaths were due to pneumonia and septicemia.

5. Three (3) children in Delhi, 2 in Goa, 2 in Gujrat, 5 in Haryana, 12 in J&K, 6 in Karnataka, 16 in Kerala and 8 in TN have Died in 2 years following Pentavalent Vaccination while 135 children were hospitalized.

In 2010 when the National Technical Advisory Group on Immunization (NTAGI) recommended Pentavalent's introduction in the country's health program, many public health experts criticized it.

Two of NTAGI members, a policy adviser and a bureaucrat filed a PIL in Supreme court against Pentavalent's introduction in UIP.

The PIL clearly Stated:

1. The plan to introduce Pentavalent has been chalked out ignoring Minz study that suggests that the number of Hib Meningitis cases is too low in India for government to introduce a Vaccine to eradicate it.

2. Figures obtained from countries where Pentavalent vaccine has been in use for years, show that there is no actual benefit of this Vaccine in preventing diseases.

3. Efficacy of Pentavalent is doubtful as it has many side effects and has caused deaths in many developing countries. The Vaccine is being introduced in India's UIP under WHO and GAVI's influence, ignoring facts and figures about its need in the and safety profile.

4. The government should first test its effects on children without combining it with DPT and Hepatitis B Vaccines.

Deaths Due to the Vaccination

1. Sri Lanka started use of Pentavalent in 2008, but suspended it soon after **the deaths of 5 children reported after Vaccination.**

2. Bhutan started it in 2009 and stopped its use after 9

deaths. Though Bhutan started using it again as WHO intervened and declared Pentavalent safe, but it again caused 4 deaths. Bhutan stopped using it permanently.

3. Three children died in Pakistan soon after introduction of Pentavalent in its immunization program. A healthy child died within half an hour of Vaccination.

4. Vietnam started use of Pentavalent Vaccine Quinvaxam in 2010 and stopped its use in March 2013 after **reporting of 12 deaths** and 9 hospitalizations from October 2012 to March 2013." - Shabdkritiyan, in "After 54 Infant Deaths, Gov't Finally Admits Pentavalent Involved", 14 February 2014.

31 July 2014

Public Health Laboratories

"Public Health England (PHE), PHE's public health laboratories provide routine and enhanced molecular diagnostic services to National Health Service (NHS) trusts. Public health laboratories (PHLs) are based within large NHS Trusts where specialist clinical departments require specialist, and often dedicated, medical microbiology support.

PHLs provide:

1. Specialist advice and support, particularly for the investigation of outbreaks and incidents.
2. Specialist referred tests - tests not performed in all laboratories, but which do not necessarily have to be sent to a reference laboratory (such as viral culture, other virology, mycology and serology tests, particularly if low volume).
3. Molecular diagnostic tests that are not widely available in other laboratories, such as nucleic acid amplification tests for HIV and hepatitis C.
4. Emergency response to bioterrorist incidents, natural outbreaks, and serious epidemics, such as SARS and H5N1 influenza

5. Research and development - Public Health England's public health laboratories are at the forefront of research and development in medical microbiology and molecular diagnostics, providing our service partners with direct 'real-time' access to technological improvements and advancements.

6. Additional work (identification or typing) where not done by a reference laboratory." - in "Public health laboratories", Gov.UK, 31 July 2014.

31 August 2014

Bill & Melinda Gates Foundation Vaccine Empire on Trial in India

"In 2009, several schools for tribal children in Khammam district in Telangana, India, became sites for observation studies for a cervical cancer Vaccine that was administered to thousands of girls aged between 9 and 15.

The girls were administered the Human Papilloma Virus (HPV) Vaccine in 3 rounds that year.

The Vaccine used was Gardasil, manufactured by Merck.

It was administered to around 16,000 girls.

Months later, many girls started falling ill, and 5 of them Died by 2010, 2 more Deaths were reported from Vadodara, Gujarat, where an estimated 14,000 children studying in schools meant for tribal children were also Vaccinated with another brand of HPV vaccine, Cervarix, manufactured by GSK.

Earlier in the week, **the Associated Press reported that scores of teenaged girls were hospitalised in a small town in northern Colombia with symptoms that parents suspect could be an adverse reaction to Gardasil.**

The children also had no idea about the nature of the disease or the Vaccine. Earlier this month, taking a serious view of the death of 7 tribal girls in the context of the

observation studies, the Supreme Court asked the Drug Controller General of India and the Indian Council of Medical Research to explain how permissions were given.

The SC bench of justices Dipak Misra and V Gopala Gowda asked the Centre to produce relevant files that pertained to the grant of licence for trial of the HPV Vaccine in India.

In March 2010 a fact-finding mission found that as many as **120 girls experienced Adverse Reactions such as:**

1. Epileptic Seizures
2. Severe Stomach Ache
3. Headaches
4. Mood Swings
5. Early onset of menstruation following the vaccination
6. Heavy bleeding
7. Severe menstrual cramps among many students

The standing committee pulled up the relevant state governments for the shoddy investigation into these deaths.

It said it was disturbed to find that "all the 7 deaths were summarily dismissed as unrelated to Vaccinations without in-depth investigations, the speculative causes were suicides, accidental drowning in well, malaria, viral infections, subarachnoid haemorrhage (without autopsy) etc."

The committee said that in the context of deaths of girls classified as suicide, the role of the "HPV Vaccine as a possible, if not probable, cause of suicidal ideation cannot be ruled out."

It said that **an American NGO — Program for Appropriate Technology in Health (PATH) — had carried out the studies. The committee found that the objective behind the observation studies in India primarily was to collect and record data on the effect of the Vaccines on the minor subjects. On 1 June 2006, the US Food and Drug Administration (USFDA) approved the first Vaccine — Gardasil**.

In the very same month, PATH embarked upon a large-scale, 5-year project that involved observation studies, covering Peru, Vietnam and Uganda, apart from India.

The committee observed that on 16 November 2006, a draft memorandum of understanding (MoU) between PATH and the ICMR was circulated by the latter.

> ***"To explore collaboration to support public sector decision regarding HPV Vaccine introduction in India, and to generate necessary evidence to allow the possible introduction of HPV Vaccine into India's Universal Immunization Programme."***

The study was sponsored by the Bill & Melinda Gates Foundation (BMGF).

Vaccination is a significant area of work and BMGF has projects running in almost every country that's counted as poor.

BMGF continues to partner PATH in a number of studies such as the ones for a Rotavirus Vaccine and pneumococcal Vaccine in several countries, mainly Africa and Asia.

The Wrong PATH

> ***"It is also unethical when people championing the cause of Vaccines are the same ones who are also investing in Vaccine development"*** *- V. Rukmini Rao*

BMGF has funded 2 organizations that over the past 5 years have played a significant role in the country's immunization programme and are both under fire for conflict of interest.

The organizations are GAVI (Global Alliance for Vaccines and Immunization), a global aid organization that specializes in Vaccination, and Public Health Foundation of India (PHFI), a public-private partnership society that BMGF co-founded with the UPA government in 2006.

Wrong Dose

In recent years, the deaths of many infants allegedly soon after they were immunized with the Pentavalent Vaccine, a 5 in 1 (five-in-one) shot, has contributed towards anxiety around Vaccines.

The Vaccine has been controversial in Sri Lanka, Bhutan and Vietnam, where it was temporarily suspended on account of some reported post-vaccination Deaths of Infants.

Launched in 2011 in India, Pentavalent is a combination of 5 Vaccines in 1: diphtheria, tetanus, whooping cough, hepatitis B and haemophilus influenza type b (the bacteria that causes meningitis and pneumonia).

The Vaccine created a furore after many infants from across the country were reported to have Died After the Vaccination.

The report of 3 deaths of infants in Tamil Nadu have **"a consistent causal association to immunization"**, which means **the ministry confirms that there is a connection between the Vaccination and the Deaths.**

In all, 54 cases of Deaths of Infants who were Vaccinated with Pentavalent have been classified as "Adverse Events Following Immunization", nomenclature that confirms the Deaths have Occurred Soon After Vaccination.

A recent strategy document on immunization published by the health ministry suggests doubling the expenditure on purchase of Pentavalent.

The Multi-Year Strategic Plan for the Universal Immunization Programme (UIP) makes the case that the ministry needs to double its spend on Pentavalent from Rs 312.7 crore in 2013, to Rs 773.8 crore in 2017.

The report also calls for a seven-fold increase in total spend on Vaccines, from Rs 510.6 crore to Rs 3,587.1 crore by the same year. The report was drafted by a team of immunization researchers who work under the PHFI which was **co-founded by BMGF and the UPA government as a Public Private Partnership.**

A few experts from UNICEF and WHO were also part of the team.

Interestingly, its on the basis of such multiyear plans that GAVI, also funded by BMGF, disburses grants to countries.

Recently, an additional secretary with the health ministry, Anuradha Gupta, was appointed as the deputy CEO of GAVI.

PHFI has accepted grants worth around `57.65 crore from pharma companies, including Merck Sharp and Dohme, Pfizer and Sanofi, which Manufacture Vaccines.

A report features a scenario as per which the optimistic case would be that the market would have hit a value of around $3.2 Billion in 2020, growing at 30-35% year-on-year from 2012 onwards.

"In all likelihood, there will be 5 "Mega" Vaccines of over $250 million each in size, constituting 60% of the market, namely the anti-influenza, anti-typhoid, HPV, pneumococcal and Hepatitis A." - K.P. Narayana Kumar, E.T. Bureau, in "Controversial Vaccine studies: Why is Bill & Melinda Gates Foundation under fire from critics in India?", 31 August 2014.

12 November 2014

Elderly Person Dies Every 7 Minutes

"Every winter 25,000 older people in England and Wales do not survive the bitter weather 206 deaths a day. There is also a massive financial cost to the NHS as it copes with additional winter deaths and illness." *- Sarah O'Grady, in "Express", 12 November 2014.*

19 March 2015

"The charity run by Bill and Melinda Gates, who say the threat of climate change is so serious that immediate action is needed, held at least $1.4 Billion of investments in the world's biggest fossil fuel companies.

The Bill and Melinda Gates Foundation and Asset Trust is the world's largest charitable foundation, with an endowment of over $43 Billion, and has already given out $33 Billion in grants to health programmes around the world." - in "The Guardian", 19 March 2015.

19 May 2015

"Last year, there was only one book on my summer reading list that you could reasonably call a beach read.

This year I tried to pick a few more things that are on the lighter side. Each of these books made me think or laugh or, in some cases, do both.

"How to Lie With Statistics", by Darrell Huff

I picked up this short, easy-to-read book after seeing it on a Wall Street Journal list of good books for investors.

A useful introduction to the use of statistics, and a helpful refresher for anyone who is already well versed in it." - Bill Gates, in "Beach reading (and more)", GatesNotes, 19 May 2015.

23 July 2015

*"**Vaccine development is facing a crisis for 3 reasons: the complexity of the most challenging targets, which necessitates substantial investment of capital and human expertise; the diminishing numbers of Vaccine manufacturers able to devote the necessary resources to research, development, production**; and the prevailing business model, which prioritizes the development of vaccines with a large market potential. We consider an international vaccine-development fund to be urgently needed to provide the resources and the momentum to*

carry vaccines from their conception in academic and government laboratories and small biotechnology firms to development and licensure by industry. Such a fund would enable basic scientists to move candidate vaccines from the laboratory through the so-called valley of death — the critical steps after good preclinical data have been obtained, comprising manufacture to Food and Drug Administration standards." - Dr Stanley A. Plotkin, MD, Dr Adel A.F. Mahmoud, MD, Dr Jeremy Farrar, MD, in "Establishing a Global Vaccine-Development Fund", The New England Journal of Medicine, 23 July 2015.

Dr Stanley A. Plotkin, MD "From the Foundation for Vaccine Research, Washington, DC, the Wellcome Trust, London (J.F.) Relevant financial activities outside the submitted work, relationships that were present during the 36 months prior to publication. Personal Fees received from: Pfizer, Sanofi Pasteur, Merck, Dynavax, Inovio, Hookipa, Emergent, Geovax, outside the submitted work, "Form for Disclosure of Potential Conflicts of Interest, International Committee of Medical Journal Editors", 15 June 2015.

Dr Adel A. F. Mahmoud, MD "Awarded a PhD in 1971 from the London School of Hygiene and Tropical Medicine. From 1998 served as President of Merck Vaccines. At Merck, Dr. Mahmoud played a pivotal role in the development and commercialization of vaccines for rotavirus, human papilloma virus, and shingles, as well as a new quadrivalent formulation of measles-mumps-rubella-varicella vaccine, up until 2006. Was a member of the boards of directors of the Global Alliance for Vaccines and Immunizations, **the International AIDS Vaccine Initiative**, and the International Vaccine Institute. Advised the: World Health Organization, National Institutes of Health, Centers for Disease Control and Prevention, Rockefeller Foundation, and National Academies". - in "American Society of Tropical Medicine and Hygiene", 3 July 2018.

Dr Jeremy Farrar, MD "Director, Wellcome Trust. Before joining Wellcome in October 2013, Jeremy Farrar was **Director of the Oxford University Clinical Research Unit in Viet Nam for 18 years. His research interests were infectious diseases and global health, with a focus on emerging infections. He has served as Chair on several advisory boards for governments and global organisations."** - in "Executive Leadership Team", Wellcome Trust, 22 May 2020

The Coalition for Epidemic Preparedness Innovations

Part I

"The concept for CEPI was outlined in a July 2015 paper in The New England Journal of Medicine, titled "Establishing a Global Vaccine-Development Fund", co-authored by British medical researcher Jeremy Farrar (a director of Wellcome Trust), American physician Stanley A. Plotkin (co-discoverer of the Rubella Vaccine), and American expert in infectious diseases Adel Mahmoud (developer of the HPV vaccine and rotavirus vaccine).

The Coalition for Epidemic Preparedness Innovations (CEPI) is a foundation that takes donations from Public, Private, Philanthropic, and Civil Society Organisations, to finance independent research projects to Develop Vaccines against Emerging Infectious Disease (EID).

CEPI is focused on the World Health Organisation's (WHO) "blueprint priority diseases", which includes: the Middle East respiratory syndrome-related coronavirus (MERS-CoV), the Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the Nipah virus, the Lassa fever virus, and the Rift Valley fever virus, as well as the Chikungunya virus and the hypothetical, unknown pathogen "Disease X". CEPI investment also requires "equitable access" to the vaccines during outbreaks. **CEPI was conceived in 2015 and formally launched in 2017 at the World Economic Forum in Davos, Switzerland.**

It was co-founded and co-funded with US$460 Million from the Bill and Melinda Gates Foundation, The Wellcome Trust, and a consortium of nations, being Norway, Japan, Germany; to which the European Union (2019) and Britain (2020) subsequently joined.

CEPI is headquartered in Oslo, Norway.

In 2017, Nature said, "It is by far **the largest Vaccine development initiative ever against viruses that are potential epidemic threats**".

In 2020, CEPI was identified as a "key player in the race to develop a Vaccine" for the Coronavirus disease 2019.

Funding

At its launch in 2017, CEPI announced 5 year financial pledges from its founders that amounted to US$460 Million and came from the sovereign governments of Japan (US$125 Million), Norway (US$120 Million), and Germany (US$10.6 Million in 2017 alone, and which later became US$90 Million), and from global foundations of the Gates Foundation (US$100 Million), and the Wellcome Trust (US$100 Million); India was finalising their financial commitment, which was made shortly afterwards.

A funding target of US$1 Billion was set for the first 5 years of operation (i.e. by January 2022).

> ***"It is by far the largest Vaccine development initiative ever against viruses that are potential epidemic threats."*** *- in "Billion-Dollar project aims to prep Vaccines before epidemics hit", Nature, 18 January 2017.*

As part of its funding structure, CEPI has used "Vaccine bonds" to "frontload" multi-year sovereign funding pledges.

In 2019, the International Finance Facility for Immunisation (IFFIm) issued NOK 600 Million in Vaccine bonds to front-load the commitment by Norway, through Gavi, the Vaccine Alliance, to CEPI.

In March 2019, the European Commission granted access

to CEPI into the EU's Horizon 2020 programme, and a longer-term financial funding programme.

CEPI note presentations that the EU's financial commitment amounts to US$200 Million, which when added to the seed amount (including the full German commitment), came to US$740 Million.

By February 2020, Bloomberg News reported that **CEPI had raised a total of US$760 Million with additional donations from the governments of Australia, Belgium, Canada, and the U.K.**

Bloomberg said that "CEPI solves what economists call a "coordination problem".

It can help pair boutique **research and development companies with big Vaccine Manufacturers, work with regulators to streamline approval processes** and resolve patent disputes on the spot.

Its scientific advisory committee has executives from Pfizer, Johnson & Johnson, and Japan's Takeda Pharmaceutical, among others".

In March 2020, **the British government pledged £210 Million in funding to CEPI to specifically focus on a Vaccine for the Coronavirus; making Britain CEPI's largest individual donor."** - in "Coalition for Epidemic Preparedness Innovations", Wikipedia, 31 March 2020.

19 November 2015

Financial Times Ltd

"**19 November 2015**
Purpose: to provide credible and independent information on maternal health and child mortality in order to raise awareness and increase knowledge and understanding of these vital issues
Amount: US$503,341
Topic: Inform and Engage Communities
Program: Advocacy [Financial Times]
Grantee Website: **www.ft.com"** - in "How We Work; Grant", Bill & Melinda Gates Foundation, 19 November 2015.

"**1 November 2016**
Purpose: to inform and engage readers on vital health and development issues
Amount: US$1,344,444
Topic: Inform and Engage Communities, Neglected Tropical Diseases
Program: Advocacy, Global Health [Financial Times]
Grantee Website: www.ft.com" - in "How We Work; Grant", Bill & Melinda Gates Foundation, 1 November 2016.

17 February 2017

"The next epidemic could originate on the computer screen of a terrorist intent on using genetic engineering to create a synthetic version of the smallpox virus or a super contagious and deadly strain of the flu.

In 1918, a particularly virulent and deadly strain of flu killed between 50 million and 100 million people.

Epidemiologists say a fast-moving airborne pathogen could kill more than 30 million people in less than a year.

And even if the next pandemic isn't on the scale of the 1918 flu, we would be wise to consider the social and economic turmoil that might ensue if something like Ebola made its way into a lot of major urban centers.

The good news is that with advances in biotechnology, **New Vaccines and drugs can help prevent epidemics from spreading out of control.**

First and most importantly, we have to **build an arsenal of new weapons - Vaccines**, drugs, **and diagnostics.**

Vaccines can be especially important in containing epidemics. But today, it typically takes up to 10 years to develop and license a new vaccine.

To significantly curb deaths from a fast-moving airborne pathogen, we would have to get that down considerably - to 90 days or less. We took an important step last month with the launch of a new **public-private partnership called the Coalition for Epidemic Preparedness Innovations (CEPI).**

The hope is that CEPI will enable the world to produce safe, effective Vaccines as quickly as new threats emerge.

The really big breakthrough potential is **in emerging technology platforms that leverage recent advances in genomics to dramatically reduce the time needed to develop Vaccines.**

Flexibility and re-usability would cut the vaccine development and approval timeline significantly.

And we can apply this **New Vaccine technology** to other hard-to-treat diseases like HIV, malaria, and tuberculosis.

The $550 Million that launched CEPI is just a down payment.

We will need considerably more support from governments to fund the Research & Development necessary to realize the promise of this new technology.

The third thing we need to do is prepare for epidemics the way the military prepares for war.

This includes germ games and other preparedness exercises so we can better understand how diseases will spread, how people will respond in a panic, and how to deal with things like overloaded highways and communications systems.

We also need trained medical personnel ready to contain an epidemic quickly, and better coordination with the military to help with logistics and to secure areas.

The cost of ensuring adequate pandemic preparedness worldwide is estimated at $3.4 Billion a year.

Imagine if I told you that somewhere in this world, there's a weapon that exists - or that could emerge - capable of killing tens of thousands, or millions, of people, bringing economies to a standstill, and throwing nations into chaos.

I'm optimistic that a decade from now, we can be much better prepared for a lethal epidemic—**if we're willing to put a fraction of what we spend on defence budgets and new weapons systems into epidemic readiness." - Bill Gates** in "Munich Security Conference", **17 February 2017.**

Please Note In order to understand: "**The really big breakthrough potential is in emerging technology platforms that leverage recent advances in genomics**", please read the Chapter "Genetic Fudge" in "Medicine: The Lies, The Greed & The Death", in this book.

22 February 2017

Wuhan Institute of Virology

"Viruses don't know borders." - Professor Zhi-ming Yuan, Director of the National Bio-safety Laboratory, Wuhan Institute Of Virology in "Inside the Chinese lab poised to study world's most dangerous pathogens", Nature, 22 February 2017.

13 September 2017

"Researchers studying the flu Vaccine in pregnancy have found a hint of a possible link between miscarriage early in pregnancy and the flu Vaccine i*n women who received a certain version of the Vaccine 2 years in a row. It's the first study to identify a potential link between miscarriage and the flu Vaccine, and* ***the first to assess the effect of repeat influenza Vaccination and risk of miscarriage."*** *- in "Miscarriages linked to flu Vaccine being administered during pregnancy in new study", The Independent, 13 September 2017.*

24 April 2018

U.S. Government $7 Billion Stockpile of Medication

"**Several warehouse across the country are part $7 Billion Strategic National Stockpile**, a government repository of drugs and supplies ready for deployment in a bioterrorism or nuclear attack, **or against an infectious disease outbreak - of either a known pathogen or some unknown threat with pandemic potential, which global health officials dub "Disease X" - or other major public health emergency.**

There are antibiotics, including the powerful medication Ciprofloxacin, Vaccines for smallpox, anthrax, and antivirals for a deadly influenza pandemic." - in "The Washington Post", 24 April 2018.

27 April 2018

Bill Gates Warns 30 Million People Could Die From Flu Pandemic

"Significant probability of a large and lethal modern-day pandemic occurring in our lifetimes", **Bill Gates said before the Massachusetts Medical Society, stressing the importance of U.S. funding for advanced research on new therapeutics, including a universal flu vaccine, which would protect against all or most strains of influenza, also announced a $12 Million Grand Challenge in partnership with the family of Google Inc. co-founder Larry Page to accelerate the development of a universal flu vaccine.**

But Vaccines, he noted, take time to research, deploy and generate protective immunity.

"So we need to invest in other approaches, like antiviral drugs and antibody therapies that can be stockpiled or

rapidly manufactured to stop the spread of pandemic diseases or treat people who have been exposed." - in "The Washington Post", 27 April 2018.

29 June 2018

*"**I mentioned SARS epidemic in Hong Kong.** And Hong Kong illustrates what we are going to increasingly be confronted with, and that is very high density populations, dense populations like in Mong Kok, for those of you have been in Hong Kong, is the most densely populated place on earth. **And that's where the SARS virus, which is a corona virus is a whole family a new family that we know and it probably comes from bats.**" - Dr Peter Piot, MD in "**Are We Ready for the Next Pandemic?**", 29 June 2018.*

27 September 2018

***"I'd like to see more people get Vaccinated",** Robert Redfield told the AP at an event in New York. "We lost 80,000 people last year to the flu." CDC officials called the 80,000 figure preliminary, and it can be slightly revised. But they said it is not expected to go down." - in "The Weather Channel", 27 September 2018.*

17 October 2018

"The cost of developing a single epidemic infectious disease Vaccine from preclinical trials through to end of phase 2a is US$31–68 Million (US$14–159 million range), assuming no risk of failure.

We found that previous licensure experience and indirect costs are upward drivers of research and development costs.

Accounting for probability of success, the average cost of successfully advancing at least one epidemic infectious disease Vaccine through to the end of phase 2a can vary from US$84–112 Million ($23 Million–$295 Million range)

starting from phase 2 to $319–469 Million ($137 Million–$1.1 Billion range) starting from preclinical.

This cost includes the cumulative cost of failed Vaccine candidates through the research and development process.

Assuming these candidates and funding were made available, progressing at least one vaccine through to the end of phase 2a for each of the 11 epidemic infectious diseases would cost a minimum of $2.8–3.7 Billion ($1.2 Billion–$8.4 Billion range)."

- Dr Penny M Heaton, MD, Bill & Melinda Gates Medical Research Institute, Cambridge, MA, USA;

- James M Robinson, "Novavax Inc. (Nasdaq: NVAX) appointed James M. Robinson Vice President of Technical and Quality Operations, joins from Sanofi Pasteur, a division of Sanofi Aventis Group. Jim's leadership will be critical in translating our vision of dovetailing our virus-like particle vaccine platform with our portable, disposable manufacturing technology to revolutionize vaccine development and production. Novavax is developing vaccines to protect against H5N1 pandemic influenza, seasonal flu and other viral diseases." - in "Novavax", 14 March 2007; and in "Estimating the cost of vaccine development against epidemic infectious diseases", The Lancet Global Health, 17 October 2018.

6 November 2018

Influenza (Seasonal)

"**Ask the expert: Influenza Q&A**

Seasonal influenza is an acute respiratory infection caused by influenza viruses which circulate in all parts of the world.

The pathogen

There are 4 types of seasonal influenza viruses, types A, B, C and D. Influenza A and B viruses circulate and cause seasonal epidemics of disease.

1. Influenza A viruses are further classified into subtypes according to the combinations of the hemagglutinin (HA) and the neuraminidase (NA), the proteins on the surface of the virus. Currently circulating in humans are subtype A(H1N1) and A(H3N2) influenza viruses. The A(H1N1) is also written as A(H1N1)pdm09 as it caused the pandemic in 2009 and subsequently replaced the seasonal influenza A(H1N1) virus which had circulated prior to 2009. Only influenza type A viruses are known to have caused pandemics.

2. Influenza B viruses are not classified into subtypes, but can be broken down into lineages. Currently circulating influenza type B viruses belong to either B/Yamagata or B/Victoria lineage.

3. Influenza C virus is detected less frequently and usually causes mild infections, thus does not present public health importance.

4. Influenza D viruses primarily affect cattle and are not known to infect or cause illness in people.

Signs and symptoms

Seasonal influenza is characterized by a sudden onset of fever, cough (usually dry), headache, muscle and joint pain, severe malaise (feeling unwell), sore throat and a runny nose.

The cough can be severe and can last 2 or more weeks.

Most people recover from fever and other symptoms within a week without requiring medical attention.

But influenza can cause severe illness or death especially in people at high risk. Illnesses range from mild to severe and even death. **Hospitalization and death occur mainly among high risk groups.**

Worldwide, these annual epidemics are estimated to result in about 3 to 5 Million cases of severe illness, and about 290,000 to 650,000 respiratory deaths.

In industrialized countries most deaths associated with influenza occur among people age 65 or older.

Epidemiology

All age groups can be affected but there are groups that are more at risk than others. **People at greater risk of severe disease or complications** when infected are: **Pregnant women, Children under 59 months, the Elderly, individuals with Chronic Medical Conditions** (such as **Chronic Cardiac, Pulmonary, Renal, Metabolic, Neurodevelopmental, Liver or Hematologic Diseases**) and individuals with immunosuppressive conditions (such as **HIV/AIDS**, **receiving chemotherapy** or **steroids**, or malignancy).

In temperate climates, **seasonal epidemics occur mainly during winter**." - in "Influenza (Seasonal)", WHO, 6 November 2018.

30 November 2018

> ***"The flu Vaccine's failure*** *to protect against some of the key strains of the infection contributed to more than 50,000 "extra" deaths in England and Wales last winter, according to the Office of National Statistics. The impact on death rates was apparent as early as March, when experts warned the government must "urgently investigate" a spike of 10,000 deaths in the first weeks of 2018." - in "The Independent", 30 November 2018.*

1 December 2018

"Between December 2017 and March 2018 there were 50,100 "extra" deaths – over and above the rates expected from the last 5 years. The King's Fund think tank has warned that these spikes could become a continual trend. The UK's population is steadily ageing and reductions in heart attacks and strokes – which have reliably occurred for decades." - in "There's no perfect prescription for preventing winter deaths", The Independent, 1 December 2018.

4 January 2019

The $1 Billion Syphilis Infections Lawsuit

A Federal Judge in Maryland, pronounced that: Johns Hopkins University, Bristol-Myers Squibb global biopharmaceutical company, and the Rockefeller Foundation, must face a $1 Billion syphilis infections lawsuit (by 3 law firms based in the U.S. and Venezuela) over their roles in a 1940s United States Government experiment that infected 750-800 of citizens of Guatemalan with syphilis.

"Beginning in 1946, the United States government engaged in research experiments in which more than 5,000 uninformed and unconsenting Guatemalan people were intentionally infected with bacteria that cause sexually transmitted diseases. Between 1946 and 1948, health officials intentionally infected at least 1,308 of these people with syphilis, gonorrhoea, and chancroid, and conducted serology tests on others. Many have been left untreated to the present day." *- Dr Michael A. Rodriguez, MD in "First, Do No Harm: The US Sexually Transmitted Disease Experiments in Guatemala", American Journal of Public Health, December 2013.*

Who Directed the Experiment?

1. Dr John Cutler, MD, US Governments, Employee.
2. Juan Funes, Guatemala, Employee.
3. The study got approval from the Syphilis Study Section of the National Institute of Health, run by Johns Hopkins Professor Joseph Earle Moore.
5. Dr Thomas Parran, MD, US Surgeon General who approved the study, sat also on the board of trustees at the Rockefeller Foundation.
6. Dr Fred Soper, MD, (received his MD in 1918, and during his last year at Rush Medical College at the University of Chicago, was recruited by the Rockefeller Foundation's International Health Board) in 1925 he left the Johns Hopkins School of Public Health to join the Rockefeller Foundation, he was running the Pan American Sanitary Bureau that also supported the study (elected Director of the Pan American Sanitary Bureau in 1947). He received a doctorate from the Johns Hopkins School of Public Health.
7. Some former Bristol-Myers Squibb entity, is thought, to have provided the penicillin.

"Berta was a female patient in the psychiatric hospital. Her age and the illness that brought her to the hospital are unknown. In February 1948, Berta was injected in her left arm with syphilis. A month later, she developed scabies (an itchy skin infection caused by a mite).

Several weeks later, lead investigator Dr John Cutler, MD noted that she had also developed red bumps where he had injected her arm, lesions on her arms and legs, and her skin was beginning to waste away from her body.

Berta was not treated for syphilis until 3 months after her injection. Soon after, on August 23, Dr Cutler wrote that Berta appeared as if she was going to die, but he did not specify why.

That same day he put gonorrheal pus from another male subject into both of Berta's eyes, as well as in her urethra and rectum. He also re-infected her with syphilis.

Several days later, Berta's eyes were filled with pus from the gonorrhea, and she was bleeding from her urethra.

On August 27, Berta died." - in Presidential Commission for the Study of Bioethical Issues. "Ethically impossible", STD research in Guatemala from 1946–1948.

> *"Johns Hopkins expresses profound sympathy for individuals and families impacted by the deplorable 1940's syphilis study funded and conducted by the U.S. government in Guatemala. We respect the legal process, and we will continue to vigorously defend the lawsuit." - in Johns Hopkins University statement, Guatemala Study.*

"In 1939 a "Drug Trust" alliance was formed by the Rockefeller empire and the German chemical company IG Farben (Bayer). After World War II, IG Farben was dismantled but later emerged as separate corporations within the alliance. Well known companies included General Mills, Kellogg, Nestle, Bristol-Myers Squibb, Procter and Gamble, Roche and Hoechst (Sanofi-Aventis).

The Rockefeller empire, in tandem with Chase Manhattan Bank (now JP Morgan Chase), owns over half of the pharmaceutical interests in the United States. It is the largest drug manufacturing combine in the world. Since WWII, the Pharmaceutical Industry has steadily netted increasing profits to become the world's second largest manufacturing industry; after the arms industry." - "sourcewatch.org/index.php/Rockefeller_Foundation", 2020.

17 February 2019

> *"Flu Season: Up to 19,000 People Have Died in the USA;* ***Vaccine Protecting About Half Who Get It.*** *CDC figures show flu* ***Vaccine formulated for the H1N1 strain of influenza virus is 47% effective****. Last year's* ***Vaccine was 36% effective.*** ***Overall, the 2017-2018 vaccine was 40% effective*** *for the entire season." - in "The Weather Channel", 17 February 2019.*

2 March 2019

Bat Coronaviruses in China

"During the past 2 decades, 3 zoonotic coronaviruses have been identified as the cause of large-scale disease outbreaks-Severe Acute Respiratory Syndrome (SARS), Middle East Respiratory Syndrome (MERS), and Swine Acute Diarrhoea Syndrome (SADS). SARS and MERS emerged in 2003 and 2012, respectively, and caused a worldwide pandemic that claimed thousands of human lives, while SADS struck the swine industry in 2017.

They have common characteristics, such as they are all highly pathogenic to humans or livestock, their agents originated from bats, and 2 of them originated in China.

Thus, it is highly likely that future SARS, or MERS, like coronavirus outbreaks will originate from bats, and there is an increased probability that this will occur in China."

- Yi Fan, CAS Key Laboratory of Special Pathogens and Biosafety, Wuhan Institute of Virology, Chinese Academy of Sciences, Wuhan;
- Kai Zhao, CAS Key Laboratory of Special Pathogens and Biosafety, Wuhan Institute of Virology, Chinese Academy of Sciences, Wuhan;
- **Zheng-Li Shi**, CAS Key Laboratory of Special Pathogens and Biosafety, Wuhan Institute of Virology, Chinese Academy of Sciences, Wuhan;
- Peng Zhou, CAS Key Laboratory of Special Pathogens and Biosafety, Wuhan Institute of Virology, Chinese Academy of Sciences, Wuhan, in "Bat Coronaviruses in China", Viruses, 2 March 2019.

April 2019

NO TIME TO WAIT
Securing the Future from Drug-Resistant Infections, Report from the Secretary General of the UN

"**Antimicrobial resistance is a global crisis that threatens a century of progress in health and achievement of the Sustainable Development Goals.**

Alarming levels of antimicrobial resistance have been reported in countries of all income levels.

In some member countries of the Organization for Economic Cooperation and Development (OECD), about 35% of common human infections are already resistant to currently available medicines, and in some low- and middle-income countries (LMICs), resistance rates are as high as 80% to 90% for some antibiotic-bacterium combinations.

More than a third of countries providing data to WHO in 2017 reported widespread resistance to common pathogens.

Resistance to second- and third-line antibiotics – the last lines of defence against some common diseases – are projected to almost double between 2005 and 2030.

Concurrently, millions of lives are lost every year due to lack of access to existing antimicrobial agents: inadequate access to antibiotics alone kills nearly 6 million people annually, including a million children who die of preventable **Sepsis and Pneumonia**.

There is no time to wait. Unless the world acts urgently, antimicrobial resistance will have disastrous impact within a generation. The true magnitude of antimicrobial resistance in humans is not fully known, but estimates suggest that resistant infections already cause at least **700,000 deaths every year**, including **230,000 deaths from Multidrug-Resistant Tuberculosis.**

A worst-case scenario developed by the World Bank has suggested that this figure could rise to 10 million deaths every year by 2050, if no action is taken.

In countries where resistance can be measured accurately, the OECD predicts that around 2.4 million people could die in Europe, North America and Australia between 2015 and 2050 without a sustained effort to contain antimicrobial resistance.

The IACG calls on Public, Private and Philanthropic Donors and Other Funders to Increase Investment and innovation in quality-assured, new antimicrobials (particularly antibiotics), novel compounds, diagnostics, vaccines, waste management tools, and safe and effective alternatives to antimicrobials for human, terrestrial and aquatic animal and plant health, as well as implementation and operational research.

The economic impact of uncontrolled antimicrobial resistance would also be catastrophic.

As drug resistant pathogens spread, health care expenditures would increase dramatically, and sustainable food and feed production – including global trade in food, feed and livestock – will increasingly be at risk.

As a result, the World Bank estimates that by 2030 up to 24 million people could be forced into extreme poverty, mainly in low-income countries, and annual economic damage as a result of antimicrobial resistance could be comparable to the shocks experienced during the 2008-2009 global financial crisis – but with no end in sight." - in "NO TIME TO WAIT, Securing the Future from Drug-Resistant Infections, Report from the Secretary General of the UN", UN, April 2019.

6 May 2019

Antibiotics Market to Reach $63.34 Billion by 2026

"Increase in number of chronic diseases coupled with technological advancements globally, are the major factors influencing market growth.

Market Size US $46.23 Billion in 2018, Market Growth - CAGR of 3.9%, Market Trends –Technological advancement along with increasing chronic diseases.

The Antibiotics Market is estimated to reach USD 63.34 Billion by 2026, according to a new report by Reports and Data. **This can be mainly associated with the growing incidences of infectious diseases such as Pneumonia, HIV/AIDS, Malaria, and Tuberculosis along with technological advancements that are expected to become the most common growth factors globally in the coming years.** A report by the Pew Charitable Trust states, about 37 promising molecules were investigated within the U.S. market in March 2016. **Majority of which are in clinical trials phase II and are expected to hit the market in the coming years. Moreover, supportive government enactments, such as the GAIN (Generating Antibiotics Incentives Now) Act, is anticipated to facilitate the approval process. Diarrhoea is one of the leading causes of death among children across the globe, and it requires antibiotic mediation to reduce the death rate. Other infectious diseases that may boost the growth of the market are pneumonia, HIV/AIDS, Malaria, and Tuberculosis. Moreover, the development of new infections, such as the Ebola virus and Zika, are also promoting the development and growth of the antibiotics market. Due to the presence of key players, favourable reimbursement policies, and rising number of chronic diseases along with several initiatives taken by the governments, North America accounts for the largest share of 33.5% of the market in 2018.**" - in "Globe Newswire", 6 May 2019.

Brazil's Pharmaceutical Market Value Will Approach US$55 Billion

"Brazil's pharmaceutical market was estimated to be worth US$24.1 Billion in 2012 and is expected to reach approximately **US$55.7 Billion by 2020** at a Compound Annual Growth Rate (CAGR) of 11.1%.

The medical device market was worth approximately US$7.9 Billion in 2012 and is expected to reach approximately US$13.1 Billion by 2020 at a projected CAGR of 6.6%.

These positive trends can primarily be attributed to: An increasing elderly population.

The major players in the pharmaceutical market: Pfizer Inc., Sanofi, Novartis, F. Hoffmann-La Roche Ltd., AstraZeneca. And the medical device market: Siemens Healthcare, GE Healthcare, F. Hoffmann-La Roche, Essilor International, and Philips Healthcare." - in "Country Focus: Healthcare, Regulatory and Reimbursement Landscape - Brazil", October 2013.

"**The Brazilian pharmaceutical market is one of the worldwide leaders in terms of total expenditures**, which is a consequence of the size of the country, characteristics of the market, and pharmaceutical policies. We obtained data on 8,559 products marketed in Brazil between 1998 and 2010. Of these, 2,825 were systemic antibacterial (25.1% broad spectrum penicillin, 17.6% macrolide, 17.5% cephalosporin, 14.7% fluoroquinolone, 25.1% others), 448 medicines for diabetes (31.3% sulphonylurea, 25.5% biguanide, 25.9% insulin, 17.3% others) and 2,113 for hypertension (5.3% methyldopa, 13.2% diuretic, 19.2% beta blocking agent, 16.7% calcium antagonist, 45.6% renin-angiotensin system agent)." - Andréa Dâmaso Bertoldi, et al., in "The Brazilian private pharmaceutical market after the first ten years of the generics law", Journal of Pharmaceutical Policy and Practice volume, 14 August 2019.

The Pharmaceutical Industry in Brazil

"Socioeconomic aspects: 5th largest country in terms of both land area and population, with 8.51 million square kilometers and close to 200 million inhabitants, in 2012 Brazil recorded a Gross Domestic Product (GDP) of US$ 2.2 Trillion, the world's 7th largest.

Market estimates point to the possibility that the country could already become the world's 5th largest economy in this decade.

On the list of the best-selling Medication in Brazil are those to reduce cholesterol and control high blood pressure, in addition to a significant portion of drugs not requiring prescriptions and others related to lifestyle, such as Cialis and Viagra.

In addition, although the profile of illnesses in Brazil is getting closer to that found in more developed countries, like the United States.

From 2007 to 2011, **retail drug sales increased 82.2%,** from R$ 23.6 billion to R$ 43 Billion according to an Interfarma report based on IMS Health data.

Another study performed by Scrip Insights, of **the total retail pharmaceutical sales of US$ 25.8 Billion in 2011**." - in "The pharmaceutical industry in Brazil", Pricewaterhouse Coopers Brasil, 2013.

7 June 2019

Chief Medical Advisor

"The Cabinet Secretary has announced Chris Whitty as the new Chief Medical Officer for England and the UK government's Chief Medical Adviser.

He will replace the current Chief Medical Officer in October 2019.

Professor Whitty is currently Chief Scientific Adviser for the Department of Health and Social Care.

He has overall responsibility for the department's research and development, including the National Institute for Health Research (NIHR) and life science strategy.

He is also the Professor of Public and International Health at the London School of Hygiene and Tropical Medicine, a practising NHS Consultant Physician in acute medicine and infectious diseases **at University College London Hospitals**, and Gresham Professor of Physic." - in "New chief medical officer appointed", Gov.UK, 7 June 2019.

16 June 2019

"As Many as 2 Million Protesters Hit Hong Kong Streets. Protesters wanted the complete withdrawal of the bill, which opponents say threatens the former British colony's tenuous autonomy from Communist Party-ruled China." - Annie Lee, Fion Li, Shawna Kwan in "Bloomberg", 16 June 2019.

17 June 2019

"As darkness fell, protesters started to take over major roads and crossings and surrounded the legislative council building." - in "Hong Kong protest: 'Nearly two million' join demonstration", *BBC, 17 June 2019.*

9 August 2019

"Canada's National Microbiology Laboratory shipped Ebola and Henipah viruses to Beijing on 31 March 2019, raising suspicions from experts in biochemical warfare, who say they think China may use the pathogens to develop offensive biological agents." - in "Questions Surround Canadian Shipment of Deadly Viruses to China", The Scientist, 9 August 2019.

2019-2020
Hong Kong Ongoing Protests

"The 2019–20 Hong Kong protests are ongoing protests in Hong Kong triggered by the introduction of the Fugitive Offenders amendment bill by the Hong Kong government.

Despite a demonstration attended by hundreds of thousands on 9 June 2019, the government persisted with the bill.

Protesters gathered outside the Legislative Council Complex to stall the bill's second reading on 12 June 2019, resulting in an intense standoff between the protesters and the police, who deployed tear gas and rubber bullets.

An even bigger march took place on 16 June 2019, just one day after the suspension of the bill, as protesters insisted on the complete withdrawal of the bill and reacted to the perceived excessive use of force by the police on 12 June 2019.

The anniversary of the handover on 1 July 2019 saw the storming of the Legislative Council Complex, and subsequent protests throughout the summer spread to different districts." - in "2019–20 Hong Kong protests", Wikipedia 2020.

24 September 2019

"The 2018–2019 season in Sweden was dominated by influenza A and reached a moderate level of intensity. The epidemic started in the second week of December (week 50) and reached its peak in mid-February (week 6). 99% of these were influenza A. **The number of reported cases increased after the epidemic started in December and then reached a plateau around the Christmas and New Year holidays.**

A similar trend is seen most seasons.

Patients who died, with a median age of 81 years of age." - in "Influenza in Sweden - Season 2018–2019", The Public Health Agency of Sweden, 24 September 2019.

"These are the shadows of things that have been. That they are what they are, do not blame me!" *- Charles Dickens in "A Christmas Carol in Prose, Being a Ghost-Story of Christmas", 1843.*

18 October 2019

"The Johns Hopkins Center for Health Security in partnership with the World Economic Forum and the Bill and Melinda Gates Foundation hosted Event 201, a high-level pandemic exercise on **18 October 2019**, in New York, NY **(participants included representatives from NBCUniversal (media), UPS (logistics), and Johnson & Johnson (Medical and Pharmaceutical Products)).**

The exercise illustrated areas where **Public Private Partnerships will be necessary during the response to a severe pandemic in order to diminish large-scale economic and societal consequences."** - in "centerforhealthsecurity.org/event201", October 2019.

Event 201 Model

"Date: 11 October 2019

The Event 201 model simulates an outbreak of a moderately transmissible pathogen in a fully susceptible population.

The Center's scholars researched these topics to inform the scenario

Fact Sheets

1. CAPS: The Pathogen and Clinical Syndrome

I. The FICTIONAL Coronavirus Acute Pulmonary Syndrome (CAPS) is an acute respiratory infection that can progress to Pneumonia and Acute Respiratory Distress Syndrome. **It is caused** by a Swine-origin **Coronavirus**

(CAPS virus). The CAPS virus is from the same family of viruses as SARS and MERS but is antigenically distinct. The virus has existed in the fruit bat population for many years and has been transmitted to domestic pigs.

"The Event 201 pandemic exercise, conducted on 18 October 2019. The Johns Hopkins Center for Health Security, World Economic Forum, and Bill & Melinda Gates Foundation jointly propose the following:

II. Industry,national governments, and international organizations should work together to enhance internationally held stockpiles of medical countermeasures to enable rapid and equitable distribution during a severe pandemic. The World Health Organization (WHO) currently has an influenza Vaccine virtual stockpile, with contracts in place with pharmaceutical companies that have agreed to supply Vaccines should WHO request them.

IV. Governments should provide more resources and support for the development and surge manufacturing of Vaccines, therapeutics, and diagnostics that will be needed during a severe pandemic. In the event of a severe pandemic, countries may need population-level supplies of safe and effective medical countermeasures, including Vaccines, therapeutics, and diagnostics. Therefore,the ability to rapidly develop, manufacture, distribute, and dispense large quantities of Medical Countermeasures will be needed to contain and control a global outbreak." - in "Public-private cooperation for pandemic preparedness and response. A call to action", 18 October 2019.

2. Medical Countermeasures: Status of Supplies and Distribution/Allocation Systems

Coronavirus Acute Pulmonary Syndrome (CAPS) Antiviral

I. In addition to vaccines, monovalent antibody therapies and antivirals have been investigated for treating coronavirus infections.

II. In this scenario, **Extranavir is a FICTIONAL antiviral drug.**

1. Extranavir is currently used to treat HIV but has been shown to be an effective treatment for CAPS.

2. Extranavir may be an effective prophylactic if given throughout a period of possible exposure to the virus.

3. When used as a therapeutic, Extranavir may reduce the severity of disease and length of viral shedding in infected individuals.

4. Extranavir is a generic drug that is manufactured in 5 countries, including the US and China.

5. About 1 Million people per day take Extranavir to treat HIV.

6. If all Extranavir users were switched to a different HIV treatment, current supplies of the antiviral could treat up to 26 million CAPS patients.

7. It may be possible to double production of Extranavir by expanding existing manufacturing capacity and by licensing the drug to additional manufacturers. This expansion could allow for 52 million treatment courses per year but would likely require a year to reach that capacity.

8. If Extranavir were used broadly as a prophylactic rather than a treatment, a much greater supply of the drug would be needed.

Current Medical Countermeasure Distribution and Allocation Systems

I. Current supply chain mechanisms exist to distribute Vaccines and other medical countermeasures (MCMs) on a routine basis. However, a centralized and scalable MCM distribution system for use during pandemics does not exist.

II. Multiple systems and Stakeholders can facilitate MCM distribution in smaller scale public health emergencies and could be either scaled up or provide lessons for a pandemic context. These include:

1. The International Coordinating Group on Vaccine Provision (ICG), a coordinating Group of Key Global health Stakeholders, including the:

I. World Health Organization (WHO)
II. UNICEF
III. Médecins Sans Frontières (MSF)
IV. International Federation of the Red Cross

The goal of this group is to handle the allocation of particular vaccine stockpiles for specific diseases (cholera, meningococcal meningitis, yellow fever).

2. WHO also has stockpiles for other diseases,including smallpox and pandemic influenza.

3. WHO Contingency Fund for Emergencies

a) Can release initial funds up to $500K in 24 hours

b) Serves as the potential source of funds for initial emergency response if properly funded.

4. **The US President's Emergency Plan for AIDS Relief (PEPFAR)**, is a **US-funded program to control the HIV/AIDS epidemic** and **is the largest effort by any one nation to control a disease.** PEPFAR funds programs aimed at expanding access to HIV treatments and prevention services in low-income settings.

5. Gavi, the Vaccine Alliance, procures vaccines for low-income countries for selected routine and emergency immunization. For example, the organization procured $300 Million for Ebola vaccines during the 2014-2016 Ebola outbreak.

Medical Countermeasure Development and Manufacturing Is Challenging

In general, **several technical barriers make the rapid scale-up of Vaccine Manufacturing challenging**, including a lack of Research & Development, and manufacturing capacity due to competing interests, the cost of establishing or repurposing manufacturing facilities, **regulatory barriers, and the lack of a consistent market.**

3. Finance in a Pandemic

- There are several major sources of money that would become available to help respond to a global catastrophic pandemic.

- Pandemic Emergency Financing Facility The World Bank Group's Pandemic Emergency Financing Facility is a system designed to respond to specific types of pandemics.

- It consists of a cash window and an insurance window. **The insurance window is funded by 2 tranches of Catastrophe Bonds That Pay Out Under Specified Conditions.**

A Coronavirus Pandemic Would Trigger a Payout of the Class B notes After All of the Following Conditions Were Met:

1. It kills at least 250 people
2. Lasts at least 12 weeks
3. Has at least 250 new cases in the past 12 weeks
4. Has an increasing average number of new cases over the past 12 weeks
5. Kills at least 20 people in a second country

- The payout is based on the number of deaths and the geographic spread of the disease.

- A coronavirus pandemic that killed more than 2,500 people would trigger a full payout of the Class B notes, raising US$95 Million.

- It would also trigger a 16.67% payout of the Class A notes, raising an additional US$37.5 Million.

- A full payout of the Class A notes is triggered only by an Influenza Pandemic.

World Bank's IDA Crisis Response Window

International Development Association (IDA), is the part of the World Bank that gives loans (called "credits"), to poor countries for development.

They meet every 3 years to raise money, and decide how it will be spent.

These are called Replenishment meetings.

The last one, the 18th Replenishment, or IDA18, finished in 2016.

It raised US $75 Billion to finance projects from 1 July 2017 to 30 June 2020.

The next meeting in this cycle is 21-22 October 2019, in Washington, DC.

Most IDA money is used for long-term development projects, but the Crisis Response Window is a special pool of money devoted to helping countries respond to disasters.

It spent US $420 Million to fight the 2014-2016 West Africa Ebola epidemic.

The IDA18 replenishment raised US $3 Billion for crisis response and, as of October 2018, US $2.6 Billion was still unspent and available for immediate use.

International Monetary Fund IMF

The International Monetary Fund has about:

US $1 Trillion available to lend.

However, this is meant to address temporary issues with a country's balance of payments and is not intended to be a form of development aid or response to a health emergency.

Lending is usually conditional on economic policy changes, made after a period of negotiation, and will be made only if the IMF is confident that it will be repaid.

Without a significant change in policy, many countries would not be willing or able to borrow money from the IMF in order to finance a response to a major pandemic.

National Governments

Total international development aid from governments is about US$200 Billion per year.

Although much of this is allocated to specific uses and could not be redirected, **some percentage of it could be made available in a catastrophic pandemic, and or the total amount might be increased, if there was sufficient global coordination.**

Private Charity

Total international giving by US foundations was about US$9 Billion in 2015.

In a severe pandemic, some of this could be redirected to help the pandemic response.

The total endowment of the top 40 Wealthiest Charitable Foundations is currently about US $500 Billion.

Many of these charities have not historically been involved in health, and there are institutional limits on how much of the endowment could be spent, but some percentage of these endowments might be made available to respond to a catastrophic pandemic if enough charities responded to a global call to action.

Amount of Money Raised

In the scenario, there is a large and successful mobilization of funds. Donor countries are convinced to contribute roughly 40% of their annual aid budgets to CAPS response, for US $80 Billion, and private charities spend down some of their endowments to contribute an additional US $20 Billion, for a total of roughly US $100 Billion in additional financing.

Cost of Supporting Health Systems

About US $6 Billion was disbursed by donors in response to the 2014-2016 West Africa Ebola epidemic.

At the point in the scenario where the US $400 Billion estimate is made, it is assumed that Coronavirus Acute Pulmonary Syndrome (CAPS) would cause case counts and expenses in low-and middle-income countries about orders of magnitude higher than the Ebola epidemic.

CAPS would, in many cases, cause emergency spending that would quickly consume all of countries annual healthcare budgets.

They would then need a bailout to continue normal functioning as well as providing minimal pandemic response.

Low-and middle-income countries typically spend about 5% of GDP on health care, and in a crisis situation, everything gets more expensive.

The total GDP of low-and middle-income countries (excluding China, India, and Russia) is about US$14 Trillion.

If these countries require a bailout of, on average, slightly more than half of their annual healthcare spending, this would be US$400 Billion."

- in "centerforhealthsecurity.org/event201", October 2019.

> *"The scenario ends, at the 18-month point, with 65 million deaths. The pandemic is beginning to slow due to the decreasing number of susceptible people. The pandemic will continue at some rate until there is an effective vaccine, or until 80-90% of the global population has been exposed.* ***From that point on, it is likely to be an endemic childhood disease.****" - in "The Event 201 scenario", (centerforhealthsecurity.org/event201/scenario.html), October 2019.*

"**Limitations inherent in current approaches to Vaccine**:

These limitations include the use of embryonated chicken eggs as the substrate for Vaccine production, which is time-consuming and could involve potential biohazards in growth of new virus strains.

Other limitations include the requirement that the current inactivated influenza Vaccines be administered using needles and syringes, requiring trained personnel, which could be a bottleneck when attempting to Vaccinate large populations in mass campaigns.

In addition, the current inactivated Vaccines that are delivered by injection elicit limited protective immunity in the upper respiratory tract where the infection process is initiated." - Richard W. Compans, Walter A. Orenstein, in "Vaccines for Pandemic Influenza", 2009.

"A recent review of 72,314 cases by the Chinese Center for Disease Control and Prevention showed that ***less than 1% of the cases were in children younger than 10 years of age."*** *- in "Characteristics of and important lessons from the COVID-19 outbreak in China", JAMA, 24 February 2020.*

"We have 3 or 4 neonates, I think who tested positive, and ***who have not so severe disease, and children, as in China are basically spared at least from the symptoms, I'm not sure that they are not infected, but apparently they don't get sick."*** *- Dr Giacomo Grasselli, MD, University of Milan who is coordinating the network of intensive care units in Lombardy, Covid-19 outbreak, in Channel 4 News, 10 March 2020*

Event 201 Players

The following prominent individuals from global business, government, and public health were exercise players tasked with leading the policy response to a fictional outbreak scenario in the Event 201 pandemic tabletop exercise:

1. Dr Latoya D. Abbott: **Senior Director of Global Occupational Health Services, Marriott International**. Prior Dr Abbott was the Director of the Occupational Health and Wellness Institute at Providence Hospital in Washington, DC. In this role, Dr Abbott created and implemented a streamlined process to vaccinate hospital employees against the flu. Her innovative flu clinic led to a threefold increase in influenza vaccination rates among hospital workers.

2. Sofia Borges: **UN Foundation's Senior Vice President.** Chief liaison with **United Nations leadership and the diplomatic community, working to identify new opportunities for building and deepening partnerships with a range of Stakeholders,** as well as **overseeing initiatives with the private sector** and managing engagement with other organizations.

3. Brad Connett: **President of Henry Schein's US Medical Group**, one of the nation's leading providers of products and services to physician offices, urgent care clinics, retail clinics, freestanding emergency rooms, Integrated Delivery Networks, Ambulatory Surgery Centers, and other alternate care sites.

> *Henry Schein, Inc. is a solutions company for health care professionals powered by a network of people and technology. With more than 22,000 Team Schein Members serving more than 1 million customers globally, the Company is the world's largest provider of Business, Clinical, Technology, and Supply Chain solutions to enhance the efficiency of office-based dental,*

animal health, and medical practitioners. The Company also serves dental laboratories, government and institutional health care clinics, and other alternate care sites.

4. Christopher Elias: **President of the Global Development Program, Bill & Melinda Gates Foundation (BMGF). He leads the foundation's efforts to accelerate the delivery of proven healthcare products and solutions, especially women and children.** Focusing on appropriate and sustainable strategies with the potential to improve the health of hundreds of millions of people in underserved communities, the Global Development program focuses on 5 program areas including: **polio and Vaccine delivery.** He serves on various advisory boards, including the Advisory Committee to the Director, CDC. He also represents the Gates Foundation as the chair of the Polio Oversight Board of the Global Polio Eradication Initiative, the chair of the Investors Group of the Global Financing Facility, and co-chair of the FP2020 Reference Group.

5. Tim Evans: From 2003 to 2010, was **Assistant Director General at the World Health Organization (WHO)**. Prior to this, served as **Director of the Health Equity Theme at the Rockefeller Foundation**. Earlier in his career was an Assistant Professor in International Health Economics at the Harvard School of Public Health. He has been at the forefront of **advancing Global Health** equity and strengthening health systems delivery for more than 20 years. He has been a **co-founder of many partnerships, including the Global Alliance on Vaccines and Immunization (GAVI).**

6. Dr George F. Gao, MD: **Director-General, Chinese Center for Disease Control and Prevention; a Professor in the Institute of Microbiology, Chinese Academy of Sciences; President of the Chinese Society of Biotechnology; and President of the Asian Federation of Biotechnology (AFOB)**. His research interests include enveloped viruses and molecular immunology. His group

research is mainly focused on the enveloped virus entry and release, especially influenza virus interspecies transmission (host jump), structure-based drug-design, and structural immunology. He is also interested in virus ecology, especially the relationship between influenza virus and migratory birds or live poultry markets and the bat-derived virus ecology and molecular biology. Dr Gao has published more than 450 refereed papers and 10 books or book chapters, and he has applied for and obtained more than 25 UK, US, and Chinese patents.

7. Avril Haines: Avril Haines is a **Senior Fellow at the Johns Hopkins University**; a member of the National Commission on Military, National, and Public Service; and a principal at WestExec Advisors.

8. Jane Halton: **member of the board of the ANZ Bank, Clayton Utz, the Australian Strategic Policy Institute, and the US Institute of Health Metrics and Evaluation. She is chairman of the Coalition for Epidemic Preparedness Innovations, COTA Australia (Council on the Ageing)**.

9. Matthew J. Harrington: **Global chief operating officer at Edelman (the largest public relations firm in the world by revenue).**

10. Martin Knuchel: **Senior Director and Head of Crisis, Emergency & Business Continuity Management, for Lufthansa Group Airlines.** He is responsible for strategic development of crisis and emergency procedures, emergency field organization and care organization procedures for the Lufthansa Group.

11. Eduardo Martinez: **President of the UPS Foundation and UPS Chief Diversity & Inclusion Officer.** The UPS Foundation leads the global citizenship programs and initiatives for UPS, and, as President, **Dr Martinez is responsible for the operations and management of its global philanthropic, employee engagement, and**

corporate relations programs, which invests in more than 4,300 organizations and communities across 170 countries. Dr Martinez was formerly Chairperson of the World Economic Forum's (WEF) Global Agenda Council on Humanitarian Response. Currently, **he serves on the WEF's Managing the Risk and Impact of Future Epidemics Steering Committee.**

Dr Martinez also serves on the UN Global Logistics Cluster's Logistics Emergency Team Steering Council and on the executive committees of the United Nations Office for Coordination Humanitarian Affairs (UNOCHA) Connecting Business Initiative and the Global Health Security Agenda's Private Sector Round Table. Dr Martinez serves as chair of the Points of Light Corporate Service Council, which is composed of Fortune 500 companies dedicated to the global volunteer movement. He serves as Principal, representing UPS, on the Corporate Board of Advisors for UnidosUS organization as well as Chairperson of the Points of Light Institutes' Corporate Service Council.

12. Dr Stephen C. Redd, MD: **Deputy Director for Public Health Service and Implementation Science at the Centers for Disease Control and Prevention (CDC).** In his deputy director role, he focused on the adoption of implementation science principles at CDC. In collaboration with multiple groups, he is working to understand how public health can most effectively address social determinants of health in various sectors. **Served as incident commander for the 2009 H1N1 pandemic response**, which was the longest activation of CDC's Emergency Operations Center at the time.

As the leader of the response, involving more than 3,000 CDC staff, he aided in the effort to vaccinate 81 million people against H1N1 in the United States.

Dr Redd is board certified in internal medicine, a Fellow in the American College of Physicians. He trained in medicine at the Johns Hopkins Hospital, and also **completed the CDC's 2-year Epidemic Intelligence Service training program.**

13. Hasti Taghi: **Chief of staff capacity at NBCUniversal Media (major media company).** She also leads strategic initiatives for the office, **including partnerships with the World Economic Forum.**

14. Dr Adrian Thomas, MD: **Vice President Global Public Health, at Johnson & Johnson. Responsible for global public health programs and strategy addressing Global Health Security threats and pandemic preparedness** including antimicrobial resistance (AMR), Multi Drug Resistant Tuberculosis (MDRTB), Ebola, Dengue Fever, HIV vaccines amongst others. Adrian is a physician with a special interest in the fields of disease area strategy, public health, market access, and pharmaceutical policy. He has held numerous roles in market access including Global Head of Market Access for Janssen & Global Head of Access for Medical Devices, for Johnson & Johnson, as well as roles in risk management and drug safety, including Global Head of Benefit Risk Management and Chief Safety Officer for Janssen. Prior to joining J&J, Adrian held roles in regional medical affairs, drug development and product management for Schering-Plough and Eli Lilly.

Johnson & Johnson is a holding company, which engages in the research and development, manufacture and sale of products in the health care field. It operates through the following segments: Consumer, Pharmaceutical, and Medical Devices. The Consumer segment includes over-the-counter pharmaceutical. The Pharmaceutical segment focuses on therapeutic areas such as immunology, infectious diseases and Vaccines, neuroscience, oncology, cardiovascular and metabolism, and pulmonary hypertension.

"Stoffels confirmed the company started working on a coronavirus Vaccine two weeks ago." *- in "J&J scientific officer 'pretty confident' they can create coronavirus Vaccine as outbreak widens", CNBC,* ***27 January 2020.***

*"**The Company expects to start a human clinical trial of its COVID-19 Vaccine in early November.**" - Dr Paul Stoffels, MD, Chief Scientific Officer of J&J." - in CNBC, 17 March 2020.*

*"**Johnson & Johnson's stock rose more than 7%** Tuesday to $136.59." - in CNBC, 17 March 2020.*

15. Lavan Thiru: **Previously, he was the head of the Financial Products and Investment Solutions Division, part of the Financial Markets Development Department of the Monetary Authority of Singapore. In that role, he oversaw the development of Singapore financial markets. He was also responsible for developing initiatives related to infrastructure and trade finance."**

6 November 2019

Pandemic Simulation Exercise Spotlights Massive Preparedness Gap

*"**Event 201, hosted by the Johns Hopkins Center for Health Security, envisions a fast-spreading coronavirus with a devastating impact.**" - in "Health security", Johns Hopkins University, 6 November 2019.*

15 November 2019

Vaccine Stock Procurement

"Vaccine stock and procurement: For prelicensure supply needs for expanded access or emergency use, Gavi, the Vaccine Alliance, recently entered into an advance purchase agreement with Merck, committing $5 Million USD towards a stockpile of 300,000 rVSV-ZEBOV doses.

After licensure, countries will make requests to the International Coordinating Group (ICG) for the provision of Ebola Vaccine, an international partnership to manage, deploy, finance, and monitor emergency vaccine stockpiles.

Alternate emergency Vaccination strategies: While most EV experience is in the context of ring Vaccination, certain scenarios may warrant alternate emergency Vaccination strategies including geographic or M**ass Vaccination** and reactive HCW/FLW Vaccination.

Both geographically-targeted and Mass Vaccination strategies might miss individuals who are not present at the time of Vaccination, whereas careful listing of contacts as part of ring Vaccination might locate those individuals.

In instances of widespread transmission, limited Vaccine and supplies may be a barrier to mass Vaccination." - in "Considerations for use of Ebola vaccine during an emergency response", Vaccine, Vol. 37, Issue 48, 15 November 2019.

> ***"The Embassy of Italy in Washington hosted on 15 November 2019, the annual meeting of the Italian Scientist and Scholars in the North America Foundation. The meeting under the High Patronage of the President of the Republic. Mauro Ferrari, (Italian American) nanotechnology luminary, as of 1 January 2020, President of the European Research Council, attended the meeting. ISSNAF awarded Ferrari with the Life Achievement Award by as a recognition of his career."*** *- in "Embassy of Italy in Washington", 15 November 2019.*

24 November 2019

On the 24 November 2019 in Australia the TV program "60 Minutes" presents an interview with the Chinese Spy Defector Wang Liqiang, who reveals the extent work of the Chinese Communist Party operations trying to stop the street protests by the Hong Kong democratic and independence movements.

27 November 2019

The United States Congress passed the "Hong Kong Human Rights and Democracy Act", on 27 November 2019 to support the protest movement.

"History repeats itself; the first as tragedy, then as farce." - *Karl Marx*

The Virus Outbreak

Novel Coronavirus Pneumonia (COVID-),
Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2)

31 December 2019

"WHO was informed by the People's Republic of China of cases of pneumonia of unknown microbial aetiology associated with Wuhan City, Hubei Province, China on 31 December 2019." - in "Minutes of the NERVTAGWuhan Novel Coronavirus Meeting", 13 January 2020.

1 January 2020

Professor Mauro Ferrari Becomes the 4th President of the European Research Council

"The European Research Council (ERC), set up by the EU in 2007, is funded exclusively through the EU budget as part of the current Horizon 2020 programme.

The new President Professor Mauro Ferrari joins the ERC at an Important Moment for its Development.

For the next long-term EU budget, the Commission has proposed Horizon Europe, the most ambitious EU research and innovation programme ever.

A political agreement on the new programme was reached in April.

Horizon Europe will safeguard the independence of the ERC under the Scientific Council and maintain its sole focus on scientific excellence.

The ERC is led by an independent governing body, the Scientific Council, and the implementing arm in Brussels is the ERC Executive Agency.

The Commission has proposed a significant budget increase for the ERC from €13.1 Billion in 2014-2020 to €16.6 Billion for 2021-2027.

The Commission's decision follows a competitive selection procedure led by a high-level Search Committee composed of:

Professors Mario Monti (Chair, President of Bocconi University),

Alice Gast (President, Imperial College),

Fabiola Gianotti (Director General, CERN),

Carl-Henrik Heldin (Chairman, Nobel Foundation)." - in "Commission appoints Ferrari as next ERC President", European Commission, 14 May 2019.

9 January 2020

"Chinese authorities have made a preliminary determination of a novel (or new) coronavirus, identified in a hospitalized person with pneumonia in Wuhan.

Chinese investigators conducted gene sequencing of the virus, using an isolate from one positive patient sample.

Initial information about the cases of pneumonia in Wuhan provided by Chinese authorities last week.

Chinese authorities subsequently reported that laboratory tests ruled out SARS-CoV, MERS-CoV, influenza, avian influenza, adenovirus and other common respiratory pathogens.

Coronaviruses are a large family of viruses with some causing less-severe disease, such as the common cold, and others more severe disease such as MERS and SARS.

Globally, novel coronaviruses emerge periodically in different areas, including SARS in 2002 and MERS in 2012." - in "WHO Statement regarding cluster of pneumonia cases in Wuhan, China", 9 January 2020.

10 January 2020

"Fraudsters stole at least €8.8 Billion from the EU budget between 2002 an 2016, *but EU institutions clawed back just €2.6 Billion, or one third of it." - in "Special Report Fighting fraud in EU spending: action needed", European Court of Auditors", 10 January 2020.*

12 January 2020

"According to information conveyed to WHO by Chinese authorities on 11 and 12 January, 41 cases with novel coronavirus infection have been preliminarily diagnosed in Wuhan City. Of the 41 cases reported, 7 are severely ill.
This is when the 1 death, mentioned above, was reported, in a patient with other underlying health conditions.
Six patients have been discharged from hospital. Symptom onset

of the 41 confirmed nCoV cases ranges from 8 December 2019 to 2 January 2020.
No additional cases have been detected since 3 January 2020. ***The clinical signs and symptoms reported are mainly fever****, with a few cases having difficulty in breathing, and chest radiographs showing invasive pneumonic infiltrates in both lungs." - in "Novel Coronavirus – China", WHO, 12 January 2020.*

13 January 2020

"Preliminary assessment of the genomic information places the novel coronavirus in group 2b of coronaviruses. ***There are already some sequence discrepancies between various Chinese groups releasing virus sequence information."*** *- in "Minutes of the NERVTAG Wuhan Novel Coronavirus Meeting", New and Emerging Respiratory Virus Threats Advisory Group, Public Health England, 13 January 2020.*

16 January 2020

Alarming: 1 in 5 Deaths Due to Sepsis

"One in 5 deaths around the world is caused by sepsis, also known as blood poisoning, shows the most comprehensive analysis of the condition. The report estimates 11 million people a year are dying from sepsis - more than are killed by cancer. The researchers at the University of Washington said the "alarming" figures were double previous estimates." - James Gallagher, Health and science correspondent, in "Health", BBC, 16 January 2020.

January 2020

The Birth of A Rumour

"The Kim paper has something really problematic, and, this doesn't come from the conclusion, it comes from the introduction section, and they said basically that a new corona virus was identified as the causative agent of this unexplained pneumonia in January 2020.

> *"Following the first outbreaks of unexplained pneumonia in Wuhan, China, in late 2019, a new coronavirus was identified as the causative agent in January 2020* ***(7).*** *" - Jeong-Min Kim, et al., in Center for Laboratory Control of Infectious Diseases, Korea, Osong Public Health Res. Perspect., 19 February 2020.*

Reference: (7) - Paraskevis D, Kostaki EG, Magiorkinis G, et al., in "Full-genome evolutionary analysis of the novel corona virus (2019-nCoV) rejects the hypothesis of emergence as a result of a recent recombination event", Infection, Genetics and Evolution, 29 January 2020.

This is a very bold statement, and the conclusions of the other two papers (1) (2) which came before this, didn't make any such statements based on their research.

In reference number 7, is where the declarative statement about about it being a causative agent comes from.

And interestingly it's not a study that is trying to isolate or identify a virus.

It's a study that's looking at the full sequence of the genetic material, of this so-called virus, and comparing it with evolutionary analysis, in other words with other species, or viruses sequences found in other species.

So, in other words, the science of that article would not be able to prove anything about causation.

I went and looked at that article:

> *"A novel coronavirus (2019-nCoV) **associated** with human to human transmission and severe human infection has been recently reported from the city of Wuhan in Hubei province in China (World Health Organization, 2020; Hui et al., 2020). **The unique genetic features of 2019-nCoV and their potential association with virus characteristics and virulence in humans remain to be elucidated.**" - Paraskevis D, et al., in "Full-genome evolutionary analysis of the novel corona virus (2019-nCoV) rejects the hypothesis of emergence as a result of a recent recombination event", Infection, Genetics and Evolution, 29 January 2020.*

Interestingly, it doesn't say anything about causation anywhere.

In the introduction it says that the novel coronavirus is associated with human to human transition, and severe human infection, so once again **association is not causation.**

And in conclusion, it talks about the genetic features of the virus and their potential association with virus characteristics and virulence in humans remain to be elucidated, so, in other words, there is some kind of association we need more research, we haven't proven anything.

So, how did they say this? They must have just basically flat-out lied. They made this up. They said it's a causative agent, they gave a reference, and it's not in the reference.

This is a serious ethical violation here, to make such an important claim all of the world policies are based upon this claim that is a causative agent and they cannot reference any science to back that up whatsoever.

So you see; **once a rumour is put out there, then other people are going to adopt it, and then it's going to become in people's minds "the truth", even though there is nothing to back it up.**

To summarize (the whole rumour mill thing):

1. We have the 1st and 2nd papers that actually did the studies, and they claim that there is: an **association**, or an **implication** of the virus in the illness (far from any declarative statement about causation).

2. Then in the 3rd paper; it was changed to **causative agent**.

3. Then was changed to "set in motion the pandemic" (web article ahead of pub), so, stronger, and stronger statements.

4. No evidence was provided, at all, to back up those statements, just flat-out lies.

And to conclude:

Rumours and lies placed Covid-19 as the cause of a pandemic, with no proof, no proof whatsoever." - Dr Andrew Kaufman, MD, B.S. in Molecular Biology, in "Evidence that Viruses Cause Disease or The Rooster in the River of Rats", 20 April 2020.

References:

1. Peng Zhou, et al, in "Discovery of a novel coronavirus associated with the recent pneumonia outbreak in humans and its potential bat origin." - First published in "bioRxiv", 23 January 2020; then, later published in "Nature", 3 February 2020, under the title "A pneumonia outbreak associated with a new coronavirus of probable bat origin".

2. Na Zhu, et al. for the China Novel Coronavirus Investigating and Research Team, in "A Novel Coronavirus from Patients with Pneumonia in China, 2019", The New England Journal of Medicine, 20 February 2020.

16 January 2020

First Test for Novel Coronavirus

"The coronavirus, which first emerged in Wuhan, China, and can cause severe pneumonia, **can now be detected in the laboratory. Developed by a group of DZIF researchers working under the leadership of Prof. Dr Christian Drosten, Director of the Institute of Virology on Campus Charité Mitte, the world's first diagnostic test for the coronavirus** has now been made publicly available.

Following its online publication by the WHO, the test protocol will now **serve as a guideline for laboratories.**

An international consortium is currently conducting a joint evaluation study." - Prof. Dr Christian Drosten, MD, Charité Universitätsmedizin Berlin in "Researchers develop first diagnostic test for novel coronavirus in China", 16 January 2020.

Prof. Dr. Christian Drosten, Charité Universitätsmedizin Berlin

Charité Universitätsmedizin, International partner Universities:

1. London School of Hygiene and Tropical Medicine, United Kingdom

2. Johns Hopkins School of Medicine, Baltimore, USA

3. Tongji University, Shanghai, China

4. Tongji Medical College, Wuhan, China

In 2004, Prof. Dr Christian Drosten received the GlaxoSmithKline funding award for clinical infectiology.

11 February 2020

"Bill Gates is one of the investors in a £100 Million project designed to create wrist-worn devices that could revolutionise the detection and treatment of dementia." - in "Bill Gates joins Apple in assault on the traditional watch market", WatchPro, 11 February 2020.

"Alzheimer's Research UK has launched a global initiative to revolutionise the early ***detection of neurodegenerative diseases like Alzheimer's. Using wearable technologies, such as smart watches.*** *The collaboration aims to secure at least £67 Million over the first 6 years, with an ambition to attract up to £100 Million of total investment by 2030. Funds towards the initiative have already been secured from Bill Gates and Iceland Foods Charitable Foundation, and EDoN.* ***The charity's President, former UK Prime Minister David Cameron, hosted an event to launch the Early Detection of Neurodegenerative diseases (EDoN) initiative at the World Economic Forum in Davos, Switzerland last month.***

"The UK is uniquely placed to undertake this work with its expertise in AI and the clinical sciences, coupled with an NHS that is critical to deliver patient benefit. We are delighted to be embarking on this partnership." - David Cameron, President of Alzheimer's Research UK

In December 2018, the UK Government committed £79 Million through the Life Sciences Sector Deal 2 to create the Accelerating Detection of Disease cohort, a group of up to 5 million people to act as a testbed for data-driven discovery." - in "Dementia charity spearheads global initiative to use wearables to revolutionise disease detection", Alzheimer's Research UK,11 February 2020.

28 February 2020

Covid-19 is shown to be novel coronavirus, structurally related to virus that causes SARS

"As in 2 preceding instances of emergence of coronavirus in the past 18 years. Epidemiologic description of 425 cases a degree of clarity is emerging.

Median age 59 years, with higher morbidity and mortality among elderly and among those with coexisting conditions (similar to influenza).

Another report mortality 1.4% among 1,099 patients; these patients had a wide spectrum of disease severity.

This suggests overall clinical consequences of Covid-19 may ultimately be more akin to those of a severe seasonal influenza or a pandemic influenza (similar to those in 1957 and 1968)." - Dr Anthony S. Fauci, MD, Dr H. Clifford Lane, MD, Dr Robert R. Redfield, MD, in "Covid-19 — Navigating the Uncharted", NEJM, 28 February 2020.

5 March 2020

"The average age of Covid-19 positive and deceased patients is 81 years, they are mostly men and in more than 2/3 of cases they have 3 or more pre-existing diseases.

An analysis of the data of 105 Italian patients who died on the 4 March 2020, conducted by the "Istituto Superiore di Sanità". **The average age of the patients examined is 81 years. The average number of pathologies observed in this population is 3.4** (median 3, Standard Deviation 2.1).

Overall, 15.5% of the sample had 0 or 1 pathologies, 18.3% had 2 pathologies, and **67.2% had 3 or more pathologies.**

The most represented co-morbidity is Hypertension (present in 74.6% of the sample), followed by Ischemic Heart Disease (70.4%), and Diabetes Mellitus (33.8%)." - in "CS N ° 15/2020 - ISS Study On 105 deceased with Covid-2019, average age 81 years and pre-existing pathologies in 2/3 of cases", Istituto Superiore di Sanità, 5 March 2020.

6 March 2020

The Example of Greenland

"While Europe battles the deadly pandemic, ***not one person has yet died from corona in Greenland,*** *the world's largest island, and not one is in intensive care." - in "Greenland watches... and waits for virus", EuObserver, 6 March 2020.*

19 November 2021

"As of 19 November 2021 Greenland had reported 0 (zero) deaths." *- in "Coronavirus COVID-19 Global Cases Map, Johns Hopkins Center for Systems Science and Engineering", 19 November 2021.*

The Coalition for Epidemic Preparedness Innovations

Part II

"The Coalition for Epidemic Preparedness Innovations (CEPI), the organisation set up to accelerate the development of Vaccines against emerging infectious diseases, today made an urgent call for $2 Billion to support the development of a Vaccine against the virus responsible for COVID-19.

It also welcomed the UK Government's announcement of £20 Million that is needed immediately for Vaccine development efforts to continue. In response to this call, the UK government today announced £20 Million of additional funding and urged other donors to join the efforts to find a Vaccine. This builds on £30 Million of funding the UK Government has previously given to CEPI to support its Vaccine development work against COVID-19 and other emerging infectious diseases.

Today's call for $2 Billion of new funding will enable CEPI to expand the number of Vaccine candidates at the outset to increase our chances of success, and to fund the clinical trials for these candidate Vaccines.

Our ambition is to have at least 3 Vaccine candidates, which could be submitted to regulatory authorities for licensure for general use/use in outbreaks.

CEPI has identified 5 Funding Phases:

$100 Million immediately, to support

1. Vaccine development for 8 candidates through phase 1 clinical trials

$375 Million by END OF MARCH, to support

1. Manufacturing of clinical trial material for phase 2/3 trials for 4-6 Vaccine candidates
2. Preparation of phase 2/3 trials for 4-6 Vaccine candidates (potential initiation of phase 2 trial for 1 candidate)
3. Initial investments to expand global manufacturing capacity. **These investments are needed to ensure the Vaccine is ultimately available at scale and globally**

$400 Million by END OF JUNE, to support

1. Execution of phase 2/3 trials for at least 2 candidates
2. Preparation of phase 2/3 **clinical trials in a number of locations globally**
3. Production of additional phase 2/3 clinical trial material
4. **Further investment in scaling up / technology transfer of manufacturing process for up to 6 candidates**

$400 Million by END OF SEPTEMBER, to support

1. Conduct of phase 2/3 clinical trials for additional 4 candidates **in a number of locations globally**
2. Investment in large-scale manufacturing capacity for at least 3 Vaccine candidates

$500-750 Million in 2021, to support

1. Enhancing global manufacturing capacity with tech transfer to geographically distributed locations of up to 3 candidates

2. Completion of clinical trial testing

3. Completion of regulatory and quality requirements for at least 3 Vaccines

4. Preparation of regulatory dossiers for emergency authorization/licensure submission

To ensure availability of funds and reflecting the many uncertainties that still surround Covid-19, the World Bank has created a Financial Vehicle whereby Funds can be Returned to Donors if not used for the response or if the epidemiological picture changes and Vaccine development is deemed unwarranted.

Alternatively, at the donor's discretion, **Funds may be retained at the World Bank for use in a future Disease X scenario.**

Invest Now

Join our coalition and help us create a future in which epidemics are no longer a threat to humanity.

About CEPI

CEPI is an innovative Partnership between Public, Private, Philanthropic, and Civil Organisations, launched at Davos (WEF) in 2017, to develop Vaccines to stop future epidemics. CEPI has reached over US$750 Million of its **$1 Billion funding target.**

CEPI's priority diseases include Ebola virus, Lassa virus, Middle East Respiratory Syndrome coronavirus, Nipah virus, Rift Valley Fever virus and Chikungunya virus.

CEPI also invests in platform technologies that can be used for rapid Vaccine and immunoprophylactic development against unknown pathogens (ie, Disease X).

To date, CEPI has committed to investing up to US$475 Million in Vaccine and platform development.

Board, Voting member, Jeremy Farrar, Director of the Wellcome Trust;

CEPI Board Committees: Audit and Risk: Peter Piot, London School of Hygiene & Tropical Medicine.

Compensation and Nomination, Charlotte Watts, **Chief Scientific Adviser to the UK Department for International Development.**" - in "CEPI welcomes UK Government's funding and highlights need for $2 Billion to develop a vaccine against COVID-19", CEPI, 6 March 2020.

"**Jeremy Farrar, Director of the Wellcome Trust**, One of the few members of Sage who has made their membership public. Farrar is a medical researcher and former head of Oxford's clinical research unit in Ho Chi Minh City.

He has said Britain is on course to be among the worst, if not the worst, affected country in Europe.

Prof Charlotte Watts, chief scientific adviser to the Department for International Development. Watts is on secondment from the London School of Hygiene and Tropical Medicine where she is a professor of social and mathematical epidemiology." - in " Who's who on secret scientific group advising UK government? Scientific Advisory Group for Emergencies (Sage) is advising cabinet on coronavirus response", The Guardian, 24 April 2020.

First Lenin Statue,Victory for the Marxist-Leninist Party

"Victory for the Marxist-Leninist Party of Germany of the German city of Gelsenkirchen, after city authorities tried to halt installation. "We are really happy. Gelsenkirchen is a workers' city and Lenin fits in here very well." said Gabi Fechtner, head of MLPD. The MLPD, founded in 1982, is under observation by German intelligence, considers it extremist and unconstitutional." - in "First Lenin statue in western Germany to be erected after heated battle", The Guardian, 6 March 2020.

8 March 2020

"This is life for the 7 million people of Hong Kong, caught in the cross-hairs of the coronavirus. A world where people only venture out in masks, where almost all public places are deserted, for fear of infection, where businesses are deserted, and economic markets are in panic.

> *"There is now an emergency going on, and what we must do is* ***very rigorous infection control."*** *- Professor Gabriel Leung*

If coronavirus is the disease X the world has been fearing then it possibly **began somewhere like this among a colony of bats.** Professor Gabriel Leung is considered **the world's foremost expert on Coronavirus based in Hong Kong he led the global fight against SARS.** I can tell you in all the years I've been coming here this is not normal this is one of Hong Kong's busiest market streets and at this time of the day it is always packed jammed teeming shoulder-to-shoulder with tourists and shoppers but **this is a product of what public health officials call Social Distancing.**

The people of Hong Kong have accepted the new world of the coronavirus don't have much choice." - in "World of Pain", 60 Minutes Australia, 8 Mar 2020

> *"Many European Research Council funded researchers have been active for some time in researching the coronavirus family and many other equally dangerous pathogens.* ***Over 50 ongoing or completed ERC projects supported for a total value of about EUR €100 Million are contributing to the response to the COVID-19 pandemic by providing insights from several different scientific fields such as: Virology, Epidemiology, Immunology, paths for new diagnostics and treatments, public health, medical devices, artificial intelligence, social behaviour, crisis management."*** *- in "Resignation of Mauro Ferrari, Statement by the Scientific Council", ERC Scientific Council, 8 March 2020.*

9 March 2020

"The Gates Foundation, and Wellcome, are each contributing up to US$50 Million, and, the Mastercard Impact Fund, has committed up to US$25 Million to catalyse the initial work of the accelerator. The Gates Foundation's funding is part of its US$100 Million commitment to the COVID-19 response *announced last month." - in "COVID-19 Therapeutics Accelerator will coordinate R&D efforts and remove barriers to drug development and scale-up to address the epidemic", Wellcome Trust, 9 March 2020.*

10 March 2020

"The Covid-19 Therapeutics Accelerator, as they have called it, will be a catalyst to draw in much more money for coronavirus drug development, said Jeremy Farrar, Wellcome director.
He is on the board of the Global Preparedness Monitoring Board, an independent health monitoring body, which estimated on Monday that a total of US$1.5 Billion will be required for research and development of a portfolio of four Covid-19 treatments." *- in " Gates Foundation and Wellcome set up US$125 Million coronavirus drug fund Research, with Mastercard-backed charity to develop treatments", Financial Times, 10 March 2020.*

11 March 2020

The National Institute of Allergy and Infectious Diseases Director Dr Anthony Fauci, MD, tells the House Oversight and Reform Committee that the novel coronavirus spreading across the globe is:

> ***"10 times more lethal than the seasonal flu."*** *- Dr Anthony Fauci, in "House Oversight and Reform Committee", 11 March 2020.*

An Extra £5 Billion for the NHS

"Treasury's initial fund of £5 Billion will support health and social care services and local councils, says chancellor, but that **more would be forthcoming if required.**

"Any extra resources needed by the NHS will be provided as the situation develops. So it could go up, dependent on need", said Treasury official." - Denis Campbell, in "Pledge to fund NHS coronavirus battle 'whatever it costs", The Guardian, 11 March 2020.

The Naming of the Virus

"The virus has been named "SARS-CoV-2", the symptoms it causes has been named "Coronavirus Disease 2019" (abbreviated "COVID-19").

The SARS-CoV-2 virus is a betacoronavirus, like MERS-CoV and SARS-CoV". - in "National Center for Immunization and Respiratory Diseases (NCIRD)", Division of Viral Diseases, Centers for Disease Control and Prevention CDC, 11 March 2020.

"In December 2019, Wuhan, China, became the centre of an outbreak of pneumonia. By 7 ***January2020, Chinese scientists had isolated a novel coronavirus****, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; previously known as 2019-nCoV), from these patients with virus-infected pneumonia, which was later designated coronavirus disease 2019 (COVID-19) in February 2020, by WHO." - in "Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study",* ***The Lancet, 11 March 2020.***

First British Case

A British woman 53 years died (in Indonesia), had:
Lung Disease & Diabetes, before being diagnosed with Covid-19.

13 March 2020

The Voice of Reason

"UK's chief scientific adviser defends herd immunity strategy for coronavirus, Patrick Vallance says 40m Britons would have to contract coronavirus to prevent future outbreaks.

Communities will become immune to it and that's going to be an important part of controlling this longer term." - in "The Financial Times", 13 March 2020.

14 March 2020

U.S. Government $8 Billion Stockpile of Medication

> ***"About US$8 Billion worth of Vaccines, Pharmaceuticals,*** *protective gear, ventilators and other kinds of medical equipment are housed in warehouses that are strategically located around the United States." - Nell Greenfieldboyce, in "Why Even A Huge Medical Stockpile Will Be Of Limited Use Against COVID-19", NPR, 14 March 2020.*

A "letter" signed by 501 UK so-called "Scientists", and "Experts" on Infectious Diseases, and 41 so-called "Distinguished international signatories", composed by individuals who are left-wing affiliated, and communist sympathisers, they called for the UK Prime Minister Boris Johnson, to abandon the plan of herd immunity **and Enforce Social Distancing.** Their letter states the following:

Public request to take Stronger Measures of Social Distancing across the UK with Immediate Effect

"As scientists living and working in the UK, we would like to express our concern about the course of action announced by the Government on 12 March 2020 regarding the Coronavirus outbreak.

In particular, **we are deeply preoccupied by the timeline of the proposed plan, which aims at delaying social distancing measures even further.**

The current data about the number of infections in the UK is in line with the growth curves already observed in other countries, including Italy, Spain, France, and Germany.

The same data suggests that the number of infected will be in the order of dozens of thousands within a few days.

Under unconstrained growth, this outbreak will affect millions of people in the next few weeks.

This will most probably put the NHS at serious risk of not being able to cope with the of ICU beds in the UK is not larger than that available in other neighbouring countries with a similar population.

Going for "herd immunity" at this point does not seem a viable option, as this will put NHS at an even stronger level of stress, risking many more lives than necessary.

By putting in place social distancing measures now, the growth can be slowed down dramatically, and thousands of lives can be spared.

We consider the social distancing measures taken as of today as insufficient, and **we believe that additional and more restrictive measures should be taken immediately,** as it is already happening in other countries across the world.

We urge anyone who has sympathy with our views, and access to the government strategy group, to make our concerns more widely known." - 14 March 2020

The letter gives 2 references, one of them is the article published in a Marxist Communist Newspaper: "Covid-19: Open letter from Italy to the international scientific community", Coronavirus, Diritti Esteri, In evidenza, International Politica, Rivista, Società", Left - L'unico giornale di sinistra, "Left - The only leftist newspaper", Left Redazione, 13 March 2020.

On 7 January 2015, the Newspaper "Left" was purchased by the Editoriale Novanta srl, which is owned by Matteo Fago, who commented on his entry as editor: **"Information that serves to build a new, honest, independent and secular left wing."**

Herd Immunity and the Benefits of Vaccination

"Conclusions: Herd (community) Immunity protects not only Vaccinated individuals, but prevents the development of epidemics in situations where they might otherwise occur." - Dr Mark S. Roberts, MD, Professor and Chair, Department of Health Policy and Management, Professor of Medicine, Industrial Engineering, Business Administration and Clinical and Translational Science Director, Public Health Dynamics Laboratory - in "Herd Immunity and the Benefits of Vaccination, Using Measles as an Example", University of Pittsburg, 2 November 2018.

> ***"I'm an Epidemiologist.***
> ***When I heard about Britain's 'herd immunity' coronavirus plan, I thought it was satire." - Dr William Hanage, professor of the evolution and epidemiology of infectious disease at Harvard University****, in "The Guardian", 15 March 2020.*

16 March 2020

The Imperial College Report Convincing Boris Johnson for a Lockdown

"Perhaps our most significant conclusion is that mitigation is unlikely to be feasible without emergency surge capacity limits of the UK and US health care systems being exceeded many times over.

In the most effective mitigation strategy examined, which leads to a single, relatively short epidemic **(case isolation, household quarantine and social distancing of the elderly)**, the surge limits for both general ward and ICU beds would be exceeded by at least 8-fold under the more optimistic scenario for critical care requirements that we examined.

In addition, even if all patients were able to be treated, we predict there would still be in the order of 250,000 deaths in GB, and 1.1-1.2 Million in the US." - Neil M Ferguson, Daniel Laydon, Gemma Nedjati-Gilani, Natsuko Imai, Kylie Ainslie, Marc Baguelin, Sangeeta Bhatia, Adhiratha Boonyasiri, Zulma Cucunubá, Gina Cuomo-Dannenburg, Amy Dighe, Ilaria Dorigatti, Han Fu, Katy Gaythorpe, Will Green, Arran Hamlet, Wes Hinsley, Lucy C. Okell, Sabine van Elsland, Hayley Thompson, Robert Verity, Erik Volz, Haowei Wang, Yuanrong Wang, Patrick GT Walker,Caroline Walters, Peter Winskill, Charles Whittaker, Christl A. Donnelly, Steven Riley, Azra C Ghani.

On behalf of the Imperial College COVID-19 Response Team

1. WHO Collaborating Centre for Infectious Disease Modelling.

2. MRC Centre for Global Infectious Disease Analysis

3. Abdul Latif Jameel Institute for Disease and Emergency Analytics.

4. Imperial College London." - in "Report 9: Impact of non-pharmaceutical interventions (NPIs) to reduce COVID-19 mortality and healthcare demand", 16 March 2020.

The Report giving 7 out of 18 references, in which **Neil Morris Ferguson is one of the authors:**

References:

1. Ferguson NM, et al., The effect of public health measures on the 1918 influenza pandemic in U.S. cities. Proc Natl Acad Sci USA 2007.

5. Ferguson NM, at al., Strategies for mitigating an influenza pandemic. Nature 2006.

6. Ferguson NM, et al., Modeling targeted layered containment of an influenza pandemic in the United States. Proc Natl Acad Sci USA 2008.

7. Ferguson NM, et al., Strategies for containing an emerging influenza pandemic in Southeast Asia. Nature 2005.

13. Neil M. Ferguson, et al. Report 8: Symptom progression of 2019 novel coronavirus. 2020. Available from: https://www.imperial.ac.uk/media/imperial-college/medicine/sph/ide/gida-fellowships/Imperial-College-COVID19-symptom-progression-11-03-2020.pdf

17. Ferguson NM, et al., Estimating the impact of school closure on influenza transmission from Sentinel data. Nature 2008.

18. Ferguson NM, et al., Model-Based Comprehensive Analysis of School Closure Policies for Mitigating Influenza Epidemics and Pandemics. PLoS Comput Biol 2016.

References No. 4:

4. World Health Organisation. Pandemic influenza A (H1N1) 2009 virus vaccine – conclusions and recommendations from the October 2009 meeting of the immunization Strategic Advisory Group of experts. Wkly Epidemiol Rec 2009; Professor Andrew J. Pollard, SAGE Member since 2016, Professor of Paediatric Infection and Immunity at the University of Oxford, United Kingdom.

Please Note

The Imperial College Report, was:

1- Never Published!
2- Never Peer Reviewed!

It was taken at Face Value, by the UK Government.

Then, we also have that this so-called "report", that was never a report, more like a "memo", if even that!

Thus the entire UK population was placed under lockdown measures and legislation was created and passed in Parliament based upon a written demand by a group of interlinked left-wing affiliated individuals.

Who have previously brought misery to the UK with their predictions, and rants.

It Has Emerged

"However, it has now emerged that ***Ferguson has been criticised in the past for making predictions based on allegedly faulty assumptions which nevertheless shaped government strategies and impacted the UK economy."*** *- in "Neil Ferguson, the scientist who convinced Boris Johnson of UK coronavirus lockdown, criticised in past for flawed research", The Telegraph, 28 March 2020.*

"Professor Michael Thrusfield, Professor of Veterinary Epidemiology at Edinburgh University, said ***Prof Ferguson was previously instrumental in modelling that led to the cull of more than 6 Million animals during the foot and mouth outbreak in 2001, which left rural Britain economically devastated.***
Prof Thrusfield, an expert in animal diseases, ***claimed the model made incorrect assumptions about how foot and mouth disease was transmitted, and in a 2006 review, he claimed Imperial's foot and mouth model was "not fit for purpose", while in 2011 he said it was "severely flawed".***
Prof Thrusfield told The Daily Telegraph (28 March 2020), ***the episode was "a cautionary tale" about the limits of Mathematical Modelling and he felt a sense of "déjà vu" about the current situation, when he read Mr Ferguson's Imperial College paper on coronavirus (Report 9: Impact of non-pharmaceutical interventions (NPIs) to reduce COVID-19 mortality and healthcare demand, 16 March 2020)."*** *- Stephen Adams, in "The Mail on Sunday", 26 April 2020.*

Imperial College London's Model of the Covid-19 disease based on undocumented, 13-year-old computer code

"I'm conscious, that lots of people would like to see and run the pandemic simulation code we are using to model control measures against COVID-19. To explain the background - I wrote the code (thousands of lines of undocumented C) 13+ years ago to model flu pandemics..." - Neil Ferguson, in "@neil_ferguson", Twitter, 9:13 PM, 22 March 2020.

"The natural history within the human host of a future pandemic strain is unknown. We caution against over-interpretation of the modelling results, even where the 3 models suggest similar effectiveness of interventions. Because of the uncertainties in the models, the results need to be viewed more as helping to structure thinking about pandemic planning, rather than being predictive of the precise effectiveness of different policies." *- Neil M. Ferguson, et al., in "Modeling targeted layered containment of an influenza pandemic in the United States", Proceedings of the National Academy of Sciences, 25 March 2008.*

Please see: "FRED - A Framework for Reconstructing Epidemic Dynamics"

Professor Neil Ferguson: high priest of Liberal Hospital Management and Inventor of the Generalized Containment Against Covid-19

In the past, European political leaders yielded to the orders of their astrologers. Today, they refer to them identically to the statisticians of the Imperial College. The latter have provided them as much justification as they needed for their liberal hospital policy. ***Today, they predict millions of deaths without any scientific rigour.***

"Professor Neil Fergusson assures that statistics can predict the behaviour of living beings.

This is stupid, yet many high-ranking political leaders believe it.

Unfortunately, unlike the Soviets, **they draw political consequences that ruin their countries.**

The Creation of the European Centre for Disease Prevention and Control

For the past 20 years, Western political leaders have been trying to use statistical knowledge of epidemics to determine the right decisions to be made in the event of danger.

Following the SARS outbreak in 2003, the European Union established the European Centre for Disease Prevention and Control in 2005.

During the second half of 2008, this centre and the French rotating presidency organised a colloquium to study the advisability of closing schools to combat a flu epidemic and to determine when it should occur and when it should stop.

There was still no talk of widespread containment of the entire population.

The main contribution was made by Professor Neil Ferguson and Simon Cauchemez from Imperial College London.

It compared statistical data on school closures in Hong Kong in 2003, and 2008, on the impact of the teachers' strike in Israel in 2000, on the impact of zonal holidays in France from 1984 to 2006, on the closure of schools infected with influenza in France in 1957, and on the impact of Spanish influenza in some US cities and in Australia in 1918.

And it pointed out the inequalities and injustices associated with school closures in the UK and the USA.

From that point on, the problem was turned upside down.

Experts had observed that school closures did not have a significant impact on the final number of deaths, but only on the speed of the spread of the disease.

Their task was to provide a solution to the closure of hospital beds that were not occupied on a day-to-day basis.

Statistics were no longer at the service of the health of Europeans, but of an ideology, that of the liberal management of the state.

Bernard Kouchner, the French Minister of Foreign Affairs who organized this symposium, was the one who, when he was Minister of Health (1992-93, 1997-99, 2001-02), began the reorganization of the French **hospital system no longer according to medical criteria, but according to a logic of profitability.**

In about 15 years, France has thus been able to make substantial savings by closing 15% of its hospital beds; savings that are derisory compared to the current cost of containment.

Intellectual Fraud: Covid-19 Neil Ferguson, the Liberal Lyssenko

Trofim Denisovich Lysenko (1898-1976), was a Soviet Agronomist and Biologist.

His experimental research in improved crop yields earned him the support of the Soviet leader Joseph Stalin, especially following the famine and loss of productivity resulting from crop failures and forced collectivization in several regions of the Soviet Union in the early 1930s.

In 1940, Lysenko became director of the Institute of Genetics within the USSR's Academy of Sciences, with exercise of political influence and power.

Professor Ferguson is the European reference for epidemic modelling.

1. In 2001: Ferguson convinced Prime Minister Tony Blair to have more than 6 Million cattle, sheep and pigs slaughtered to stop the "Foot-and-Mouth Epidemic" (a decision that cost £10 Billion, and is now considered an aberration).

2. In 2002: Ferguson calculated that "Mad Cow Disease" would kill about 50,000 British people and another 150,000 when transmitted to sheep. There have only been 177 deaths from BSE in the UK.

3. In 2005: Ferguson predicted that "Bird Flu" would kill 65,000 Britons. In the end, only 282 people died worldwide from the disease between 2003 and 2009.

> ***4. "In 2009: Ferguson and his Imperial team predicted that "Swine Flu" had a case fatality rate 0.3% to 1.5%. His most likely estimate was that the mortality rate was 0.4%. A government estimate, based on Ferguson's advice, said a "reasonable worst-case scenario" was that the disease would lead to 65,000 UK deaths. In the end swine flu killed 457 people in the UK."*** *- Steerpike, in "Six questions that Neil Ferguson should be asked", The Spectator, 16 April 2020.*

Regardless of all this, has became adviser to the World Bank, and several governments.

It was he who sent a confidential note to French President Emmanuel Macron on 12 March 2020 announcing half a million deaths in France.

In panic, Macron took the decision for generalized confinement that same evening.

It was also Ferguson who publicly announced on 16 March 2020 that, if nothing was done, there would be as many as 550,000 deaths in the UK, and as many as 1.2 Million in the USA, forcing the British government to review its policy.

Simon Cauchemez, was his right-hand man in 2009, now heads the modelling unit at the Pasteur Institute.

He is, of course, a member of the Scientific Committee of the Élysée, where he proposed; Generalized Confinement.

This Committee was set up by the Director General of Health, Professor Jérôme Salomon, former technical advisor to Bernard Kouchner.

The Ferguson Team seizure of power was based on an; Intellectual Swindle.

"Mathematical Biology" (sic) could justify the liberal management of health services.

Unfortunately, while statistics can be used to evaluate the effects of this or that measure after the fact, they cannot predict the behaviour of a living organism.

Incidentally, extrapolating influenza measures to the Covid-19 epidemic is absurd: influenza affects many children, not Covid-19, which in demographic terms only kills elderly people or people with diabetes or high blood pressure.

Children infected with Covid-19 have a very low viral load, it is not even known to this day whether they are contagious.

One cannot help but notice the drift of this guru, who is no longer content to justify liberal policies applied to public health, but has come to advocate depriving entire peoples of their freedom.

To hide the reality of this drift, Ferguson's supporters distract the public's attention by proposing the use of surgical masks, which we have already explained; are of no use in the face of the epidemic.

Controversy with Professor Didier Raoult

These explanations shed new light on the polemic that opposed the disciples of Ferguson to those of Professor Dr Didier Raoult, MD.

This is not a problem of Methodology, but of Finality.

Neil Ferguson is an individual caught up in his own swindle, while Dr Didier Raoult, MD is a clinical doctor.

The followers of Professor Ferguson need dead people to believe in their religion, those of Professor Dr Didier Raoult, MD take care of their patients.

The problem we are facing is not a scientific debate, but a war of repeated errors." - Thierry Meyssan, in "Intellectual Fraud, Covid-19: Neil Ferguson, the Liberal Lyssenko", Voltaire Network, 20 April 2020.

> *"Neil Morris Ferguson OBE FmedSci, British epidemiologist and professor of Mathematical Biology, who specialises in the patterns of spread of infectious disease in humans and animals. He is the director of the Abdul Latif Jameel Institute for Disease and Emergency Analytics, head of the Department of Infectious Disease Epidemiology in the School of Public Health and Vice-Dean for Academic Development in the Faculty of Medicine, all at Imperial College, London. Ferguson was appointed Order of the British Empire (OBE) in the 2002 New Year Honours for his work modelling the 2001 United Kingdom foot-and-mouth outbreak." - in Wikipedia, 2 May 2020.*

20 March 2020

"The Istituto Superiore di Sanità said that the average age of Italy first 3,200 victims was 78.5%.
Almost 49% of them had 3 or more pre-existing conditions. Just 1.2% of those who died had no other ailments." *- in Agence France-Presse, 20 March 2020.*

"The wristband and the app use what is called geofencing technology, which is different from GPS location tracking*, explained Gary Chan, co-founder and director of Compathnion Technology.* ***"As you walk around the home, the algorithm on the app will sample the signals of the home,"*** *said Chan, who is also a professor of computer science and engineering at the Hong Kong University of Science and Technology." - in* ***"Hong Kong is using tracker wristbands to geofence people under coronavirus quarantine"****, Quartz, 20 March 2020.*

Covid-19 - Interim Clinical Guidance

Clinical Presentation

"Among reports that describe the clinical presentation of patients with confirmed Covid-19, most are limited to hospitalized patients with pneumonia.

The incubation period is estimated at 4 days (interquartile range: 2 to 7 days).

Some studies have estimated a wider range for the incubation period; data for human infection with other coronaviruses (e.g. MERS-CoV, SARS-CoV) suggest that the incubation period may range from 2-14 days.

Frequently reported signs and **symptoms of patients admitted to the hospital include fever (77–98%), cough (46%–82%), myalgia or fatigue (11–52%), and shortness of breath (3-31%) at illness onset.**

Among 1,099 hospitalized COVID-19 patients, fever was present in 44% at hospital admission, and developed in 89% during hospitalization.

Other less commonly reported respiratory symptoms include sore throat, headache, cough with sputum production and/or hemoptysis.

Some patients have experienced **Gastrointestinal Symptoms such as Diarrhea and Nausea Prior To Developing Fever and Lower Respiratory Tract Signs and Symptoms.**

A limited number of reports describe identification of asymptomatic or subclinical infection on the basis of detection of SARS-CoV-2 RNA or live virus from throat swab specimens of contacts of confirmed patients.

Risk factors for severe illness are not yet clear, although **older patients and those with chronic medical conditions may be at higher risk for severe illness.**

Among more than 44,000 confirmed cases of COVID-19 in China as of 11 February 2020, most occurred among patients aged 30–69 years (77.8%), and approximately 19% were severely or critically ill.

Case-fatality proportion among cases aged ≥60 years was: 60-69 years: 3.6%; 70-79 years: 8%; ≥80 years: 14.8%.

Patients who reported no underlying medical conditions had an overall case fatality of 0.9%, but case fatality was higher for patients with comorbidities: 10.5% for those with cardiovascular disease, 7% for diabetes, and 6% each for chronic respiratory disease, hypertension, and cancer.

Case fatality for patients who developed respiratory failure, **septic shock, or multiple organ dysfunction** was 49%.

Clinical Course

Clinical presentation among reported cases of COVID-19 varies in severity **from:**

Asymptomatic Infection, to
Mild Illness, to
Severe or Fatal Illness.

Some reports suggest the potential for clinical deterioration during the second week of illness.

In one report, among patients with confirmed COVID-19 and pneumonia, just over half of patients developed dyspnea a median of 8 days after illness onset (range: 5–13 days).

In another report, the mean time from illness onset to hospital admission with pneumonia was 9 days.

Acute Respiratory Distress Syndrome (ARDS) developed in 17–29% of hospitalized patients, and secondary infection developed in 10%.

In one report, the median time from symptom onset to ARDS was 8 days.

Approximately 20-30% of hospitalized patients with COVID-19 and pneumonia have required intensive care for respiratory support.

Compared to patients not admitted to an intensive care unit, critically ill patients were older (median age 66 years versus 51 years), and were more likely to have underlying co-morbid conditions (72% versus 37%).

Among critically ill patients admitted to an intensive care unit, 11–64% received high-flow oxygen therapy and 47-71% received mechanical ventilation; some hospitalized patients have required advanced organ support with endotracheal intubation and mechanical ventilation (4–42%).

A small proportion have also been supported with extracorporeal membrane oxygenation (ECMO, 3–12%).

Other reported complications include cardiac injury, arrhythmia, septic shock, liver dysfunction, acute kidney injury, and multi-organ failure.

Post-mortem biopsies in one patient who died of ARDS reported pulmonary findings of diffuse alveolar damage.

An overall case fatality proportion of 2.3% has been reported among confirmed cases of COVID-19 in China.

However, the majority of these cases were among hospitalized patients and therefore this estimate of mortality is likely biased upward.

Among hospitalized patients with pneumonia, the case fatality proportion has been reported as 4–15%.

Among critically ill COVID-19 patients in China, the reported case fatality proportion was 49%.

In a report from one hospital, 61.5% of critically ill patients with COVID-19 had died by day 28 of ICU admission.

Laboratory and Radiographic Findings

The most common laboratory abnormalities reported among hospitalized patients with pneumonia on admission included leukopenia (9–25%), leukocytosis (24–30%), lymphopenia (63%), and elevated alanine aminotransferase and aspartate aminotransferase levels (37%).

Among 1,099 COVID-19 patients, lymphocytopenia was present in 83%; 36% had thrombocytopenia, and 34% had leukopenia.

Most patients had normal serum levels of procalcitonin on admission.

Chest CT scan images have shown bilateral involvement in most patients.

However, one study that evaluated the time from symptom onset to initial CT scan found that 56% of patients who presented within 2 days had a normal CT." - "Interim Clinical Guidance for Management of Patients with Confirmed Coronavirus Disease (COVID-19)", CDC, 20 March 2020.

22 March 2020

Chronic Metabolic Disease, Obesity and Poor Diet

"After analysing the data, it's clear most suffering worst complications have **Chronic Metabolic Disease**, if you look at Italy the average age of death was 81, and the average person who died had at least 2.7 Chronic Conditions, which included: **High Blood Pressure, Type 2 Diabetes, Smoking and Cancer**.

In Wuhan, China more than 60% of the people who suffered major complications and tragically many of these people died had Type 2 Diabetes, a High Blood Pressure.

The general health of the British, American and many European people is dire, we have **6 out of 10 adults overweight or obese** in this country (UK) similar in America only 17.4% of people in the United States are metabolically healthy.

Why is that important?

First and foremost if you have high blood glucose if you're pre-diabetic or Type 2 Diabetic, then you have a dis-regulated immune system, your white cells will cannot function optimally, the same applies to people who are overweight or obese as well we know people who with obesity so for more complications from influenza." - Dr Aseem Malhotra, MD in "Sky News", 22 March 2020.

"Obesity is a major, public health concern that affects at least 400 million individuals and is associated with severe disorders including diabetes and cancers.

The causes that drive obesity appear to be complex, and a consensus hypothesis is emerging that proposes that obesity is influenced by a mixture of environmental, genetic, neural and endocrine factors.

Infectious agents have also been proposed to be causes of obesity, and in human obesity, have been associated with small EDRK-rich factor 1A (SMAM-1), an avian adenovirus and adenovirus 36.

Food is a source of bacteria and viruses, and changes in patterns of **food consumption results in differences in human gut flora among different groups of people."** - Emmanouil Angelakis, Fabrice Armougom, Matthieu Million, Didier Raoult, in "The relationship between gut microbiota and weight gain in humans", Future Microbiology 2012.

> ***"Obesity is a serious public health problem associated with increased morbidity and mortality.*** *The rapid global spread of obesity resembles epidemiologically the spread of an infectious disease. Seven viruses and a scrapie agent have been implicated (observed) in obesity." - Dr A. Vasilakopoulou, MD, Dr C.W. le Rouxin, MD, in "Could a virus contribute to weight gain", International Journal of Obesity, 2007.*

> ***"Many patients dying from infectious diseases, such as influenza and the various forms of septicemia, are found, at autopsy, to have ulcerations in the mucosa of the stomach and duodenum."*** *- Dr J. Louis Ransohoff, MD, in "Some Aspects of Stomach Surgery", The West Virginia Medical Journal February, 1930.*

"The association between obesity and influenza was first noted during the early phase of the 2009 influenza A(H1N1) pandemic, **when data from many countries around the world indicated that obese persons were disproportionally represented among influenza-associated hospitalizations and deaths.**

Obese or morbidly obese patients appeared to be at increased risk of influenza-associated intensive care unit (ICU) admission and death.

Furthermore, obese patients hospitalized with 2009 H1N1 infection admitted to an ICU had longer duration of mechanical ventilation, as well as ICU and hospital length of stay compared with those who were not obese.

Because certain chronic medical conditions (including cardiovascular and metabolic diseases) that place persons at risk for influenza related complications are highly correlated with obesity." - in "Obesity and Influenza", Clinical Infectious Diseases, 1 September 2011.

"A total of 4,778 participants were enrolled in this study and had complete data. A total of 43.0% had severe influenza-like illness. 16.3% were positive for influenza, 55.2% were positive for other viral respiratory pathogens, and 28.5% had no respiratory virus isolated. ***Adults with influenza were more likely to be hospitalized if they were underweight, obese, or morbidly obese compared to normal-weight adults.*** *Obese adults with H1N1 had a sixfold increase in odds of hospitalization over H3N2 and B compared to normal-weight adults. In adults with coronavirus, metapneumovirus, parainfluenza, and rhinovirus, participants that were underweight and morbidly obese were more likely to be hospitalized as compared to normal-weight adults. All-cause influenza-like illness had a similar but less pronounced association between underweight or morbidly obesity and hospitalization.* ***Conclusions: our findings suggest that adults, who are underweight or morbidly obese, even if they do not have chronic conditions that increase the risk of influenza-related complications, may be at increased risk of developing severe disease due to seasonal influenza infection as well as other respiratory viral infections."*** *- Joe-Ann S. Moser, et al., in "Underweight, overweight, and obesity as independent risk factors for hospitalization in adults and children from influenza and other respiratory viruses", Influenza and Other Respiratory Viruses,2019.*

"Data from the 2,204 patients admitted to 286 NHS intensive care units with Covid 19 reveals 73% fell into this category." - in "Coronavirus warning: Most patients admitted to intensive care were overweight or obese", *Express, 17 April 2020.*

"We need to talk about the uncomfortable link between obesity and coronavirus." *- Alexandra Phillips, in "The Telegraph", 21 April 2020.*

"Obesity and poor diet is emerging as one of the biggest risk factors for a severe response to Covid-19 infection that can no longer be ignored." *- Professor Tim Spector, April 2020.*

COVID-19 & Underlying Conditions

"COVID-19 High-Risk Conditions: Based on currently available information and clinical expertise, **older adults** and **people of any age who have serious underlying medical conditions** might be at higher risk for severe illness from COVID-19.

Based upon available information to date, those at high-risk for severe illness from COVID-19 include:

1. People aged 65 years and older
2. People who live in a nursing home or long-term care facility
3. Other high-risk conditions could include:
   a) People with chronic lung disease or moderate to severe asthma
   b) People who have heart disease with complications
   c) People who are immunocompromised including cancer treatment
   d)People of any age with severe obesity (body mass index [(BM]I)≥40) or certain underlying medical conditions, particularly if not well controlled, such as those with diabetes, renal failure, or liver disease might also be at risk

4. People who are pregnant should be monitored since they are known to be at risk with severe viral illness, however, to date data on COVID-19 has not shown increased risk

Many conditions can cause a person to be immunocompromised, including cancer treatment, bone marrow or organ transplantation, immune deficiencies, poorly controlled HIV or AIDS, and prolonged use of corticosteroids and other immune weakening medications." - in "Information for Healthcare Professionals: COVID-19 and Underlying Conditions", National Center for Immunization and Respiratory Diseases, Division of Viral Diseases, CDC, 22 March 2020.

23 March 2020

"Almost 2/3 of patients who fall seriously ill from coronavirus are obese, 63% of patients in intensive care in UK hospitals because of the virus are overweight, obese or morbidly obese.

The average age of people suffering the most serious symptoms of coronavirus is 64.

An NHS audit has revealed. The Intensive Care National Audit and Research Centre analysed all admissions to critical care units in the UK." - in "The Daily Mail", 23 March 2020

24 March 2020

"Treatment for coronavirus:
There is currently no specific treatment for coronavirus.
Treatment aims to relieve the symptoms while your body fights the illness." - in "NHS Coronavirus (COVID-19)", 24 March 2020

"On 23 April, the first two of over 1,000 volunteers began a trial for the ChAdOx1 nCoV-19 Vaccine, which aims to protect healthy people from contracting COVID-19 by generating in those individuals an immune response against the virus.

The Vaccine was developed by a team of University of Oxford researchers led by St Cross College Vice-Master Andy Pollard." - in "Clinical trials begin for COVID-19 vaccine developed by team led by Andy Pollard", St Cross College Oxford, 24 April 2020.

26 March 2020

"These are important facts for the American people, many of you saw the recent report out of the UK, about them adjusting completely their needs, this is really quite important, if you remember that was **the report that said there would be 500,000 deaths in the UK and 2.2 Million deaths in the United States,** they've adjusted that number in the UK to 20,000, so 500,000 to 20,000 we're looking into this in great detail to understand that adjustment.

In the model, either you have to have a large group of people who are asymptomatic who've never presented for any test in order to have the kind of numbers that were predicted, to get to 60 million people infected, or of 6 million people infected you have to have a large group of asymptomatic because in no country to date have we seen an attack rate over 1 in 1,000 so either we're only measuring the tip of the iceberg of the symptomatic cases and underneath it are a large group of people so we're working very hard to get that antibody test because that's a good way to figure out who are all these people under here and do they exist or **we have the transmission completely wrong so these are the things we're looking at because the predictions of the models don't match the reality on the ground in either China South Korea or Italy.**

When people start talking about 20% of a population getting infected it's very scary but we don't have data that matches that based." - Dr Deborah Birx, MD, White House Coronavirus Response Coordinator, in press conference, **"Covid-19 Hysteria caused by the Imperial College London study",** 26 March 2020.

30 March 2020

COVID-19 Therapeutics Accelerator Awards $20 Million in Initial Grants to Fund Clinical Trials

"Today, the partners in the COVID-19 Therapeutics Accelerator announced grants of $20 Million to 3 institutions: the University of Washington, University of Oxford, and La Jolla Institute for Immunology, to fund clinical trials in order to identify highly potent immunotherapies for the COVID-19 pandemic.

These grants mark the **first investments** to come from the **COVID-19 Therapeutics Accelerator**, a large-scale initiative **launched by the Bill & Melinda Gates Foundation, Wellcome, and Mastercard to speed the development of and access to therapies for COVID-19.**

In addition, newly announced **funding from Government and Philanthropic Donor**s has added to the Accelerator's initial funding.

The Chan Zuckerberg Initiative committed $25 Million and the UK government committed £40 Million last week." - in "Bill & Melinda Gates Foundation", 30 March 2020.

Note: The Chan Zuckerberg Initiative (CZI) is a limited liability company (LLC) established and owned by Facebook founder Mark Zuckerberg.

Lord Sumption on Coronavirus

"The real problem is but when human societies lose their freedom, it's not usually because tyrants have taken it away, **it's usually because people willingly surrender that freedom in return for protection against some external threat, usually exaggerated, and that's what I fear we are seeing now.**

The pressure on politicians has come from the public they want action, they don't pause to ask whether the action will work, they don't ask themselves if whether the cost will be worth paying they want action anyway.

And anyone who has studied history will recognize here the classic symptoms of collective hysteria.

Hysteria is infectious we are working ourselves up into a lather in which we exaggerate the threat and stop asking ourselves whether **the cure may be worse in the disease.**

We have to recognize that this is how societies become despotisms.

And we also have to recognize that this is a process which leads naturally to exaggeration.

The symptoms of coronavirus are clearly serious for those with other significant medical conditions, especially if they're old.

There are exceptional cases in which young people have been struck down, which have had a lot of publicity but the numbers of small.

The Italian evidence for instance, suggests that only 12% of deaths is it possible to say coronavirus was the main cause of death.

So yes this is serious, and yes it's understandable that people cry out to the government.

But the real question is is this serious enough to warrant **putting most of our population into house imprisonment, wrecking our economy for an indefinite period, destroying businesses, that honest and hardworking people have taken years to build up, saddling future generations with debt, depression, stress, heart attacks, suicides and unbelievable distress inflicted on millions of people who are not especially vulnerable and will suffer only mild symptoms, or none** at all like the health secretary and the prime minister.

Certainly **there's not a lot in the way of institutional scrutiny, the press has engaged in a fair amount of scrutiny there has been at some some good and challenging journalism, but mostly the press has, I think echoed and indeed amplified that the general panic.**

The tradition of policing in this country, is that policemen are citizens in uniform they are not members of a disciplined hierarchy operating just at the government's command.

Yet in some parts of the country the police have been trying to stop people from doing things like travelling to take exercise in the open country, which are not contrary to the regulations.

Simply because ministers have said that they would prefer us not to, **the police had no power to enforce ministers preferences,** but only at legal regulations, which don't get us anything like as far as the government's guidance.

I have to say that the behaviour of the Derbyshire police in trying to shame people, into using their undoubted right to travel to take exercise on the country and wrecking beauty spots in the fells so that people don't want to go there, is frankly disgraceful.

This is what if the least state is like it's a state in which the government can issue orders or express preferences with no legal authority and the police will enforce ministers wishes.

There is a natural tendency of course a little strong temptation for the police to lose sight of their real functions and turn themselves from citizens in uniform into glorified school prefect.

It is the right and duty of every citizen to look and see what the scientists have said, and to analyse it for themselves and to draw common-sense conclusions.

We are all perfectly capable of doing that, and there's no particular reason why the scientific nature of the problem; that should mean that we have to resign our Liberty into the hands of scientists.

We all have critical faculties and it's rather important in a moment of national panic, that we should maintain them North." - Lord Sumption, former Justice of the Supreme Court of the United Kingdom in "Lord Sumption Explains National Overreaction to Coronavirus", BBC Radio 4's World at One, 30 March 2020.

31 March 2020

"We need a consistent nationwide approach to shutting down. *Despite urging from public health experts, some states and counties haven't shut down completely. In some states, beaches are still open; in others, restaurants still serve sit-down meals. This is a recipe for disaster.* ***The country's leaders need to be clear: Shutdown anywhere means shutdown everywhere.*** *Until the case numbers start to go down across America,* ***which could take 10 weeks, or more."*** *- Bill Gates, co-chair of the Bill & Melinda Gates Foundation, in "Here's how to make up for lost time on covid-19", The Washington Post, 31 March 2020.*

The Bill & Melinda Gates Foundation Trust, "The trust, which administers the assets of the Gates Foundation, disclosed that it ***now owns 5% of the closed-end fund, which focuses on Mexico Stock Exchange listings. The Mexico Fund has tumbled this year amid the market disruption cased by the coronavirus pandemic****." - in "Barrons", 31 March 2020.*

1 April 2020

FDA Requests Removal of All Ranitidine Products (Zantac) from the Market

"The U.S. Food and Drug Administration today announced it is requesting manufacturers withdraw all prescription and over-the-counter (OTC) ranitidine drugs from the market immediately.

This is the latest step in an ongoing investigation of a contaminant known as N-Nitrosodimethylamine (NDMA) in ranitidine medications (commonly known by the brand name Zantac).

The agency has determined that the impurity in some ranitidine products increases over time and when stored at higher than room temperatures and may result in consumer exposure to unacceptable levels of this impurity.

NDMA is a probable human carcinogen (a substance that could cause cancer).

Low levels of NDMA are commonly ingested in the diet, for example NDMA is present in foods and in water.

These low levels would not be expected to lead to an increase in the risk of cancer. However, sustained higher levels of exposure may increase the risk of cancer in humans." - in "U.S. Food and Drug Administration", FDA, 1 April 2020.

> *"In the face of mounting nationwide lawsuits and continuing alarming testing data, the FDA has finally announced it is requesting manufacturers withdraw all prescription and over-the-counter ranitidine drugs from the market immediately." - in "FDA Zantac Recall: Too Little, Too Late", The National Law Review, 10 April 2020.*

Ranitidine Sold Under the Trade Name Zantac Among Others

"Ranitidine was discovered in England, UK in 1976, and was introduced in commercial use in 1981, and was the world's biggest-selling prescription drug by 1987. **It is on the World Health Organization's List of Essential Medicines, the safest and most effective medicines needed in a health system.** In 2017, it was the 48th most commonly prescribed medication in the United States, with more than 16 Million prescriptions.

Side Effects

The following adverse side effects for ranitidine have been reported as events in clinical trials:

1. Central nervous system: Rare reports have been made of ranitidine causing malaise, dizziness, somnolence, insomnia, and vertigo. In severely ill, elderly patients, cases of reversible mental confusion, agitation, depression, and hallucinations have been reported.

2. Cardiovascular: Arrhythmias such as tachycardia, bradycardia, atrioventricular block, and premature ventricular beats have also been reported.

3. Gastrointestinal: All drugs in the H2 receptor blocker class of medicines have the potential to cause vitamin B12 deficiency, secondary to a reduction in food-bound vitamin B12 absorption.

4. Liver: Cholestatic hepatitis, liver failure, hepatitis, and jaundice have been noted. Blood tests can reveal an increase in liver enzymes or eosinophilia, although in rare instances, severe cases of hepatotoxicity may require a liver biopsy.

5. Lungs: Ranitidine and other histamine H2 receptor antagonists may increase the **risk of Pneumonia in hospitalised patients**. They may also **increase the risk of community-acquired pneumonia in adults and children**.

6. Blood: Thrombocytopenia is a rare but known side effect. Drug-induced thrombocytopenia usually takes weeks or months to appear, but may appear within 12 hours of drug intake. Typically, the platelet count falls to 80% of normal, and thrombocytopenia may be associated with neutropenia and anaemia.

7. Skin: Rash, including rare cases of erythema multiforme, and rare cases of hair loss and vasculitis have been seen." - in "Wikipedia", 8 May 2020.

4 April 2020

US$100 Billion for Hospitals and other Medical Providers

*"**The White House plans to designate US$100 Billion in emergency spending approved by Congress to reimburse hospitals and other health care providers** for treating the estimated 28 Million people who are uninsured in the United States." - in "White House says it will use US$100 Billion to reimburse hospitals to treat uninsured Americans for coronavirus", ABC News, 4 April 2020.*

6 April 2020

*"Last week, **the head of the Nobel foundation Carl-Henrik Heldin** was among well over 2,000 physicians and academics who penned an open letter urging Sweden to shape up. **Some even demanded Stockholm, the capital, be locked down."** - in "Daily Mail", 6 April 2020.*

*"**Carl-Henrik Heldin is a Swedish Molecular Biologist and Medical Researcher.** Has been **director of the Uppsala branch of Ludwig Cancer Research since 1986 and professor in molecular cell biology at the Medical Faculty of Uppsala University since 1992. He is Vice-President of the European Research Council since 2011,** and was appointed chairman of the Nobel Foundation in 2013." - in "Wikipedia", 6 April 2020.*

State Aid: Commission approves £50 Billion UK "umbrella" Scheme to Support the Economy in the Coronavirus Outbreak

"The measure is a UK-wide National Temporary Framework for State aid, with an estimated budget of £50 Billion, and allows for the provision of aid in the form of:

d) Support for coronavirus related Research and Development (R&D);

e) Support for the **construction and upscaling of Testing Facilities to develop and Test Products** useful to tackle the coronavirus outbreak;

f) Support for the **production of products** relevant to tackle the coronavirus outbreak." - in "European Commission", 6 April 2020.

*"**Coronavirus: Some 460,000, nearly half a million Chinese companies close** in first quarter amid fallout from the coronavirus pandemic". - Sidney Leng in "South China Morning Post", 6 April 2020.*

*"**Begin to Test an Experimental coronavirus Vaccine** starting this week. Pennsylvania-based biotech Inovio Pharmaceuticals received regulatory clearance to begin testing. **The Bill and Melinda Gates Foundation, along with other nonprofits, have poured funding into Inovio's Vaccine project."** - in "A potential coronavirus vaccine funded by Bill Gates is set to begin testing in people, with the first patient expected to get it today", Business Insider, 6 April 2020.*

7 April 2020

EU Science Chief Resigns with Blast at Coronavirus Response

*"**The European Research Council,** set up in 2007 to fund Europe's best scientists, has become one of the world's most prestigious funding agencies **with a budget of around €2 Billion a year."** - in "The Financial Times", 8 April 2020.*

*"**The Commission has launched a €10 Million emergency research fund for the Coronavirus, and also directed €45 Million from its industry drugs partnership, the Innovative Medicines Initiative, to develop treatments and diagnostics."** - in "Politico", 8 April 2020.*

"The ERC, by law, funds research proposed directly by scientists – based on their own judgment of what's important; they get the money - €2.2 Billion in all for 2020.

Ferrari's statement says he knew his idea for "top-down" COVID19 grants ran counter to the agency's normal "bottom-up" practice, but it was justified by the emergency.

The ERC focuses on fundamental rather than applied research – and numbers **among its existing grantees Virologists, Epidemiologists** and others who have been doing basic research for the agency.

They include €48.5 Million for emergency Horizon 2020 collaborative projects for Vaccines, cures and tools; €45 Million to its Innovative Medicines Initiative; **€80 Million in financial support for German Vaccine maker Curevac;** and up to €164 Million in grants to small business with COVID-19 solutions to develop." - in "Science Business", 7 Apr 2020.

> ***"Mauro Ferrari, a pioneer of the application of nanotechnology to medicine will lead the ERC as the Horizon 2020 research programme**, through which it is funded, is succeeded by Horizon Europe at the start of 2021.*
> *The ERC's budget will increase from €13.1 Billion in Horizon 2020 to €16.6 Billion.* ***He holds dozens of patents for inventions including different varieties of nanoparticles for drug delivery."*** *- in "Science Business", 14 May 2019.*

"As it became evident that the pandemic would be a tragedy of possibly unprecedented proportions, I moved that the European Research Council should establish a special program directed at combating Covid-19.

I believed this was justified by the expected burden of death, suffering, **societal transformation, and economic devastation.**

I thought that at a time like this, the very best scientists in the world should be provided with resources and opportunities to fight the pandemic, **with New Drugs, New Vaccines, New Diagnostic Tools, New Behavioural Dynamic Approaches Based On Science, to replace the oft-improvised intuitions of political leaders."** - Mauro Ferrari in resignation memo, 7 April 2020.

"Mauro Ferrari, Other Activities, Corporate Boards:

1. AMBER, Member of the Scientific Advisory Board.
2. Arrowhead Pharmaceuticals, Member of the Board of Directors.
3. Dead Sea Research Institute, President of the int'l board of governors.
4. Leonardo Biosystems, Member of the Board of Directors.
5. NanoMedical Systems, Member of the Board of Directors." - in "Wikipedia", 8 April 2020.

9 April 2020

> ***"The lockdowns have come at a great cost. Another 6 Million more people filed for unemployment in the U.S. last week, which means, in the last few weeks, at least 16 million people have lost their jobs in the U.S. alone. Other countries are having it just as bad."*** *- in "Why Sweden Isn't Locking Down", NPR, 9 April 2020.*

"Stockholm – The primary schools are operating normally; gatherings of up to 50 people are still permitted; restaurants, shops, cafés and gyms remain open, although there are fewer customers.

Most limitations announced by the authorities are no more than recommendations.

Anyone displaying the symptoms characteristic of the coronavirus is asked to stay home, but other members of their family are not restricted from going to school or showing up for work.

Public transportation is operating, though people are encouraged to use it only when absolutely necessary, and the borders to most European countries are still open." - in "Why Sweden Isn't Forcing Its Citizens to Stay Home Due to the Coronavirus", Haaretz, 9 April 2020.

> ***"European Union sets aside €15.6 Billion for virus fight in Africa and beyond.*** *EU crisis management commissioner Janez Lenarcic said.* ***Some €3.25bn will go to Africa to pay for medical and sanitation projects."*** *- in "EuObserer", 9 April 2020.*

10 April 2020

> ***"As you know, we give the WHO approximately $500 Million a year,*** *and we're going to be talking about that subject next week. We'll have a lot to say about it." - Donald Trump, US President, "Press Briefing at the White House", 10 April 2020.*

"Aides to President Trump are debating some potentially far-reaching moves to punish the World Health Organization in the wake of the coronavirus pandemic, including cutting off U.S. funding and trying to create an alternative institution." - in "POLITICO", 10 April 2020.

"Coronavirus Reshapes Global Economy: Japanese Prime Minister Shinzo Abes, announced an economic stimulus package of $2.2 Billion to help Japanese companies to shift production out of china, and cut dependence on China." - in "International Business Times", 10 April 2020.

***"Thursday's Eurogroup agreement promised Italy loans** to deal with the health care costs of coronavirus; but refused to help it stave off economic catastrophe." - in "Jacobin", 10 April 2020.*

12 April 2020

National Institute of Allergy and Infectious Diseases Immunization, Infectious Diseases, and Influenza (Flu)

"Dr. Anthony Fauci, MD in 1984 was appointed Director of the National Institute of Allergy and Infectious Diseases, 1 of 27 Institutes and Centers of the National Institutes of Health (NIH).

He oversees an extensive research portfolio of basic and applied research to prevent, diagnose, and treat established infectious diseases such as: **HIV/AIDS, Respiratory Infections, Diarrheal Diseases, Tuberculosis, Malaria as well as Emerging Diseases such as Ebola and Zika**. The **NIAID budget** for fiscal year 2020 is an estimated **US$5.9 Billion**." - in "NIAID", 14 April 2020.

"The National Institutes of Health, a U.S. government agency, awarded a $3.7 Million research grant to the Wuhan Institute of Virology." - in "Daily Mail", 12 April 2020.

14 April 2020

WHO Launched an Appeal in March for US$675 Million to Help Fight the Coronavirus Pandemic and is Reported to be Planning a Fresh Appeal for At Least US$1Billion

"I am directing my administration to halt funding while a review is conducted to assess the World Health Organization's role in severely mismanaging and covering up the spread of the coronavirus." - Donald Trump, President of the US, in "Press Conference", White House, 14 April 2020.

"During the worst public health crisis in a century, halting funding to the World Health Organization is a dangerous step in the wrong direction that will not make defeating COVID-19 easier.

Fighting a global pandemic requires international cooperation and reliance on science and data.

Cutting funding to the WHO – rather than focusing on solutions – is a dangerous move at a precarious moment for the world.

The American Medical Association is deeply concerned by this decision and its wide-ranging ramifications, and we strongly urge the President to reconsider." - Dr Patrice A. Harris, MD, AMA President in, "American Medical Association", 14 April 2020.

15 April 2020

"Halting funding for the World Health Organization during a world health crisis is as dangerous as it sounds. Their work is slowing the spread of COVID-19 and if that work is stopped no other organization can replace them. ***The world needs WHO now more than ever." - Bill Gates, in "Twitter", 15 April 2020.***

"The US is the biggest single donor to the Geneva-based WHO. It contributed more than $400 million in 2019, roughly 15% of the WHO's annual budget. The second-largest funder is the Bill and Melinda Gates Foundation, which provides 9.8% of the WHO's funds." - in "How is the World Health Organization funded?", World Economic Forum, *15 April 2020.*

17 April 2020

"It's not a model that most of us in the infectious disease epidemiology field think is well suited" to projecting Covid-19 deaths, epidemiologist Marc Lipsitch of the Harvard T.H. Chan School of Public Health told reporters this week, referring to projections by the Institute for Health Metrics and Evaluation at the University of Washington." - Sharon Begley, in "Influential Covid-19 model uses flawed methods and shouldn't guide U.S. policies, critics say", 17 April 2020.

Vaccine Mania Drives Continued Lockdown

"Yesterday, the UK Government continued its unjust and irrational shutdown of major sectors of the economy and, incidentally, of large areas of the NHS. **They intensified Covid-19 Project Fear. Why does the UK persist with a policy which the rest of Europe is now abandoning?**

Social Distancing: "Indefinitely"

A comment from the false prophet whose biased modelling spooked the Government into starting the lockdown gives us a clue.

According to the BBC, Professor Neil Ferguson of Imperial College said we should expect a "significant level" of social distancing "indefinitely".

It would continue until a Vaccine for Covid-19 is rolling off the production line." - in "Christina Voice", 17 April 2020.

20 April 2020

£4.5 Billion + £300 Million

"£4.5 Billion is the amount the Treasury allocates to local government for local Public Health Services.

£300 Million is the Public Health England (PHE) annual budget from government." - in "PHE's response to a column in the Sun newspaper", 20 April 2020.

> *"NHS England works closely with Public Health England and the Department of Health to provide and commission a range of public health services. The NHS has a critical part to play in securing good population health. The public health functions agreement (Section 7A) is an annual agreement between the Secretary of State for Health and NHS England." - in "Public Health", NHS, 20 April 2020.*

NHS Funding

Figures as of 14 July 2017

1. NHS net expenditure (resource plus capital, minus depreciation) has increased from £78.881 Billion in 2006/07 to £120.512 Billion in 2016/17.

2. Planned expenditure for 2017/18 is £123.817 Billion, and for 2018/19 is £126.269 Billion.

3. The budget is expected to increase from £120.512 Billion in 2016/17 to £123.202 Billion by 2019/20." - in "NHS statistics, facts and figures", NHS Confederation, 14 July 2017.

Why we must be wary of Philanthropic Contributions by Bill Gates, Jeff Bezos and other Billionaires

"The problem lies in the distribution of power between human beings.

The coronavirus pandemic has produced a surge in philanthropic giving from some of the world's wealthiest people.

Bill and Melinda Gates, the foundation's influence shapes the global health agenda in a way that has been already been described as a "cartel", have committed funds to research the disease and manufacture a Vaccine when one becomes available.

Jack Dorsey, co-founder of Twitter, has pledged $1 Billion for "global Covid-19 relief".

Then there are Jack Ma, Li Ka-Shing, **George Soros,** Giorgio Armani and **Jeff Bezos** founder and CEO of Amazon.

Master and servant

Freedom is at risk when the imbalance of wealth and power is so stark.

Consider for a moment whether you would agree to be a slave.

How healthy can it be that so many people in the world are utterly dependent on the generosity of billionaires?" - Gwilym David Blunt, Lecturer in International Politics, City, University of London, in "The Conversation", 20 April 2020.

21 April 2020

Governments Must Act Now to Stop 265 Million Starving Warns World Food Programme

"This is truly more than just a pandemic - it is creating a hunger pandemic. This is a humanitarian and food catastrophe." - Beasley took his message to the UN security council, warning world leaders that they must act quickly in a fast-deteriorating situation.

Urged them to bring forward about US$2 Billion of aid that has been pledged, so it can get to the frontline as quickly as possible.

Another US$350 Million is also needed to set up the logistics network to get Food and Medical Supplies, including personal protective equipment, to where it is needed, including air bridges where ground transport is impossible." - Fiona Harvey, Environment correspondent, in "Coronavirus pandemic "will cause famine of biblical proportions", About this content; Global Development is supported by Bill & Melinda Gates Foundation, The Guardian, 21 April 2020.

23 April 2020

"Vaccines have saved more lives than any other tool in history.

Smallpox, which used to kill millions of people every year, was eradicated with a Vaccine.

New Vaccines have played a key role in reducing childhood deaths from 10 million per year in 2000 to fewer than 5 million per year today.

Short of a miracle treatment, which we can't count on, the only way to return the world to where it was before COVID-19 showed up is a highly effective Vaccine that prevents the disease.

Some countries, including **China required patients to turn over information about where they have been in the last 14 days by looking at GPS information on their phone or their spending records.**

A number of digital approaches are being proposed where phones detect what other phones are near them.

(It would involve using Bluetooth plus sending a sound out that humans can't hear but that verifies that the two phones are reasonably close to each other.)

The idea is that if someone tests positive then their phone can send a message to the other phones and their owners can get tested.

I think most countries will use the approach that Germany is using, which requires interviewing everyone who tests positive **and using a database to make sure there is follow-up with all the contacts.**

The pattern of infections is studied to see where the risk is highest and policy might need to change." - Bill Gates in "The first modern pandemic, The scientific advances we need to stop COVID-19", Innovation vs. the coronavirus, Gates Notes, 23 April 2020.

24 April 2020

"**The Scottish government wants to modernise and consolidate the law on what people are permitted to say to each other.** The Scottish administration's Hate Crime and Public Order Bill, introduced in Holyrood last week, aims to extend considerably the category of banned speech.

This should ring loud alarm bells." - in "The SNP's war on free speech", Spiked, 30 April 2020.

"**This new Hate Crime Bill is an important milestone.**

By creating robust laws for the justice system, Parliament will send a strong message to victims, perpetrators, communities and to wider society that offences motivated by prejudice will be treated seriously and will not be tolerated." - **Humza Yousaf, Justice Secretary, Scotland, in "Hate Crime Bill", Scottish Government**, 24 April 2020.

> *"At age 27, he was the youngest minister ever appointed to the Scottish Government, became Scotland's first Muslim cabinet minister when appointed as Cabinet Secretary for Justice in 2018. Appointed aged 33, he also became the youngest person to ever hold a cabinet position in the Scottish Government."- in "Wikipedia", May 2020.*

> ***"Our new campaign for the Scottish Government and Police Scotland. It's something we're really proud of."** - The Leith Agency, 26 September 2018.*

> ***"The hate crime bill is possibly the most sinister piece of legislation passed in the Scottish Parliament."** - Murdo Fraser, Member of the Scottish Parliament*

25 April 2020

Professor Lockdown

"Professor Neil Ferguson, of Imperial College London, authored a paper that prompted the UK to scrap its coronavirus strategy.

Ferguson's team warned Boris Johnson that the quest for "herd immunity" could cost 510,000 lives, prompting an abrupt U-turn.

Ferguson co-founded the MRC Centre for Global Infectious Disease Analysis, based at Imperial, in 2008.

It is the leading body advising national governments on pathogen outbreaks.

It gets tens of millions of dollars in annual funding from the Bill & Melinda Gates Foundation, and works with the UK National Health Service, the US Centres for Disease Prevention and Control (CDC), and is tasked with supplying the World Health Organization (WHO) with "rapid analysis of urgent infectious disease problems." - Bill Bostock, in "How "Professor Lockdown" helped save tens of thousands of lives worldwide — and carried COVID-19 into Downing Street", Business Insider, 25 April 2020.

27 April 2020

Court Rules Insurers can Collect US$12 Billion under Health Care Law

"The Supreme Court has ruled that Insurance Companies can collect US$12 Billion from the federal government to cover their losses in the early years of the health care law championed by President Barack Obama." *- Mark Sherman, AP, 27 April 2020.*

28 April 2020

"Gates Foundation spokesperson says: "As of mid-April, the foundation has provided WHO approximately $11 Million for its actions on Covid-19." *- in "Coronavirus: Bill Gates defends WHO from Trump, gives $11 Million", The African Report, 28 April 2020.*

Madagascar President Presents Herbal Drink Against COVID-19

"A drink made from Artemisia, a plant used in some malaria drugs, developed by Malagasy Institute of Applied Research, with more than 30 years research of Madagascar's traditional medicines." *- Laetitia Bezain, in "Associated Press", 28 April 2020.*

29 April 2020

"**Coronavirus patients can't relapse, South Korean scientists believe.**" -in "The Korea Herald", 29 April 2020.

Why Do So Many NHS Nightingale Hospitals Remain Empty?

"Nightingale hospitals are opening across the UK, but as r**eports emerge of thousands of empty beds** questions are being raised about the facilities. The West Midlands' Nightingale Hospital has yet to admit any patients more than a fortnight after becoming operational. **Scenes from northern Italy caused officials to worry the NHS would run out of intensive care beds and ventilators, or even that doctors could be forced to leave some patients to die**." - Verity Bowman, in "Why do so many NHS Nightingale hospitals remain empty?", The Telegraph, 29 April 2020.

Half the Global Workforce Could Lose Their Livelihoods Due To The Pandemic

"The continued sharp decline in working hours globally due to the COVID-19 outbreak means that 1.6 Billion workers in the informal economy – that is nearly half of the global workforce – stand in immediate danger of having their livelihoods destroyed.

> ***"Millions of workers, no income means no food, no security and no future."*** *- Guy Ryder, ILO Director-General*

As a result of the economic crisis created by the pandemic, almost 1.6 Billion informal economy workers (representing the most vulnerable in the labour market), out of a worldwide total of 2 Billion and a global workforce of 3.3 Billion, have suffered massive damage to their capacity to earn a living. This is due to lockdown measures and/or because they work in the hardest-hit sectors." - in "ILO: As job losses escalate, nearly half of global workforce at risk of losing livelihoods", International Labour Organization, 29 April 2020.

> ***"Gates Foundation donated $10 Million to the Vaccine Alliance GAVI to help fund efforts to tackle the COVID-19 pandemic in Africa. GAVI said the funds would be used to distribute and deploy any New Vaccines against COVID-19 once they are developed, trialled and licensed. GAVI a Public-Private Partnership backed by the Bill & Melinda Gates Foundation, World Health Organization WHO, World Bank, UNICEF, and others,*** *which arranges bulk buys to reduce Vaccine costs for poor countries." - in Reuters, 29 April 2020.*

"The Bill & Melinda Gates Foundation pledged US$ 750 Million to set up Gavi in 1999.

Since then, additional pledges have brought **the Foundation's total commitment to Gavi to date to over US $4 Billion.**

The Gates Foundation plays both a technical and financial role in the Vaccine Alliance's **efforts to shape Vaccine markets.**

It helps to gather data to inform our decision making and provides financial support for market investments.

Our partnership with Vaccine Companies in the industrialised world harnesses their research and technical expertise **to supply Vaccines that address the needs of developing countries.**

Representatives of the International Federation of Pharmaceutical Manufacturers & Associations (IFPMA) have one seat on the Gavi Board.

The IFPMA represents more than 55 members of national industry associations, including Johnson & Johnson, GlaxoSmithKline, Merck & Co., Novartis, Sanofi Pasteur, the vaccines division of Sanofi-Aventis and Pfizer.

Building on their engagement in the Children's Vaccine Initiative launched in 1990, IFPMA members have worked in partnership with the Vaccine Alliance since its launch in 2000, supplying vaccines to a number of key Gavi-supported programmes:

1. Janssen (former Crucell) supplied the first internationally-available, fully liquid pentavalent (5-in-1) vaccine Quinvaxem. In 2015, the company reaffirmed its pledge of making its pentavalent Vaccine available at UNICEF prices to Gavi transitioned countries over the next five years.

2. GlaxoSmithKline (GSK) extended its price-freeze commitment in favour of countries transitioning out of Gavi's financial support on 26 January 2015. GSK also reaffirmed that if the company identifies new manufacturing efficiencies that reduce the costs of

producing these vaccines, it will pass those savings on to Gavi and its donors.

3. Merck has provided funding for various Vaccine initiatives in the past, including the Merck Vaccine Network - Africa; as well as a programme providing rotavirus Vaccination for all infants in Nicaragua from 2006 to 2009. Merck is expected to supply about 2.4 million doses of GARDASIL, the Vaccine against HPV, between 2013 and 2017. As part of its commitment to protecting children's health by improving affordability, availability, and accessibility of Vaccines, in 2015 Merck extended its Gavi prices for Gardasil [Human Papillomavirus Quadrivalent (Types 6, 11, 16, and 18) Vaccine, Recombinant] and RotaTeq (Rotavirus Vaccine, Live, Oral, Pentavalent) to countries that have transitioned out of Gavi's financial support for 10 years (2016-2025). This commitment will be available through the UNICEF procurement process to countries that have a GNI per capita of US $3200 and less.

4. Sanofi Pasteur committed in 2015 to expand the production of yellow fever vaccine to address chronic shortages, and promised to offer Gavi-level pricing for Gavi transitioned countries until the end of 2018. The company will also continue to contribute to the polio endgame by providing inactivated polio vaccine to Gavi countries for delivery in routine immunisation. The company also announced the expansion of its EPIVAC vaccinator training programme in Nigeria, in collaboration with Agence de Médecine Préventive.

5. Pfizer recently agreed to reduce the price per dose for its pneumococcal vaccine, from US$ 3.30 per dose to US$ 3.10 per dose for the new 4-dose vial presentation, which is expected to be introduced under the Advance Market Commitment programme. This new lower price will be extended to all Gavi-eligible and transitioned countries until the end of 2025.

Research and Technical Health Institutes

Tapping into the latest information and thinking from the scientific, medical and product delivery communities.

Partnering with the research community allows us to tap into the latest information and thinking from the scientific, medical and product delivery communities.

At the same time, it keeps the research community abreast of our policy directions and programmatic needs.

The relationship has repeatedly enabled us to deliver on our mission by generating and communicating the evidence base required by global and national decision-makers to argue in favour of introducing new and underused Vaccines.

This includes information about disease burden, Vaccines' effectiveness and safety, and health economics.

The research and technical institutes constituency has one seat on the Gavi Board.

Accelerated Development and Introduction Plans

In 2002, Gavi funds set up two Accelerated Development and Introduction Plans (ADIPs) **to put 2 new life-saving Vaccines on the agendas** in both donor and developing countries:

1. The Pneumo-ADIP, led by **Johns Hopkins University Bloomberg School of Public Health, which focused on pneumococcal Vaccines;**

2. The Rotavirus Vaccine Programme, led by Seattle-based PATH, WHO and **the U.S. Centers for Disease Control (US CDC), which concentrated on rotavirus Vaccines.**

HIB Initiative

In 2005, we reached out to research and technical institutes to help raise awareness of the disease burden of Haemophilus influenzae type b (Hib) and the existence of effective life-saving Vaccines.

The resultant Hib Initiative drew on the expertise of the US CDC, the London School of Hygiene and Tropical

Medicine, the Johns Hopkins University and WHO to play a lead role in laying the groundwork in developing countries for a dramatic uptake of Hib Vaccines.

By 2008, as the ADIPs and the Hib Initiative concluded their work, Gavi recognised the continuing need for a coordinated effort to support countries in making evidence-based decisions to introduce new Vaccines, including those against rotavirus and pneumococcal disease, and to create a platform for introducing other new Vaccines.

Accelerated Vaccine Introduction Initiative

To provide this support, we created the Accelerated Vaccine Introduction initiative (AVI) in 2008.

The AVI was a partnership with WHO, UNICEF and a consortium of technical partners including PATH, the Johns Hopkins University, the US CDC, Aga Khan University (Pakistan), International Vaccine Institute (South Korea), Norwegian Institute of Public Health (Norway) and University Of The Witwatersrand, Johannesburg (South Africa).

The partners contributed to several aspects of AVI including:

1. Conducting a series of studies generating information (safety, immunogenicity, efficacy and health economic data) to inform policy decisions;

2. Generating long-term strategic demand and supply forecasts for **New Vaccines**;

3. Supporting advocacy for New Vaccines, including the need for funding from global donors to finance the purchase of live-saving Vaccines.

Industrialised Country Governments

Contribute funding as well as expertise in international development programmes.

Industrialised countries are Gavi's principal donors, providing approximately three-quarters of our total

funding. Five industrialised country governments are represented on the Gavi Board, usually by officials from development agencies or ministries of finance.

> *"Never in history has progress in health been faster than during the last 4 years and Gavi has been a major contributor. This should inspire even harder work." - Erna Solberg, Prime Minister of Norway*

Industrialised country governments have played a catalytic role in formulating and supporting innovative approaches to financing Gavi:

International Finance Facility for Immunisation

The International Finance Facility for Immunisation (IFFIm) drew on proposals put forward in 2002 by the former **UK Finance Minister Gordon Brown**. IFFIm has been actively supported by the UK Government, where IFFIm's first bonds were issued in 2006.

Advance Market Commitments

Italy actively promoted the concept of Advanced Market Commitments (AMC) among G7 governments, who later backed the pilot AMC for Pneumococcal Vaccine. The AMC was launched in Italy in 2007, and formally activated in June 2009." - in "Gavi", 2020.

> *"Bill and Melinda Gates have announced one of the biggest charitable donations in history – an unprecedented **$10 Billion investment in Vaccines for children in poor countries over the next decade. At the World Economic Forum in Davos, Gates called for "A Decade of Vaccines".** It will pay for a big push to step up coverage of existing Vaccines, such as for diphtheria, tetanus and whooping cough, and new ones for pneumonia and diarrhoeal diseases. The Gates Foundation has made child immunisation the cornerstone of its work in the developing*

*world. **"Vaccines are a miracle** – with just a few doses, they can prevent deadly diseases for a lifetime," said Melinda Gates. Bill and Melinda Gates have already committed a total of US$4.5 Billion to the research, development and delivery of various Vaccines." - in "The Guardian", 29 January 2010.*

*"Technology is a boom-or-bust business, but it's mostly busts. I've always assumed that 10% of my technology investments will succeed—and succeed wildly. The other 90% I expect to fail. When I made the transition from my first career at Microsoft, to my second career in philanthropy, I didn't think that my success rate would change much. I was now putting money into new ways to reduce poverty and disease. **Discovering a New Vaccine, I figured, would be just as hard as discovering the next tech unicorn.** (Vaccines are much harder, it turns out.) After 20 years of investing in health, though, one type of investment has surprised me—because, unlike **investing in a new Vaccine or technology,** the success rate is very high. It's what people in the global-health business call "financing and delivery." **Decades ago, these investments weren't sure bets, but today, they almost always pay off in a big way."** - Bill Gates in "The Best Investment I've Ever Made", The Wall Street Journal, 16 January 2019.*

1 May 2020

*"For the past few weeks, the number of deaths in Wilton, Connecticut attributed to the coronavirus was reported by the state as 11. That number is now 31, according to First Selectwoman Lynne Vanderslice. **The ages of those who have died in Wilton from the coronavirus have ranged from 69 to 96."** - Patricia Gay, in "Wilton coronavirus deaths jump to 31, all aged 69 and older", Houston Chronicle, 1 May 2020.*

Bristol Nightingale Hospital still empty week after construction work was finished

"No patients have been admitted to any of the 300 beds yet. *It is 1 of 7 Nightingale Hospitals along with others in East London (ExCeL conference centre), London, Birmingham, Manchester, Harrogate, Cardiff, Glasgow, Belfast." - Sophie Grubb, in "Bristol's Nightingale Hospital remains empty a week after opening", Bristol Live, 1 May 2020.*

2 May 2020

Nightingale Hospitals Empty

"At the peak of the crisis, Easter weekend, figures from NHS showed that 40.9% of acute beds were Unoccupied about 4 times the normal number. The Nightingale Hospitals are still largely unused, just 19 patients were being treated at the 4,000 bed east London hospital.

"There is no disease on the planet that would mean we would intubate and ventilate 70% of over 80 year old's, because they don't survive - they're too frail. The modelling assuming 7 in 10 patients over 80 would be intubated or ventilated was so far from real world practice, that it's kind of laughable. The more frail you are, the longer it takes to recover from an admission to ICU, and the more likely you will die from complications on the unit. *Recovery can take years, and is often partial." - Group of Senior Intensive Care Doctors*

Oxford University found there has been no surge in viral pneumonia deaths, suggesting predominant cause of Covid deaths is **non-respiratory.**

That points to the fact that this is a multi system disorder affecting your heart, your circulation, but not of

something that requires ventilation." - Tom Morgan, Sarah Knapton, Science Editor, in **"Crystal Ball Gazing" over Covid-19 has left Nightingale hospitals empty"**, The Telegraph, 2 May 2020.

> *"Things we thought were going to be really useful like* ***Ventilators, turned out that almost like half of them aren't being used,*** *nearly I think something like* ***48% of NHS beds are empty****." - Dr. Ed Hacking, MD, London Resident, in "'Useless' coronavirus PPE gowns flown in from Turkey are impounded after failing NHS safety tests", The Sun, 7 May 2020.*

3 May 2020

Amazon Reports US$75.5 Billion Revenue First Quarter of 2020

"Amazon boss Jeff Bezos, already the world's richest man with personal wealth somewhere in the region of US$145 Billion, is enjoying a sudden surge in his fortunes as more of us are shopping from home than ever." - in "Daily Star", 3 May 2020.

9 May 2020

America's $4 Trillion Medical Trade Sector

"Health-related firms in the S&P 500 have outperformed the broader index since March, when Covid-19 first hit America hard. On 5 May Regeneron, a biotech firm with a promising antibody cocktail, reported first-quarter sales of $1.8 Billion, a third more than last year. Gilead has received emergency approval to use remdesivir, an antiviral agent it is developing, in coronavirus patients; its share price is up by 19% this year." - in "The Economist", 9 May 2020.

Average patient requiring hospital treatment for Covid-19 will incur a bill totalling $72,000 over a 12-day stay

"Our research for hospital costs using a claims database from a large actuarial consulting firm suggests that **the cost of hospitalization for related illnesses like the flu and pneumonia is approximately $72,000 for a 12-day average length of stay, confirmed by interviews with commercial payers.** The one-year projected costs in the national commercial market range from $34 Billion to $251 Billion for testing, treatment and care specifically related to COVID-19 — with the potential that costs could be higher than the high end of the range. Potential COVID-19 costs for 2020 could range from about 2% of premium to over 21% of premium if the full first-year costs of the epidemic had been priced into the premium.

Health Insurance Premiums Could Rise by Over 40% Due to Coronavirus

Health carriers are in the process of setting rates for 2021. If carriers must recoup 2020 costs, price for the same level of costs next year, and protect their solvency, 2021 premium increases to individuals and employers from COVID-19 alone could range from 4% to more than 40%.

The cost estimates are based only on the impacts due to testing and treatment for COVID-19, do not include any estimates of cost impacts related to the potential impact to utilization for other conditions that may result from COVID-19's significant impact to the health care delivery system." - in "The Potential National Health Cost Impacts to Consumers, Employers and Insurers Due to the Coronavirus (COVID-19)", Covered California, 22 March 2020.

15 May 2020

Operation Warp Speed

"On 15 May 2020, President Donald Trump officially announced Operation Warp Speed, a project to develop and deliver 300 million doses of a Vaccine for the Covid19 by January 2021.

Operation Warp Speed was managed by White House senior adviser Jared Kushner with the support of the United States Department of Defence and the United States Department of Health and Human Services.

> ***"It is a huge conflict of interest for the White House's new Vaccine czar to own $10 Million of stock in a company receiving government funding to develop a COVID-19 Vaccine."*** *- Elizabeth Warren, US Senator in "@SenWarren", Twitter, 15 May 2020.*

> *"Moncef Slaoui, a former Moderna board member who was tapped to lead the White House's effort to quickly develop a COVID-19 vaccine, will divest himself of his US$10 Million in stock options in the pharmaceutical company." - in "Newly appointed coronavirus czar, Moncef Slaoui, will divest his US$10 million in Moderna stock options", Business Insider, 18 May 2020.*

Moncef Mohamed Slaoui a Moroccan-born researcher and former head of GlaxoSmithKline's Vaccines department.

He worked at the company for thirty years, retiring in 2017.

On May 15, 2020, President Donald Trump announced that Slaoui would manage the U.S. government's development of a Vaccine used to treat coronavirus disease in Operation Warp Speed.

"Last year, GlaxoSmithKline (GSK) surprised the industry with its decision to trade its oncology business for Novartis' Vaccine business. But the US$20-billion asset swap made GSK the largest Vaccine company in the world, says Moncef Slaoui, Chairman of Vaccines at GSK." - in "Nature Reviews Drug Discovery", Vol. 14, 2015.

In 2007, he announced plans to establish a neurosciences research group in Shanghai that would employ a thousand scientists and cost $100 Million; it ceased operations in August 2017.

In 2008, Slaoui led the $720 Million acquisition of Sirtris Pharmaceuticals, which folded in 2013.

In 2012, he oversaw GSK's purchase of Human Genome Sciences for over $3 Billion.

The Slaoui Center for Vaccines Research in Rockville, Maryland—named after Slaoui and GSK's first research and development institute in the United States—was opened on 14 December 2016.

Slaoui spent 30 years working at GSK.

During his time there, Slaoui oversaw the development of numerous vaccines, including Cervarix to prevent cervical cancer, Rotarix to prevent gastroenteritis in children, and an Ebola Vaccine.

He also spent 27 years researching on a malaria Vaccine, Mosquirix, that was approved by the European Medicines Agency in 2015 and touted as the first in the world.

In 2016, he discussed GSK's development of bioelectronic medicine.

Slaoui left GSK on 30 June 2017.

In September 2017, he joined European venture capital firm Medicxi." - in Wikipedia, 21 May 2020.

21 May 2020

China to Impose Security Law in Hong Kong Heralding The End of City's Autonomy

"China's Communist Party will impose a sweeping national security law in Hong Kong by fiat, criminalizing "foreign interference" along with secessionist activities and subversion of state power.

The move to undercut Hong Kong's autonomy and bring the global financial hub under its full control.

After steadily eroding Hong Kong's political freedoms, **Beijing signaled that the national security law will be a new tool that allows it to directly tackle the political dissent that erupted on Hong Kong's streets** last year.

The months-long and sometimes **violent protests began last June and fizzled out only over public health concerns related to the coronavirus outbreak."** - in "Washington Post", 21 May 2020.

22 May 2020

Lockdown Measures Resulted in Economic Devastation also Resulted in More Deaths

"**A JP Morgan study suggests lockdown measures have not only resulted in economic devastation but could have also resulted in more COVID-19 deaths.**

Strict stay-at-home orders put in place in most states to stop the spread 2 months ago has so far seen nearly 39 million American lose their jobs.

The JP Morgan report says that restarting the US economy may not lead to a second surge in infections that health experts have feared.

Report says infection rates have been falling seen since lockdown measures were lifted in parts of the country.

Alabama, Wisconsin and Colorado are among those that saw lower infection rates after lockdown measures were lifted, according to the report." - in "Many US states have seen LOWER infection rates after ending lockdowns that **are now destroying millions of livelihoods worldwide**, JP Morgan study claims", Daily Mail, 22 May 2020.

> ***"Stay-at-home orders intended to curb the spread of the coronavirus could end up causing "irreparable damage" if imposed for too long,*** *White House health advisor Dr. Anthony Fauci told CNBC." - in "Dr. Anthony Fauci says staying closed for too long could cause irreparable damage", CNBC, 22 May 2020.*

Prominent German Prof Says COVID-19 Lockdown "Completely Unnecessary", "Unbelievably Damaging To The Economy"

"Finance Prof. Dr. Stefan Homburg of the Leibniz University of Hanover said Germany's **lockdown has "amounted to nothing"**, has had no effect on the spread of the corona virus and that the spread had already slowed down below a reproduction number of 1.0 before the lockdown. Citing data from Robert Koch Institute.

Panic Fanned by Absurd Numbers

"Ineffective, completely unnecessary, Enormous economic damage. There is not going to be any terrible epidemic. All the panic was fanned by the Robert Koch Institute, who said on 20 March 2020 that in the best case we will see 300,000 dead, and maybe 1.5 Million dead. It's unbelievable that the **government allowed itself to be so misled.** It's completely unimaginable. **Huge damage is being caused. People and businesses are being financially ruined without any reason at all."** - Prof Dr Stefan Homburg, in "New RKI figures contradict, RK Chancellor Merkel", 17 April 2020.

"Politicians and their public health sidekicks have handled this corona virus amounts to the worst public policy decision making of the last few centuries." - James Allan, in "Spectator Australia", 20March 2021.

24 May 2020

Imperial College London

Report No.23

COVID-19 in the United States

"As of 20 May 2020, the US Centers for Disease Control and Prevention **reported** 91,664 confirmed or **probable** COVID-19-related deaths, more than twice the number of deaths reported in the next most severely impacted country.

In order to control the spread of the epidemic and prevent health care systems from being overwhelmed, US states have implemented a suite of non-pharmaceutical interventions (NPIs), including "stay-at-home" orders, bans on gatherings, and business and school closures.

Nationally, our estimates show that the percentage of individuals that have been infected is 4.1%, with wide variation between states.

For all states, even for the worst affected states, we estimate that less than a quarter of the population has been infected; in New York, for example, we estimate that 16.6% of individuals have been infected to date.

Our estimates suggest that the epidemic is not under control in much of the US: as of 17 May 2020, the reproduction number is above the critical threshold (1.0) in 24 states.

Higher reproduction numbers are geographically clustered in the South and Midwest, where **epidemics are still developing**, while we estimate lower reproduction numbers in states that have already suffered high COVID-19 mortality (such as the Northeast).

These estimates suggest that **caution must be taken in**

loosening current restrictions if effective additional measures are not put in place.

We predict that increased mobility following relaxation of social distancing will lead to resurgence of transmission, keeping all else constant.

We predict that deaths over the next two-month period could exceed current cumulative deaths by greater than two-fold, if the relationship between mobility and transmission remains unchanged.

Our results suggest that factors modulating transmission such as rapid testing, contact tracing and behavioural precautions are crucial to offset the rise of transmission associated with loosening of social distancing.

Overall, we show that while all US states have substantially reduced their reproduction numbers, we find no evidence that any state is approaching herd immunity or that its epidemic is close to over."

Imperial College COVID-19 Response Team:

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4 June 2020

Gavi Advance Market Commitment for COVID-19 Vaccines (Gavi Covax AMC)

"New financing mechanism, aimed at supporting affordable access for developing countries, is first building block in broader initiative to create a Covax Facility for global access to eventual COVID-19 vaccines.

Gavi, the Vaccine Alliance today launched the Gavi **Advance Market Commitment for COVID-19 Vaccines** (Gavi Covax AMC), **a new financing instrument aimed at incentivising vaccine manufacturers to produce sufficient quantities of eventual COVID-19 vaccines**, and to ensure access for developing countries. The Gavi Covax AMC is being launched with an initial goal of raising US$ 2 Billion." - in "Gavi launches innovative financing mechanism for access to COVID-19 vaccines", Gavi, the Vaccine Alliance , 4 June 2020.

> ***"The Bill & Melinda Gates Foundation today announced a 5-year, US $1.6 Billion commitment to Gavi, the Vaccine Alliance, to deliver lifesaving Vaccines to the world's poorest countries. The commitment was announced at the Global Vaccine Summit 2020, hosted by Prime Minister Boris Johnson of the United Kingdom."*** *- in "Bill & Melinda Gates Foundation" 4 June 2020.*

India Pledges 15 Million

"Prime Minister Narendra Modi on Thursday pledged USD $15 Million as India's contribution to the Vaccines alliance GAVI at the Global Vaccine Summit hosted by the UK." *- in "PM Modi pledges USD $15 Million to global vaccines alliance GAVI", The Economic Times, 4 June 2020.*

5 June 2020

Vaccine Summit Raise £7 Billion

"Almost £7 Billion has been raised to immunise 300 million children at a virtual global Vaccine summit hosted by the UK. Prime Minister Boris Johnson said up to 8 million lives would be saved as a result of the funds pledged at the Gavi Vaccine summit on Thursday.

The money will help immunise children against diseases like polio, diphtheria and measles over 5 years.

Mr Johnson said the triumph of humanity over disease was the "greatest shared endeavour of our lifetimes". Mr Johnson pledged £1.65 Billion over the next 5 years, making the UK the organisation's biggest donor." - in "Vaccine summit exceeds target to raise almost £7bn", BBC, 5 June 2020.

6 June 2020

Saudi Arabia pledges $150 Million

"World leaders attend virtual meeting of Bill Gates-led drive to develop COVID Vaccine. The Kingdom announced in March that it would contribute $500 Million to international efforts to fight the virus. **In 2016, the Kingdom contributed $25 million to support the efforts of GAVI and its mission."** - in "Saudi Arabia pledges $150 Million at GAVI vaccine summit", Arab News, 6 June 2020.

"Over time we will need to Vaccinate very large percent parts of the population of the world's 7 Billion of people." - Dr Jeremy Farrar, MD, Director of the Wellcome Trust, *in "Coronavirus:* ***the global race for a Vaccine****", **Financial Times,** 25 June 2020*

The Case of the Countries That didn't Forced Social Distancing

Sweden; Population 10 Million

"Sweden 13,578 deaths as of 8 April 2021" - in "Coronavirus COVID-19 Global Cases Map, Johns Hopkins Center for Systems Science and Engineering".

"Sweden has closed senior high schools and banned gatherings of more than 50 people, the prime minister, Stefan Löfven, has preferred to rely on Swedes sense of civic responsibility, asking rather than ordering them to avoid non-essential travel, to work from home and to stay indoors if they are over 70 or are feeling ill." - in "The Guardian", 5 April 2020.

Sweden

Influenza Seasons 2015–16 to 2018–19

"On average, 11,000 patients were treated for influenza in closed care or in specialized open care each season.

There are large variations in morbidity and mortality between different seasons.

Every season, a large part of Sweden's population falls into the flu. Influenza is a respiratory infection.

Common symptoms are:

1. High Fever
2. Headache
3. Muscle Pain
4. Sore Throat
5. Cough

Influenza is every most common during the winter season.

Influenza-related mortality

On average 685 people per season die from flu, according to the National Board of Health and Welfare's records.

This compilation includes those who have influenza as a contributing, or underlying cause of death, as well as patients who are cared for in specialist care with an influenza diagnosis and then died within 30 days regardless of the cause of death.

The number of people suffering from influenza as the underlying or contributing cause of death according to the cause of death register has on average been 508 per season.

Probably there are more people who die, but the flu is not registered as a cause of death on the cause of death certificate, or as a diagnosis in specialist care.

The public health authority's models for estimating total influenza-related mortality show higher mortality.

Unusually Many Sick, Season 2017–2018

The season with the most casualties was 2017–2018, when just over 1,100 people died. **Only 68 of these people (6%) were under 65 years. More than half of the deceased 2017–2018 were 85 years or older.**

Older people are more often admitted to hospitals.

It is primarily people 65 years or older who were cared for in closed care for influenza.

The vast majority were 75 years or older.

However, in the 2015–2016 season, there were unusually many in the 40–64 age group who were admitted to closed care.

Of all those who were hospitalized with an influenza diagnosis died an average of 7%.

The highest proportion of the deceased is found in the group 85 years and older. The age of 0 to 39 is very low." - in "Socialstyrelsen", National Board of Health and Welfare, Art. No: 2020-4-6737, 8 April 2020.

Deaths in Retirement & Care Homes

"Last week, health officials announced 40% of deaths in the Stockholm region (the epicentre of the epidemic), could be traced ***to retirement and care homes."*** *- in "Swedish coronavirus model under fire as deaths rise", France 24, 15 April 2020.*

"In Spain, where 10,905 people have died in the pandemic, the Madrid region has been worst affected with 4,483 deaths. The president of the Madrid region, Isabel Díaz Ayuso, estimates that ***3,000 people died in care homes*** *in March and says that figure is 2,000 higher than normal." - in "Coronavirus: Europe's care homes struggle as deaths rise", BBC News, 3 April 2020.*

Deaths in Healthcare Establishment

"In 2016, 594,000 people died in France: 59% died in a Healthcare Establishment, 26% at Home, 14% in a Retirement Home and 1% on the public highway. At every age, most deaths take place in a health facility. After 100 years, the share of deaths in the home is the same as in a retirement home (36%)." - Vanessa Bellamy, in "594 000 personnes décédées en France en 2016", Institut National Statistique Etudes Economiques, 12 October 2017.

Taiwan;
Population 23 Million

"Taiwan 10 deaths as of 8 April 2021." - in "Coronavirus COVID-19 Global Cases Map, Johns Hopkins Center for Systems Science and Engineering".

Nicaragua;
Population 6 Million

"The response of the Nicaragua government to the coronavirus disease 2019 (COVID-19) pandemic has been perhaps the most erratic of any country in the world to date.

Directly contradicting mitigation strategies recommended by WHO, **has refused to encourage any physical distancing measures, instead called on to congregate in street marches under the slogan "love in the time of COVID-19."**

Nicaragua is the only country in central America that has yet to declare a state of emergency in response to the outbreak.

If the government's senior leadership continues to ignore calls for strong mitigation efforts, the fragile public health infrastructure could collapse under the pressure of widespread infection." - in "Love in the time of COVID-19: negligence in the Nicaraguan response", The Lancet Global Health, 6 April 2020.

Number of Deaths Attributed to COVID-19 in Nicaragua

"Nicaragua 179 deaths as of 8 April 2021" - in "Coronavirus COVID-19 Global Cases Map, Johns Hopkins Center for Systems Science and Engineering".

Tanzania
Population; 56 Million

Number of Deaths Attributed to COVID-19

"Tanzania 21 deaths as of 8 April 2021" - in "Coronavirus COVID-19 Global Cases Map developed by the Johns Hopkins Center for Systems Science and Engineering".

Countries that Reported No Deaths from Covid-19

Anguilla	Gibraltar	Saint Lucia
Burundi	Greenland	Saint Pierre
Bhutan	Guinea-Bissau	Miquelon
Cambodia	Laos	Seychelles
Caribbean	Macao	St. Barth
Netherlands	Madagascar	St. Vincent
Chad	Maldives	Grenadines
Central African	Mozambique	Sao Tome and
Republic	Mongolia	Principe
Dominica	Montserrat	Sierra Leone
Equatorial	Namibia	South Sudan
Guinea	Nepal	Timor-Leste
Eritrea	New Caledonia	Uganda
Faeroe Islands	Papua New Guinea	Vatican City
Falkland Islands	Réunion	Vietnam
Fiji	Rwanda	Western Sahara
French Polynesia	Saint Kitts and Nevis	Yemen
Grenada		

These countries have declared ZERO Deaths from "Covid-19" by 8 April 2021.

Coronavirus Symptoms

Symptoms of Novel Coronavirus Pneumonia (COVID-19) are similar to those of the Flu (Common Cold / Influenza).

Frequent Coronavirus Symptoms:

1. Fever (also a flu symptom)
2. Dry Cough (also a flu symptom)
3. Fatigue (also a flu symptom)
4. Worsening Symptoms (also a flu symptom)
5. Shortness of Breath, breathing difficulties
6. Pneumonia
7. Chills
8. Chest Pain

> ***"If grippe condemns, the secondary infections execute."*** *- Louis Cruveilhier, quote in "Action of the pneumococcal serum during pneumonia and in complications of influenza", Annals of the Institut Pasteur, Paris, 1919.*

Comorbidity

"**Comorbidity:** means more than 1 illness or disease, occurring in one person at the same time.

Multimorbidity: means more than 2 illnesses or diseases occurring in the same person at the same time. Many older people now have more than one illness.

Alongside comes **Polypharmacy**, or the prescription of many medications. An audit I carried out a few years ago in an acute admission ward for older people revealed the average number of prescribed medications per patient was 7. I frequently meet older people who cannot tell me why they are taking certain medications, as well as individuals who have had medications prescribed for many years." - Sarah McGeorge, in "Morbidity", Nursing Older People, Royal College of Nursing, June 2011.

"Comorbidity, which is the experience of other disorders or diseases in addition to an index condition, is common in older patients and is set to increase as the population ages.

This article explores these issues in the context of heart failure, a condition that falls disproportionately on older people and where comorbidity is the norm rather than the exception.

In heart failure comorbidity impacts on the diagnosis and management of patients and adversely impacts on their self-care activities, including symptom recognition, lifestyle modifications, drug adherence and contact with health professionals.

Over the past decade health care has become preoccupied with national, standardized guidelines and single disease pathologies.

Nursing as a profession has developed along this trajectory with increasingly disease-targeted specialist roles.

It is time for health care to broaden its focus onto the patient as a whole, and for nursing to reestablish its professional roots in a holistic approach." - C.A. Rushton, Lecturer Nursing, School of Nursing and Midwifery, Keele University, Staffordshire, Dr D.K. Satchithananda, MD, Heart Failure Cardiologist, University Hospital North Staffordshire, Stoke-on-Trent; Dr U.T. Kadam, MD, Senior Lecturer General Practice/Epidemiology, Arthritis Research Campaign National Primary Care Centre, Keele University, Staffordshire, in "Comorbidity in modern nursing: a closer look at heart failure", British Journal of Nursing, 2011.

"Multiplex Polymerase Chain Reaction Detection was performed to detect: influenza A virus, influenza B virus, adenovirus, coronavirus OC43, coronavirus 229E/NL63, respiratory syncytial virus, rhinovirus, human metapneumovirus, parainfluenza virus, bocavirus, and enterovirus.

Influenza patients who were confirmed to have complications or have clinical symptoms limiting physical activities severely were hospitalized.

Hypertension, Diabetes, Chronic Lung Diseases, Cardiovascular Disorders, and Neuromuscular Diseases were independently associated with hospitalization due to Influenza.

Physicians should assess and treat the underlying comorbid conditions as well as influenza viral infections for the appropriate management of patients with influenza." - in "A Comparison of the Clinical and Epidemiological Characteristics of Adult Patients with Laboratory-Confirmed Influenza A or B during the 2011–2012 Influenza Season in Korea: A Multi-Center Study", PLoS One, 2013.

"Bloodstream infections are an important cause of morbidity and mortality in patients". *- Dr Florence Fenollar, MD, Dr Didier Raoult, MD, in "Molecular diagnosis of bloodstream infections caused by non-cultivable bacteria", International Journal of Antimicrobial Agents, 2007.*

"Measurement of viral load has proven valuable in the investigation and treatment of infections with HIV, hepatitis C virus, and other viruses. ***A few studies published so far have assessed bacterial load. Meningococcal load on admission in patients with meningococcal sepsis or meningitis was shown to correlate well with severity of disease."*** *- in "New developments in the diagnosis of bloodstream infections", The Lancet Infectious Diseases, December 2004.*

"Of all infectious diseases that the world has experienced, only a few have truly altered the history of humankind." *- Dr Didier Raoult, MD, Dr Theodore Woodward, MD, Dr J. Stephen Dumler, MD, in "The history of epidemic typhus", Infectious Diseases Clinics North America, 2004.*

"Typhus Abdominalis, which is the German term for typhoid fever." *- in "The Lancet", Typhus & Typhus, 18 October 1924.*

"Chronic Comorbid are common in critically ill patients and may influence the acute illness, the types and intensity of care delivered, and outcomes in the Intensive Care Unit (ICU).

Furthermore, the presence of comorbid diseases may alter the risk of developing other diseases encountered in the critically ill population.

For example, chronic comorbid conditions are present in 54% to 65% of all Sepsis patients and impact outcomes among not only patients with Sepsis, but among acutely ill patients overall.

Certain diseases have been suggested to increase the risk of developing Sepsis, including: Diabetes Mellitus (DM), Chronic Liver Disease, HIV, and cancer.

The most common causes of pneumonia in critically ill HIV patients are Pneumocystis carinii pneumonia, Streptococcus, Pseudomonas, Staphylococcus, Haemophilus influenza, and tuberculosis.

The prevalence of Chronic Obstructive Pulmonary Disease (COPD) varies from 5% to 17% across global regions and is a particularly common comorbid condition in ICUs.

One of the most common reasons for ICU admission in patients with COPD is respiratory compromise resulting from pneumonia, for which one important difference is the type of pathogenic organisms, including a higher incidence of Pseudomonas.

A prospective, multicenter, observational study in patients with Severe Pneumonia noted that ICU mortality and mechanical ventilation rates were higher in patients with Chronic Bronchitis or Emphysema.

Furthermore, ICU mortality was higher for patients who failed noninvasive ventilation, which may be predicted by older age and more comorbidities.

We have assessed chronic comorbid conditions such as DM, COPD, cancer, end-stage renal disease, end-stage liver disease, HIV, and obesity that are common in the ICU population and that may have a significant impact on the course of critical illness, complications, and outcomes.

The outstanding theme is that poor outcomes are the result of the presence of multiple organ dysfunction and multiple comorbidities rather than a single comorbidity." - Dr Annette M. Esper, MD, Dr Greg S. Martin, MD, in "The Impact of Cormorbid Conditions on Critical Illness", Crit. Care Med., 2011.

> *"Comorbidity may contribute to mortality; 60% of fatal cases reported worldwide older than 50 years had cardiac or pulmonary disease; similarly, in California, more than 80% of cases aged 50 years or older had other underlying medical conditions. More than 70% of adult and 60% of pediatric cases had underlying medical conditions that are associated with severe seasonal influenza." - Dr Janice K. Louie, MD, et al., in "Factors Associated With Death or Hospitalization Due to Pandemic 2009 Influenza A(H1N1) Infection in California", JAMA, 4 November 2009.*

"Early data from COVID-NET suggest that COVID-19–associated hospitalizations in the United States **are highest among older adults, and nearly 90% of persons hospitalized have one or more underlying medical conditions.**

Among 167 patients with available data, the median interval from symptom onset to admission was 7 days.

The most common signs and symptoms at admission included:

1. Cough (86.1%)
2. Fever or chills (85.0%)
3. Shortness of breath (80.0%)
4. Gastrointestinal symptoms;
   Diarrhoea (26.7%)
   Nausea or vomiting (24.4%)

- Dr Shikha Garg, MD, Dr Lindsay Kim, MD, et al, in

"Hospitalization Rates and Characteristics of Patients Hospitalized with Laboratory-Confirmed Coronavirus Disease 2019 — COVID-NET, 14 States, March 1–30, 2020", Centers for Disease Control and Prevention, 8 April 2020.

"The new pathogen is not that dangerous, it is even less dangerous than Sars-1.

The special thing is that Sars-CoV-2 replicates in the upper throat area and is therefore much more infectious because the virus jumps from throat to throat, so to speak.

But that is also an advantage: Because Sars-1 replicates in the deep lungs, it is not so infectious, but it definitely gets on the lungs, which makes it more dangerous.

You also have to take into account that the Sars-CoV-2 deaths in Germany were exclusively old people.

In Heinsberg, for example, a 78-year-old man with previous illnesses died of heart failure, and that without Sars-2 lung involvement.

Since he was infected, he naturally appears in the Covid 19 statistics.

But the question is whether he would not have died anyway, even without Sars-2." - Prof. Hendrik Streeck, MD, HIV Researcher, Epidemiologist and clinical trials. Professor of Virology, Director of the Institute of Virology and HIV Research, University Bonn, Germany, in "Frankfurter Allgemeine", 16 March 2020.

> ***"Under 40's just 0.75% of Covid-19 deaths, NHS data reveals.***
> *Just 11 people below the age of 20 have been killed by the bug out of 22,049 confirmed fatalities. And there have been only 155 deaths in the 20 to 39 age bracket — with many of those tragedies coming among people with underlying health conditions." - Nick McDermott, in "The Sun", 7 May 2020.*

Since the Influenza

"We have had many patients who, "since the influenza", as they express it, have had one ailment or another.

The most frequent of these sequels appears to be simple Neuritis, usually of the right arm, sometimes in the thigh along the course of the great sciatic.

While these patients are able to be about and to work they do so painfully. Relief does not come quickly.

In all probability they are right in assuming these troubles as an inheritance from the "flu."

For it is now an accepted fact that septic flu not alone acted deleteriously upon the blood, as shown by the haemorrhages during the attack, but that a species of nerve poisoning is certainly due to that invasion.

The remedies that have given us the best results have been specific medicines echinacea and capsicum best of all.

With instructions to keep the member as quiet as possible and warm, when possible by enveloping in common cotton, and the remedies as mentioned administered, we have been able to relieve these sufferers.

A few cases have remained intractable to any treatment.

It has been our experience that Neuritis often shows no marked improvement for several weeks, when suddenly amelioration of symptoms and a rapid cure follows." - in "The Eclectic Medical Journal", February 1920.

Comorbidity Symptoms in Coronavirus Pneumonia

Comorbidity; Symptoms in Persons with the Novel Coronavirus Pneumonia, having already 1 or more Underlying Health conditions (comorbidity).

"191 patients of whom 137 were discharged and 54 died in hospital.
91 patients (48%), had a Comorbidity:

1. Hypertension; 58 patients (30%)
2. Diabetes; 36 patients (19%)
3. Coronary Heart Disease; 15 patients (8%)". - in "Clinical course and risk factors for mortality of adult inpatients with COVID-19", The Lancet, 9 March 2020.

> ***"The current Coronavirus is not necessarily a huge problem for most people, but it is a lethal problem for the elderly and those with co-morbid conditions."*** *- Dr Dan Rudd, MD in "Comorbidity and COVID-19", 18 March 2020.*

4. Impaired Liver and Kidney Function
5. Kidney Failure

Less frequent Coronavirus Symptoms:

1. Headache (also a flu symptom)
2. Aching Muscles (also a flu symptom)
3. Exhaustion (also a flu symptom)
4. Phlegm buildup
5. Hemoptysis (Airway Bleeding: coughing blood, blood-stained mucus from bronchi, larynx, trachea or lungs)

Complications pneumonia and from swelling in the respiratory system can make it hard for the lungs to pass oxygen into the bloodstream, which can in turn lead to organ failure, thus death.

First UK Cases

5 March 2020

The 1st reported case: A woman in **70's** passed away at the Royal Berkshire NHS Trust, **had underlying health conditions. Had been; "in and out of hospital for non-coronavirus reasons".**

7 March 2020

2nd Case: A man **83 years** passed away at the Milton Keynes Hospital, **had underlying health conditions.**

8 March 2020

3rd Case: A man **60 years** passed away at North Manchester General Hospital, **had a number of underlying health problems including; Arthritis, Heart Problems.**

Tamiflu

"In 1999, the FDA approved oseltamivir phosphate for the treatment of influenza in adults based on 2 double-blinded, randomized, placebo-controlled clinical trials.

In June 2002, the European Medicines Agency (EMA) approved oseltamivir phosphate for prophylaxis and treatment of influenza.

In 2003, a pooled analysis of 10 randomised clinical trials concluded that oseltamivir reduced the risk of lower respiratory tract infections resulting in antibiotic use and hospital admissions in adults.

Oseltamivir (Tamiflu) was widely used during the H5N1 avian influenza epidemic in Southeast Asia in 2005.

In response to the epidemic, various governments, including those of the United Kingdom, Canada, Israel, United States, and Australia, stockpiled quantities of Oseltamivir in preparation for a possible pandemic and

there were worldwide shortages of the drug, driven by the high demand for stockpiling.

In November 2005, US President George W. Bush requested that Congress fund US$1 Billion for the production and stockpile of Oseltamivir, after Congress had already approved US$1.8 Billion for military use of the drug.

Defense Secretary Donald Rumsfeld, who was a past chairman of Gilead Sciences, recused himself from all government decisions regarding the drug." - in "Wikipedia", 3 May 2020.

> ***'The £653 Million spent on drugs to stave off a flu pandemic was 'money thrown down the drain',*** *a damning report found. The drugs – Tamiflu and Relenza – were stockpiled at huge cost by health chiefs in the hope they could stem the effects of a pandemic. The mass purchase was triggered in 2005 when Government scientists warned that as many as 700,000 Britons could die from deadly bird flu. Between 2006-07 and 2012-13 the Department of Health spent £609 million on antiviral medicines, £473 million on Tamiflu and £136 million on Relenza. This includes £74 million written off because poor record keeping meant medicines had to be thrown away." - Jenny Hope, in "Ministers blew £650 MILLION on useless anti-flu drugs:* ***Cash spent on stockpiling treatments that worked no better than paracetamol",*** *The Daily Mail, 10 April 2014*

"The federal government has spent upwards of US $3 Billion stockpiling millions of doses of antiviral drugs like Tamiflu—which are being used both to prevent swine flu and to treat those who fall ill.

But what if everything we think we know about fighting influenza is wrong?

What if flu vaccines do not protect people from dying—particularly the elderly, who account for 90% of deaths from seasonal flu?

*"**For a vaccine to reduce mortality by 50%, and up to 90% in some studies, means it has to prevent deaths not just from influenza, but also from: falls, fires, heart disease, strokes, and car accidents. - That's not a Vaccine, that's a Miracle.**" - Dr Tom Jefferson, MD head of the Vaccines Field at the Cochrane Collaboration*

People who choose to be Vaccinated may differ in many important respects from people who go Unvaccinated—and those differences can influence the chance of death during flu season." - Shannon Brownlee, Jeanne Lenzer, in "Does the Vaccine Matter?", The Atlantic, November 2009.

*"Vaccination is never a 100% effective antidote. One reason for this is that Vaccine content is compiled based on probabilities prior to the start of the so-called "flu season" in winter. **"The Vaccine's effectiveness is currently at 46%," according to the Robert Koch Institute.**" - in DW, 26 February 2018.*

*"**All the available relevant flu Vaccine studies (randomized controlled trials, cohort and case-control studies) performed from 1966 to 2006, during 40 years shows: Neither the manufacturers, nor any health agency have produced any convincing evidence of a significant benefit related to Vaccines against influenza.** Even more paradoxical since, as everybody knows, available studies are rather skewed towards an overestimation of benefits, because of the publication bias. To say the same in more mathematical way: **If an overestimation of benefits proves to be near zero, at which level may be the real benefits?**" - Dr Marc Girard, MD, expert witness in presenting and assessing Vaccine Damage cases in France, in "Why is the effectiveness of Swine Flu Vaccine being questioned?", 10 March 2018.*

Each year enormous effort goes into producing influenza Vaccines for that specific year and delivering them to appropriate sections of the population. Is this effort justified?

"Studies of the effects on influenza-like illness and its complications most closely replicate real life conditions because: **no one knows what agent (if any) causes this disease.** Influenza-like illness is an acute respiratory disease **caused by many different viruses** (including influenza A and B), which presents with symptoms and signs that cannot be distinguished from those of influenza.

Influenza-like illness does not have documented laboratory isolation of the causative agent and is the syndrome that most commonly presents to doctors ("the flu").

It is impossible for a vaccine that does not prevent influenza to prevent its complications, including admission to hospital.

Another reason may be "availability creep." In their efforts to deal with, or be seen to deal with, policy makers favour intervention with what is available: registered influenza Vaccines. A similar philosophy is the; "we have to make decisions and cannot wait to have perfect data" approach. This attitude may have an altruistic basis but has two important consequences. The optimistic and confident tone of some predictions of viral circulation and of the impact of inactivated Vaccines, which are at odds with the evidence, is striking. The reasons are probably complex and may involve "a messy blend of truth conflicts and conflicts of interest making it difficult to separate factual disputes from value disputes", or a manifestation of optimism bias (an unwarranted belief in the efficacy of interventions)." - Dr Tom Jefferson, MD, Cochrane Vaccines Field, in "Influenza vaccination: policy versus evidence", BMJ, 28 October 2006.

Laryngeal Injury after Prolonged Tracheal Intubation

"Ulceration of the larynx is the fundamental lesion that follows endotracheal intubation.

When intubation has been brief, the erosion is usually superficial and heals readily.

Deeper and more extensive ulceration may, however, occasionally occur.

In cases in which intubation has been prolonged, severe damage presenting as hoarseness, difficulty with swallowing, impaired laryngeal activity and varying degrees of respiratory obstruction has been found in up to 14% of patients.

The sites most commonly affected are posterior at the level of the arytenoids and in the subglottic region. Edema is invariably present, being proportional to the extent and depth of ulceration.

Supraglottic edema, a frequent post-intubation complication.

In the subglottic region, however, outward expansion is limited by the cricoid cartilage, and even minimal swelling can impinge upon the laryngeal lumen sufficiently to cause stridor and compromise airflow.

Granulation may follow ulceration. With healing of laryngeal ulcers, laryngeotracheal membranes and vocal-cord adhesions may form.

Either may cause respiratory obstruction, but both are easily amenable to corrective surgery.

Healing of deeper ulcers is of greater moment.

This may subsequently cause fibrotic stenosis at the subglottic level or immobilization of one or both cords from fibrosis around the cricoarytenoid joint and result in serious respiratory obstruction.

Surgical correction may be difficult, involving a series of complex operations.

Etiology: Laryngeal damage after prolonged tracheal intubation is primarily the consequence of pressure necrosis. Trauma to the larynx during intubation or later as a result of

movements of either the head or the tube also aggravates laryngeal damage.

Irritation can occur in response to noxious materials within the tubular substance.

Rubber has a variable composition and may cause tissue damage, as may endotracheal tubes sterilized with ethylene oxide.

The outward diffusing gas reacts with tissue fluids to form ethylene glycol and ethylene chlorohydrin, 2 toxic and irritant compounds.

The many complications cited make it impossible to define precisely a "safe period" for prolonged intubation." - Dr H. Pontoppidan, MD, Dr B. Geffin, MD, Dr E. Lowenstein, MD, in "Acute Respiratory Failure in the Adult", N. Engl. J. Med., 19 October 1972.

Pulmonary Complications Following Surgery or Trauma - The Vicious Circle

"Pulmonary complications can be a cause of death following major surgery or trauma. Various Names: "Sock Lung" and "Adult Respiratory Distress Syndrome" ARDS, have been used to describe the clinical syndrome and these imply that the patient's symptoms are part of a specific clinical entity. I suggest that no such specific entity exists, but rather that **the symptoms are manifestations of a vicious circle which may be initiated by various factors.**

Some of the manifestations are: Appearance of a white lung on chest X-ray. The X-ray picture may show only patchy white spots, or there may be a more diffuse increase in density, and the diagnosis has often mistakenly been made as bilateral pneumonia.

Extravasation of protein-rich fluid into lung interstitial space and eventually into the alveoli: In all types of

pulmonary oedema the fluid accumulates first around the large vessels (as perivascular cuffs), then in the corners of the alveoli, and it eventually enters the alveolar air space.

In left heart failure the protein concentration in oedema fluid is lower than in normal lung lymph; in the present patients, however, the protein concentration in oedema fluid is similar to or higher than that in normal lung lymph.

Decreased compliance.

Hypoxaemia: Elevation of pulmonary artery pressure. An elevated pulmonary artery pressure has been found in many of these patients." - Dr Soren C. Sorensen, MD in "Scanticon Shock Seminar: proceedings of a seminar held in Aarhus, Denmark, 6th-7th May, 1977", 1978.

> *"Both conditions tend to become manifest on a regional basis, dictated by the effect of gravity on the distribution of ventilation, blood flow and extravascular water. They result in a reduction in Functional Residual Capacity (FRC), a decrease in pulmonary compliance, and mismatching of ventilation and blood flow, which together constitute the hallmarks of Acute Respiratory Failure (ARF). Since Ashbaugh and Petty introduced Positive End-Expiratory Pressure (PEEP) into the treatment of severe ARF 10 years ago hypoxaemia is seldom seen as the primary cause of death in intensive units. Competing illness, such as acute renal failure and septicaemia, now contribute to the high mortality of these patients. The introduction of PEEP with mechanical ventilation (MV) immediately prompted extensive research into its usefulness, with concomitant descriptions of its dangers and limitations." - in "Scanticon Shock Seminar: proceedings of a seminar held in Aarhus, Denmark, 6th-7th May, 1977", 1978.*

"Pulmonary complications, especially postoperative pulmonary complications, are an important cause of morbidity and mortality in neurosurgical patients.

Postoperative mechanical ventilation is one of the important risk factors for the development of these complications.

Also, craniotomy and intracranial pressure monitoring have been reported as important risk factors for development of pulmonary complications.

The various pulmonary complications that occur in the neurosurgical patients are vastly similar to those which occur in surgical patients; however a few of these occur predominantly in the neurosurgical patient (like neurogenic pulmonary edema NPE).

The commonest postoperative complications that have been reported in surgical patients as whole (well studied in thoraco-abdominal surgeries) include postoperative atelectasis, pneumonia, respiratory failure, and exacerbation of an underlying chronic lung disease.

A number of important physiological changes occur in the postoperative period following neurosurgery, which contribute to the development of pulmonary complications.

The consequent result to the development of these complications is an increased duration of hospital and intensive care unit (ICU) stay which further translates into a vicious circle in which the occurrence of various postoperative complications, like Hospital-Acquired Pneumonia (HAP), is further exacerbated.

The most frequent postoperative pulmonary complication was purulent tracheobronchitis, followed by pneumonia, bronchospasm, and atelectasis.

Common Postoperative Pulmonary Complications

Pneumonia:

1. Hospital-Acquired Pneumonia (HAP)
2. Health-Care-Associated Pneumonia(HCAP)
3. Ventilator-Associated Pneumonia (VAP)

Pneumonia is the most serious complication that occurs in hospitalized patients (surgical and nonsurgical).

Hospital-Acquired Pneumonia (HAP) is the 2nd most common nosocomial infection that is associated with high morbidity and mortality, increased duration of hospital stay, and increased cost of treatment.

Endotracheal intubation is an extremely important contributing factor to the development of pneumonia in hospitalized patients, and in patients who are managed with Noninvasive Ventilation (NIV).

These definitions are important because these help in identification of factors that are likely to be associated with the presence of Multi-Drug-Resistant (MDR) organisms as a cause of pneumonia. The common causative organisms in early-onset HAP/VAP include: Methicillin-sensitive Staphylococcus Aureus, Haemophilus Influenzae, Streptococcus Pneumoniae, Enterobacteriaceae, and Anaerobes." - Randeep Guleria, Karan Madan, Department of Pulmonary Medicine and Sleep Disorders, in "Pulmonary complications in neurosurgical patients", Indian Journal of Neurosurgery, July-December 2012.

"Sir Richard Thompson, former-president of the Royal College of Physicians and personal doctor to the Queen, is one of a group of 6 eminent doctors **who today warn about the influence of Pharmaceutical Companies.** NHS cardiologist Dr Aseem Malhotra, claim that **too often patients are given useless – and sometimes harmful – drugs that they do not need.**

They maintain **Drugs Companies are developing medicines they can profit from, rather than those which are likely to be the most beneficial.**

> ***"There is real danger that some current drug treatments are much less effective than had previously been thought, often weak and sometimes murky basis on which the efficacy and use of drugs, particularly in the elderly, are judged".*** *- Sir Richard*

Dr Malhotra says commercial conflicts of interest are contributing to an "epidemic of misinformed doctors and misinformed patients in the UK and beyond".

Furthermore, he adds the NHS is 'over-treating' its patients, and claimed that the side effects of too much medicine is leading to countless deaths.

Dr Malhotra also points about the efficacy of Tamiflu – a flu drug the NHS spent £473 Million stockpiling. A 2014 report by a panel of eminent experts concluded it was no more effective than paracetamol. Dr Malhotra said: 'There is no doubt that a "more medicine is better" culture lies at the heart of healthcare, exacerbated by financial incentives within the system to prescribe more drugs and carry out more procedures. But there's a more sinister barrier to making progress to raise awareness of - and thus tackle - such issues that we should be most concerned about.

The elderly are particularly vulnerable to Polypharmacy with 1 in 3 hospital admissions in the over 75's the result of an adverse drug reaction. In 2012 GSK landed a $3 Billion fine - the largest healthcare fraud settlement in US history - for illegally marketing several drugs including an anti-depressant, a diabetes drug and one for epilepsy.

But in the period covered by the settlement, it posted profits of more than $25 Billion in the sales of these drugs." - in **"How Big Pharma greed is killing tens of thousands around the world:** Patients are over-medicated and often given profitable drugs with "little proven benefits", leading doctors warn", MailOnline", 23 February 2016.

Shoulder Injury Related to Vaccine Administration (SIRVA)

"1. 90% of petitions were filed for adults in the 2018 and 2019 fiscal years.

2. Over 54% of 2,520 petitions filed in the 2018 and 2019 fiscal years allege Shoulder Injury Related to Vaccine Administration (SIRVA).

3. 73% of petitions filed in the 2018 and 2019 fiscal years allege an injury from the Influenza Vaccine.

DICP Update
Award Amounts Paid as of 2 March 2020

Fiscal Year (FY)	Petitioners Award	Attorneys Fees & Costs
FY 2016	$230,140,251	$22,470,421
FY 2017	$252,245,933	$29,850,973
FY 2018	$199,658,492	$26,969,806
FY 2019	$196,217,708	$29,239,950
FY 2020	$73,294,386	$10,960,692

Vaccine Injury Compensation Trust Fund

Balance as of 31 January 2020

US$4,013,972,370

(U.S. Treasury, Bureau of the Fiscal Service, 24 February 2020)

- Tamara Overby, Acting Director, Division of Injury Compensation Programs, Healthcare Systems Bureau, in "The National Vaccine Injury Compensation, DICP Program Update, The Advisory Commission on Childhood Vaccines, 6 March 2020.

> *"In the course of reviewing claims submitted from 2006 through 2010, the Vaccine Injury Compensation Program (VICP) identified 13 claims in which it appeared that Vaccine administration led to significant shoulder pain and dysfunction. All individuals were adults, and, with one exception, all received either influenza Vaccine or a tetanus-containing Vaccine prior to the onset of symptoms. A history of prior immunization with the same Vaccine was confirmed in 85% of the cases. Among patients in whom a history of previous Vaccination was*

confirmed, the interval between Vaccinations was no less than 10 years for those receiving tetanus containing Vaccines and no less than 11 months for influenza Vaccine. One patient developed shoulder symptoms following administration of the third of a three dose series of human papillomavirus (HPV) Vaccine which was administered 3 months following the second HPV Vaccination." - S. Atanasoffa, et all, in "Shoulder injury related to vaccine administration (SIRVA)", Vaccine, 16 October 2010.

Influenza (Flu) Vaccine; Shoulder Injury Related to Vaccine Administration (SIRVA)

"At this visit, petitioner reported that her left shoulder pain began in October 2015 after receiving an Influenza Vaccination. She further reported that the injection was painful and that she had no left shoulder pain or weakness prior to the injection. Describing her pain as aching, she rated its severity as an 8 out of 10.

Below-median awards limited to past pain and suffering

In 11 prior SPU cases, the undersigned has awarded compensation for pain and suffering limited to compensation for actual or past pain and suffering that has fallen below the amount of the median proffer discussed above. These awards ranged from US$60,000.00 to US$91,163.89.21.

These cases have all included injuries with a "good" prognosis, albeit in some instances with some residual pain.

All of these cases had only mild to moderate limitations in range of motion and MRI imaging likewise showed only evidence of mild to moderate pathologies such as:

1. Tendinosis
2. Bursitis
3. Edema

The duration of injury ranged from 6 to 29 months and, on average, these petitioners experienced approximately 14 months of pain.

History of SIRVA Settlement and Proffer

SIRVA cases have an extensive history of informal resolution within the SPU.

As of July 1, 2019, 1,187 SIRVA cases have informally resolved within the Special Processing Unit since its inception in July of 2014.

Of those cases, 706 resolved via the government's proffer on award of compensation, following a prior ruling that petitioner is entitled to compensation.

Additionally, 462 SPU SIRVA cases resolved via stipulated agreement of the parties without a prior ruling on entitlement.

Among the SPU SIRVA cases resolved via government proffer, awards have typically ranged from $75,325.00 to $123,116.00. The median award is $95,470.95.

Formerly, these awards were presented by the parties as a total agreed upon dollar figure without separately listed amounts for expenses, lost wages, or pain and suffering.

Since late 2017, the government's proffer has included subtotals for each type of compensation awarded.

Among SPU SIRVA cases resolved via stipulation, awards have typically ranged from $50,000.00 to $95,000.00. The median award is $70,000.00.

In most instances, the parties continue to present the stipulated award as a total agreed upon dollar figure without separately listed amounts for expenses, lost wages, or pain and suffering." - in "DEBORAH KENT, Petitioner, v. SECRETARY OF HEALTH AND HUMAN SERVICES, Respondent. No. 17-0073V", Special Processing Unit (SPU); Decision Awarding Damages; Pain and Suffering; Influenza (Flu) Vaccine; Shoulder Injury Related to Vaccine Administration (SIRVA), United States Court of Federal Claims, Office of the Special Masters, 7 August 2019.

In 20 Years No Vaccine for SARS

"As of 2020, there is no cure or protective Vaccine for SARS that has been shown to be both safe and effective in humans.

A major researcher´s 2016 request, however, demonstrated that no field-ready SARS Vaccine had been completed because likely market-driven priorities had ended funding.

There is no Vaccine for SARS, although doctor Anthony Fauci mentioned that the CDC developed one and placed it in the US national stockpile.

That Vaccine, however, is a prototype and not field-ready as of March 2020." - 16 May 2020.

"Novavax a specialty pharmaceutical company, announced it received a 3 year contract from the National Institutes of Health (NIH) to develop a Severe Acute Respiratory Syndrome (SARS) Vaccine.

The grant for US$1,069,789 over 3 years will assist Novavax in its development of a VLP Vaccine." - in "Novavax", 4 February 2004.

SARS Vaccine within Reach

"Researchers at Baylor College of Medicine will **receive up to US $6.2 Million over 5 years from the National Institute Of Allergy and Infectious Diseases, part of the National Institutes of Health**, to develop a Vaccine for severe acute respiratory syndrome, commonly called SARS. "With NIH grant support and a collaboration between our research institute and experts at Baylor College of Medicine, Sabin Vaccine Institute and The University of Texas Medical Branch, the development of a SARS Vaccine is within our reach." in "Baylor College of Medicine receives over $6 Million from NIH to develop SARS vaccine", 22 May 2012.

Development of a SARS Coronavirus Vaccine

"Funding Agency: National Institute of Health (NIH)
National Institute of Allergy and Infectious Diseases (NIAID)
Type: NIH Challenge Grants and Partnerships Program - Phase II-Coop.Agreement (UC1)
Project: 1UC1AI062643-01
Application: 6846186
Study Section:
Special Emphasis Panel (ZAI1-PTM-M (M1))
Program Officer: Cassels, Frederick J

Institution: Novartis Vaccines and Diagnostics, Inc.
DUNS: 046866463

Project Start: 2004-09-17
Project End: 2009-08-31
Budget Start: 2004-09-17
Budget End: 2009-08-31

Support Year: 1
Fiscal Year: 2004
Total Cost: US$10,427,728" - in "Grantome", 2015.

"When the SARS coronavirus spread around the world in 2003, it resulted in more than 8,000 cases, nearly 800 deaths, and US $50 Billion in Economic Damage.

During this time, understandably, there was short-term momentum for developing pharmaceuticals to combat SARS, said Tom Inglesby, director of the UPMC Center for Health Security. However, that momentum has long since waned, and there are still no products available to treat or prevent SARS. This poses a serious threat because the potential for SARS to reemerge persists, whether naturally or as a result of a research accident in a laboratory.

In addition, there is no complete inventory of where the SARS virus is worked on around the world.

More recently, another globally threatening coronavirus known as MERS emerged in 2012, leading to about 1,000 cases thus far and more than 400 deaths.

Similar to the SARS experience, 3 years after the first case, MCMs for MERS still do not exist." - in "Developing MCMs for Coronaviruses", National Academies Press (US), 12 February 2016.

Vaccine Development

What we want to achieve

"Support the development of new and improved Vaccines: The coronavirus (COVID-19) outbreak has shown how devastating infectious disease can be for our health, the economy and society as a whole. Being able to quickly develop effective vaccines is our best chance of limiting the damage done by novel infectious threats.

What we're doing

We're working across several areas to achieve our goals.

We're working to **support the development of Vaccines** against known diseases, **and of new technology to accelerate Vaccine development when new threats appear.**

We are:

1. Funding CEPI – the Coalition for Epidemic Preparedness Innovations – to help fill critical gaps within vaccine funding and R&D. CEPI is currently supporting eight new Vaccine candidates for COVID-19.

2. Running a Joint Initiative on Research in Epidemic Preparedness and Response with the UK Department for International Development to fund research around the world, facilitate collaboration and influence policy change. This includes funding a number of COVID-19 research projects to support countries with the weakest health systems.

3. Working with **Global Stakeholders to accelerate progress towards a Universal Vaccine for Influenza.**

Promoting and using Vaccines to tackle drug-resistant infections." - in "Vaccines: a world equipped to combat infectious disease", **Wellcome Trust, April 2020.**

> *"The WHO Global Influenza Surveillance and Response System includes WHO Collaborating Centers and Reference Centers for Influenza from all over the world. It is responsible for monitoring the evolution of viruses circulating among humans and rapidly identifying new strains. Based on the information collected by the network, WHO recommends the Vaccine composition it believes will be effective against the most recent circulating strains. There are two meetings each year: one in February to determine the influenza Vaccine for the northern hemisphere, and one in September to determine the Vaccine preparation for the southern hemisphere. Influenza Vaccines are quadrivalent. They contain representative strains of the 2 virus A subtypes, A(H1N1)pdm09 and A(H3N2), and 2 B virus lineages, B-Yamagata and B-Victoria, responsible for seasonal outbreaks."* - ***in "Institut Pasteur", 12 April 2020.***

"A study from the UK found a 2-fold higher risk of Seizures on the day of the diphtheriatetanus toxoids-acellular pertussis–inactivated poliovirus–Haemophilus influenzae type b (DTaP-IPV-Hib) Vaccination, and a study from the United States found a 30% higher risk of Seizures on the day of the first DTaP Vaccination.

DTaP-IPV-Hib Vaccination was associated with an increased risk of Febrile Seizures on the day of the first 2 Vaccinations given at 3 and 5 months.

Among the 250 children whose first febrile seizures occurred within 0 to 7 days of Vaccination, 80 (32.0%) had a recurrent episode of Febrile Seizures, and 8 (3.2%) developed Epilepsy later in life.

Among the 7,561 children whose first Febrile Seizures did not occur within 0 to 7 days after DTaP-IPV-Hib Vaccination, 2,207 (29.2%) had recurrent Febrile Seizures and 208 (2.8%) developed Epilepsy later in life." - in "Risk of Febrile Seizures and Epilepsy After Vaccination With Diphtheria, Tetanus, Acellular Pertussis, Inactivated Poliovirus, and Haemophilus Influenzae Type b", JAMA, February 2012.

"Some 379,834 children in Denmark were part of this study. All received the combined diphtheria-tetanus toxoid-acellular pertussis-inactivated polio virus-H influenzae type b Vaccine. The Vaccine studied in this report has a pattern of adverse events similar to that of diphtheria and tetanus Vaccines given as isolated Vaccines." - Dr J. A. Stockman III, MD in "Yearbook of Pediatrics", January 2013.

"Dengvaxia, developed by Sanofi-Pasteur, is a recombinant chimeric live attenuated dengue virus vaccine based on a yellow fever Vaccine backbone. The Vaccine's development was "considerably more challenging than for other Flavivirus infections because of the immunological interactions between the four dengue virus serotypes and the risk of immune-mediated enhancement of disease" which causes secondary infections to lead to more severe disease, ***Neil Ferguson, of the Imperial College of London and his associates wrote, "Benefits and risks of the Sanofi-Pasteur dengue Vaccine: Modeling optimal deployment", Science, 2 September 2016."*** *- Jessica Craig, in "Dengue vaccine beneficial only in moderate to high transmission settings", 18 October 2016.*

If Vaccines Make Me Immune, Why do I Have to Get a Flu Shot Every Year?

"**What kinds of flu shots are there?**

Flu shots protect against three or four strains of flu virus. Trivalent flu vaccines protect against two influenza A strains — H1N1 and H3N2 — and one influenza B strain. Quadrivalent flu vaccines, offered for the first time in the 2013-2014 flu season, protect against the same strains as the trivalent vaccine, as well as an extra influenza B strain.

Flu Vaccines for the 2019 to 2020 season

The composition of the 2019-2020 flu shot will be slightly different from last season's flu shot. Specifically, there will be a different strain of the H1N1 virus and a different strain of the H2N3 virus in this season's flu shot, compared with last season's shot. According to the CDC, the 2019-2020 trivalent flu shot will contain the following strains of the flu virus:

1. A/Brisbane/02/2018 (H1N1)pdm09-like virus — This is the H1N1 component that is different from last year's flu shot.
2. A/Kansas/14/2017 (H3N2)-like virus — This is the H3N2 component that is different from last year's flu shot.
3. B/Colorado/06/2017-like (Victoria lineage) virus — This is the influenza B strain component that is the same as last year's shot.

The 2019-2020 quadrivalent vaccine will also contain a second influenza B strain called "B/Phuket/3073/2013-like (Yamagata lineage) virus", which was also included in last season's quadrivalent vaccine. Sanofi Pasteur company's flu vaccines, which include Fluzone Quadrivalent, Fluzone High-Dose and Flublok Quadrivalent, make up about 40% of the U.S. flu vaccine market, close to 70 million doses." - Rachael Rettner, in "Flu Shot Facts & Side Effects", Live Science, 14 February 2020.

Vaccine Effectiveness in the United States During the 2018–2019 Season

"During the 2018–2019 influenza season A(H3N2) clade 3C.3a viruses caused an increasing proportion of influenza cases. Among 2763 Flu VE Network case patients, 1325 (48%) were infected with A(H1N1)pdm09 and 1350 (49%) with A(H3N2); clade 3C.3a accounted for 977 (93%) of 1054 sequenced A(H3N2) viruses. VE was 44% against A(H1N1)pdm09 and 9% against A(H3N2); VE was 5% against A(H3N2) clade 3C.3a viruses." - Brendan Flannery, et al., in "Spread of Antigenically Drifted Influenza A(H3N2) Viruses and Vaccine Effectiveness in the United States During the 2018–2019 Season", The Journal of Infectious Diseases, 1 January 2020.

Vaccine Effectiveness in Europe During the 2016–17 & 2017–18 Season

"**During the 2017–18 season, the overall Vaccine Effectiveness (VE) against influenza A(H1N1)pdm09 was 59%.** Among those aged 0–14, 15–64 and ≥65 years, VE against A(H1N1)pdm09 was 64%, 50% and 66%, respectively. **Overall Vaccine Effectiveness against influenza A(H3N2) was 28% in 2016–17 and 13% in 2017–2018.** Among 0–14 year olds VE against A(H3N2) was 28% and 29%, among 15–64 year olds 34% and 33% and among those aged ≥65 years 15% and −9% in 2016–17 and 2017–18, respectively." - Esther Kissling, et al., in "Effectiveness of influenza vaccine against influenza A in Europe in seasons of different A(H1N1)pdm09 and the same A(H3N2) vaccine components (2016–17 and 2017–18)", Vaccine: X, 10 December 2019.

Types of Influenza Viruses

"There are 4 types of influenza viruses: A, B, C and D.

Human influenza A and B viruses cause seasonal epidemics of disease (known as the flu season) almost every winter in the United States.

Influenza A viruses are the only influenza viruses known to cause flu pandemics, i.e., global epidemics of flu disease.

A pandemic can occur when a new and very different influenza A virus emerges that both infects people and has the ability to spread efficiently between people.

Influenza type C infections generally cause mild illness and are not thought to cause human flu epidemics.

Influenza D viruses primarily affect cattle and are not known to infect or cause illness in people.

Influenza A viruses are divided into subtypes based on two proteins on the surface of the virus: hemagglutinin (H) and neuraminidase (N).

There are 18 different hemagglutinin subtypes and 11 different neuraminidase subtypes (H1 through H18 and N1 through N11, respectively).

While there are potentially 198 different influenza A subtype combinations, only 131 subtypes have been detected in nature. Current subtypes of influenza A viruses that routinely circulate in people include: A(H1N1) and A(H3N2). Influenza A subtypes can be further broken down into different genetic "clades" and "sub-clades."

Naming Influenza Viruses

CDC follows an internationally accepted naming convention for influenza viruses. This convention was accepted by WHO in 1979 and published in February 1980 in the Bulletin of the World Health Organization, 58(4):585-591 (1980).

The approach uses the following components:

- The antigenic type (e.g., A, B, C, D)
- The host of origin (e.g., swine, equine, chicken, etc.).

For human-origin viruses, no host of origin designation is given. Note the following examples:

- (Duck example): avian influenza A(H1N1), A/duck/Alberta/35/76
- (Human example): seasonal influenza A(H3N2), A/Perth/16/2019

- Geographical origin (e.g., Denver, Taiwan, etc.)
- Strain number (e.g., 7, 15, etc.)
- Year of collection (e.g., 57, 2009, etc.)
- For influenza A viruses, the hemagglutinin and neuraminidase antigen description are provided in parentheses (e.g., influenza A(H1N1) virus, influenza A(H5N1) virus)
- The 2009 pandemic virus was assigned a distinct name: A(H1N1)pdm09 to distinguish it from the seasonal influenza A(H1N1) viruses that circulated prior to the pandemic.
- When humans are infected with influenza viruses that normally circulate in swine (pigs), these viruses are call variant viruses and are designated with a letter 'v' (e.g., an A(H3N2)v virus).

Influenza Vaccine Viruses

One influenza A(H1N1), one influenza A(H3N2), and 1 or 2 influenza B viruses (depending on the vaccine) are included in each season's influenza vaccines.

Seasonal flu Vaccines do not protect against influenza C or D viruses. In addition, flu vaccines will NOT protect against infection and illness caused by other viruses that also can cause influenza-like symptoms. There are many other viruses besides influenza that can result in influenza-like illness (ILI) that spread during flu season." - in **"Understanding Influenza Viruses", National Center for Immunization and Respiratory Diseases, CDC, 18 November 2019.**

Please note Viruses don't exist this is all Medical Trade Nonsense.

Vaccination in the Context of Sjögren's Syndrome

"An aspect of adjuvant-containing vaccines, and Sjögren's syndrome (a condition affecting the body's moisture-producing glands, primary symptoms are a dry mouth and dry eyes), is the Autoimmune/inflammatory Syndrome Induced by Adjuvants (ASIA) proposed in "ASIA' - autoimmune/inflammatory syndrome induced by adjuvants", J. Autoimmun 2011.

The syndrome includes different conditions defined by common signs and symptoms (e.g. Chronic Fatigue, Arthralgia, Myalgia) arising after adjuvant exposure.

A link between ASIA and Sjögren's syndrome was suggested owing to the similarities in clinical symptoms, the link between infections and development of Sjögren's syndrome, and case reports of **Sjögren's Syndrome Arising After Vaccination** ("Sjögren's syndrome: another facet of the autoimmune/inflammatory Syndrome Induced by Adjuvants (ASIA)", J. Autoimmun., 2014).

Results indicating an increased risk of Sjögren's syndrome following infections, **raise questions about the safety and necessity of Vaccinations.**

A few case reports have indicated a possible triggering of Sjögren's syndrome by Vaccination against Hepatitis B ("Sjögren's syndrome occurring after hepatitis B vaccination", Arthritis Rheum., 2000), and H1N1 Influenza (comments on the article on the article "Acute polyarthritis after influenza A H1N1 immunization", Joint Bone Spine, 2011, Primary Sjögren's syndrome occurring after influenza A H1N1 Vaccine administration", Joint Bone Spine, 2012).

The recently updated European League Against Rheumatism (EULAR) recommendations state that Influenza and Pneumococcal Vaccination should be strongly considered for a majority of patients with autoimmune inflammatory rheumatic diseases, whilst live-attenuated Vaccines may be considered with caution ("2019 update of EULAR recommendations for Vaccination in adult patients with autoimmune inflammatory rheumatic diseases", Ann.

Rheumat. Dis., 2020)." - A. Björk, J. Mofors, M. Wahren-Herlenius, in "Factors in the Pathogenesis of Primary Sjögren's Syndrome", Journal of Internal Medicine, 27 February 2020.

> ***"The proof that Vaccine prevents influenza is meagre.*** *Its use in Chicago no doubt helped to keep the people from becoming panicky." - Dr Solomon Strouse, MD in "Proceedings of the Institute of Medicine of Chicago", 1919.*
>
> *"It may be comparatively easy to produce an active immunity, to this or that virus under experimental conditions in the laboratory by relatively harmless means, but it is another matter to devise methods applicable to man which are at once practical, effective, and devoid of risk." - in "Editorial", The Lancet, 30 September 1933.*

In the Midst of Chaos, There is Also Opportunity

"My background is microbiology infectious diseases, and, **I've always been fascinated by epidemics**, by microbes since I was a child, but it's also catching the interest now of people dealing with investments, and with risks.

Here this is from the annual report of the World Economic Forum (WEF), they publish every year a very interesting report, is called the Global Risks Report." - Dr Peter Piot, MD in "Are We Ready for the Next Pandemic?", 29 June 2018.

The Reason Every Year We Need a Different Influenza Vaccine

"Is that the virus has mutated a little bit, and so that we need a vaccine with the new antigenic make up, the new coat and so on, that will then induce antibodies against the new strain.

The first question that we thought was:

Maybe it's Ebola but maybe this is a different strain because Ebola has different types of Ebola and some are more lethal than others.

The World Health Organization declared that this was a public health crisis, and that is the specific term that then triggers international support.

> ***"This is an opportune time to accelerate clinical evaluation of experimental therapies, Vaccines, and diagnostics. Human trials of Ebola Vaccines and therapies are about to start."*** *- Dr Peter Piot, MD in "Ebola's perfect storm", Science, 12 September 2014.*

The H1N1 Vaccine Tragedy Was Played Out in 3 Acts

"They are waiting for the next pandemic that will ravage humanity, they watch for the mutant strain that will trigger it. However, we know that this is impossible since the published study by: David M. Morens, Jeffery K. Taubenberger, **Dr Anthony Fauci, MD**: "Predominant Role of **Bacterial Pneumonia as a Cause of Death in Pandemic Influenza:** Implications for Pandemic Influenza Preparedness." in The Journal of Infectious Diseases, 2008.

Its authors resumed all autopsies of people who died from the Spanish flu and found that 98.5% of them had actually died from bacterial infections, not from the virus itself.

That already demonstrated the great specialist in infections Keith Klugman: the Spanish flu has killed a lot because most of the victims died from illnesses which are said to be partly treated by antibiotics.

Nowadays, 50% of people who die from flu still die from bacterial superinfection." - Dr Didier Raoult, MD, in "The Truth about Vaccines", 2018.

"Certain Bacteria seem to be associated with symptomatic manifestations, such as:

1. Streptococcus Pneumoniae
2. Haemophilus Influenzae
3. Staphylococcus Aureus

Which are known to cause an excess of mortality due to secondary infection." - Y. Roussel, A. Giraud-Gatineau, M.-T. Jimeno, Didier Raoult, et al., in "SARS-CoV-2: fear versus data", International Journal of Antimicrobial Agents, 5 April 2020.

Conditions that Appear as a Sign of the Overgrowth of any Certain type Bacteria

Bacteria are always present in the body, both internally and externally.

It is only when certain conditions: pertaining to the metabolic state in which the body encounters itself; both the state of the bloodstream, the lymphatic stream, and the organs.

All these need to be, in a way and manner, at odds, with what which is commonly termed "in a good healthy state".

So, healthy people have no problems in coping with any microbe.

"1. Streptococcus Pneumoniae

Pneumococcal disease is an infection caused by Streptococcus pneumoniae bacteria ("pneumococcus").

These bacteria can cause many conditions, including:

I. Pneumonia (infection of the lungs)
II. Ear infections
III. Sinus Infections
IV. Meningitis (infection of the covering around the brain and spinal cord)
V. Bacteremia (blood stream infection)

Pneumococcus bacteria are spread through coughing, sneezing, and close contact with an infected person.

Symptoms of pneumococcal can include:

1. Fever
2. Cough
3. Shortness of breath
4. Chest pain
5. Stiff neck
6. Confusion and disorientation
7. Sensitivity to light
8. Joint pain
9. Chills
10. Ear pain
11. Sleeplessness
12. Irritability

In severe cases, can cause:

I. Hearing Loss
II. Brain Damage
III. Death

2. Haemophilus Influenzae

Haemophilus influenzae, a type of bacteria, can cause many different kinds of infections. H. influenzae can invade the spinal fluid, causing meningitis, or bloodstream, causing bacteremia. Invasive disease is usually serious, requiring treatment in a hospital, and can sometimes result in death.

The most common types of invasive disease caused by H. influenzae are:

1. Pneumonia (lung infection)

Symptoms of pneumonia include:

I. Fever and chills
II. Cough
III. Shortness of breath or difficulty breathing
IV. Sweating
V. Chest pain
VI. Headache
VII. Muscle pain or aches
VIII. Excessive tiredness

2. Bloodstream infection

Symptoms of bloodstream infection include:

I. Fever and chills
II. Excessive tiredness
III. Pain in the belly
IV. Nausea with or without vomiting
V. Diarrhoea
VI. Anxiety
VII. Shortness of breath or difficulty breathing
VIII. Altered mental status (confusion)

3. Meningitis

Symptoms of meningitis include sudden onset of:

I. Fever
II. Headache
III. Stiff neck
IV. Nausea with or without vomiting
V. Photophobia (eyes being more sensitive to light)
VI. Altered mental status (confusion)

4. Epiglotittis (swelling in the throat)
5. Cellulitis (skin infection)
6. Infectious arthritis (inflammation of the joint)

H. influenzae can also be a common cause of:

a) Ear infections in children
b) Bronchitis in adults

3. Staphylococcus Aureus

Staphylococcus Aureus (staph) is a germ found on people's skin, about 30% of people carry in their noses.

Most of the time, staph does not cause any harm; however, sometimes staph causes infections.

Staph can cause serious infections if it gets into the blood and can lead to sepsis or death.

Staph is either:

a) Methicillin-Resistant Staph (MRSA), or
b) Methicillin-Susceptible Staph (MSSA)

Staph infections can be serious or fatal, including:

I. Bacteremia or Sepsis when bacteria spread to the bloodstream.

II. Pneumonia, which most often affects people with underlying lung disease including those on mechanical ventilators.

III. Endocarditis (infection of the heart valves), which can lead to heart failure or stroke.

IV. Osteomyelitis (bone infection), which can be caused by staph bacteria traveling in the bloodstream or put there by direct contact such as following trauma (puncture wound of foot or intravenous (IV) drug abuse).

Anyone can develop a staph infection, although certain groups of people are at greater risk, including people with chronic conditions such as diabetes, cancer, vascular disease, eczema, lung disease, and people who inject drugs.

Nearly 20,000 people died with bloodstream Staphylococcus Aureus infections in 2017." - in "Pneumococcal Disease (Streptococcus pneumoniae)", "Haemophilus influenzae Disease (Including Hib)", "Staphylococcus Aureus", Centers for Disease Control and Prevention, 5 August 2014.

> *"In 1996 it was shown that you can treat HIV if you combine 3 different drugs. And why do you need 3 different drugs? Because like influenza it's a virus that mutates all the time, and so the risk that it becomes resistant if you give just one drug is enormous, but with 3 statistically the risk is much much lower.* ***However the price was far too high, was about $14,000 US dollars per person per year."*** *- Dr Peter Piot, MD, in "Are We Ready for the Next Pandemic?", 29 June 2018.*

> ***"Germany tries to stop US poaching Vaccine".*** *- in "The Daily Telegraph", 16 Mar 2020.*

Germany and the United States in battle over the rights to a Covid-19 Vaccine being developed by a private biopharma group CureVac, and the German State funded Paul Ehrlich Institute scientists in Tübingen.

Flu Season Deaths

France – Flu Season

"Influenza is an acute contagious respiratory infection caused by influenza viruses. The annual seasonal outbreaks that affect 2 to 8 million people in ***France every year, with influenza-associated excess mortality estimated at 10,000 to 15,000 deaths, mainly in vulnerable individuals." - in "Institut Pasteur", 12 April 2020.***

2017-2018 Germany – Flu Season

"For the 2018/19 season, no estimate of excess-mortality could be made, as the necessary data of the Federal Statistical Office are published with a time delay.

However, the estimate for the **2017/18 season (still lacking in the last annual report) has been supplemented: approximately 25,000 influenza-related deaths exemplify** – together with other parameters – the extraordinary severity of the flu epidemic 2017/18." - in "Report on the Epidemiology of Influenza in Germany 2018/2019", Robert Koch Institute, 30 September 2019.

2017-2018 Spain – Flu Season

"Professionals from the CIBER of Epidemiology and Public Health and the Carlos III Health Institute in Madrid, have estimated in the summary of the ***2017-2018 flu season that nearly 15,000 died."*** *- in "Flu in Spain: almost 800,000 cases, 52,000 admitted and 15,000 dead", Redacción Médica, 23 October 2018.*

2018-2019 Spain – Flu Season

"According to Amparo Larrauri, Carlos III Health Institute in Madrid, "Using population models, it has been estimated that in ***the last 2 seasons, the flu may have been responsible for up to 15,000 deaths attributable to this disease."*** *- in "Outbreak News Today",* ***11 January 2020.***

"The flu killed 15,000 people in Spain last year, making the coronavirus an anecdote" The doctor and geriatrician Jesús Cuadrado regrets the alarmism around this virus "with the intention of distracting people." *- in "Diario 16", 11 February 2020.*

2014-2015

In Italy **"653,000 died in 2015 (+54,000).**

The mortality rate, equal to 10.7 per thousand, is the highest among those measured since the second post-war period onwards.

The increase in mortality is concentrated in the very old age groups (75-95 years).

The peak is partly due to structural effects related to ageing." - in "Document No.180494", Instituto Nazionale di Statistica, Italy, 19 February 2016.

"The demographer Gian Carlo Blangiardo.

From Istat data for the first 7 months of 2015, Professor Blangiardo deduces a surplus of 39,000 deaths compared to the same period of 2014, "an increase of 11% which, if confirmed on an annual basis, would lead to 664,000 deaths in 2015, against 598,000 last year."

A surge of 66,000 deaths (the estimate will then be revised to 68,000 with the most recent data." - "Morti, boom dei decessi in Italia nel 2015. I motivi? Caldo, Grande guerra e influenza", Il Fatto Quotidiano, 10 February 2016.

"On the basis of what has been highlighted, it can be concluded that 2015 was certainly a year of high mortality but not of the magnitude that could result from the analysis of the number of deaths in 2015 and 2014 only.

The SiSMG data, in line with those of the ISTAT confirm an increase in the number of deaths in 2015, attributable primarily to the progressive increase in the elderly population and, probably, to the role played by demographic phenomena, attributable to the cohorts born between the First World War and in the years immediately following.

The analysis of mortality rates, standardized by age and stratified by ten-year age classes, shows that overall the 2015 mortality rate was in line with the average value of the previous 5 years (2009-2013) but significantly higher than that observed in the previous 2 years (2013 and 2014).

("Thinking about the 2015 deaths." Comments from Agenas, Cislaghi et al).

The seasonal analysis confirms an increase in mortality in the months of January and February for the very elderly population (+85 years) from Cardiovascular and Respiratory causes (as shown by the analyzes of the 32 cities, which takes into account the standardized rates by age, as well as surveys conducted at local level (eg. Lazio and Piedmont) which revealed excesses due to respiratory causes.

The high mortality of the winter season is associated with the periods of flu epidemic." - in "Saniraria Aumento dei Decessi in Italia Anno 2015", Direzione Generale della Prevenzione, Ministero della Salute, 29 February 2016.

2013 to 2017 Italy – Flu Season

"In recent years, Italy has been registering peaks in death rates, particularly among the elderly during the winter season. In the winter season 2014/2015 (more than 375,000 deaths in absolute terms), corresponding to an estimated 54,000 excess deaths, representing the highest reported mortality rate since the Second World War in Italy (UN, 2019). The objective of our study was to estimate the influenza-attributable contribution to excess mortality during the influenza seasons from 2013/14 to 2016/17 in Italy. More than 68,000 deaths attributable to Flu Epidemics were estimated in the study from the 4 years flu season period. **Italy showed a higher influenza attributable excess mortality compared to other European countries, especially in the elderly."** - Aldo Rosano, National Institutes of Health, et al., in "Investigating the impact of influenza on excess mortality in all ages in Italy during recent seasons", International Journal of Infectious Diseases, 8 August 2019.

2016 to 2017 Italy – Flu Season

"24,981 Deaths." - in "Investigating the impact of influenza on excess mortality in all ages in Italy during recent seasons", *International Journal of Infectious Diseases, 8 August 2019.*

2013-2015 South Africa – Flu Season

"Influenza (also known as flu) kills between 6,000 to 11,000 South Africans every year. About 50% of those deaths are among the elderly (65 years and older), and about 30% in HIV-infected people. ***Having a chronic illness like diabetes, lung disease, tuberculosis and heart disease, means that the body is less able to cope with infection. In South Africa, flu circulation is highly seasonal and circulates during the winter."*** *- in "National Department of Health", South Africa, March 2020.*

"The estimated mean annual cost of influenza-associated illness was $270.5 million, of which $111.3 million (41%) were government-incurred costs, 40.7 million (15%) were out-of-pocket expenses, and $118.4 million (44%) were indirect costs.

The cost of influenza-associated medically attended mild illness ($107.9 million) was 2.3 times higher than that of severe illness ($47.1 million).

Influenza-associated respiratory illness costs ($251.4 million) accounted for 93% of the total cost.

Estimated absenteeism and Years of Life Lost were 13.2 million days and 304 867 years, respectively.

Among patients with influenza-associated WHO-defined Severe Acute Respiratory Illness (SARI) and Influenza-Like Illness (ILI; subsets of all-respiratory illnesses) as suggested in the WHO manual.

The costs ($95.3 million), absenteeism (4.5 million days), and years of life lost (65 697) were 35%, 34%, and 21% of the total economic and health burden of influenza." - in "Health and economic burden of influenza-associated illness in South Africa, 2013-2015", Influenza Other Respiratory Viruses, September 2019.

2017-2018 United Kingdom – Flu Season

"Within the first 7 weeks of 2018, some 93,990 people died in England and Wales.

An additional **person died every 7 minutes during the first 49 days of 2018** compared with what had been usual in the previous 5 years, an average of 83,615 people died." - Lucinda Hiam, London School of Hygiene and Tropical Medicine; Danny Dorling, University of Oxford, in "Rise in mortality in England and Wales in first seven weeks of 2018", British Medical Journal, 14 March 2018.

"26,408 deaths associated with influenza observed through the FluMOMO algorithm with confidence intervals, England, 2017 to 2018." *- in "Surveillance of influenza and other respiratory viruses in the UK Winter 2018 to 2019", Public Health England, May 2019.*

2012-2013 United States - Flu Season

"56,000 deaths from influenza." *- in CDC, 5 September 2019.*

2017-2018 United States - Flu Season

"79,400 deaths from influenza."

- in "Archived Estimated Influenza Illnesses, Medical visits, Hospitalizations, and Deaths in the United States — 2017–2018 influenza season", Centers for Disease Control and Prevention, National Center for Immunization and Respiratory Diseases, CDC, 22 November 2019.

"**1. How many children died from flu during the 2017-2018 season?**

As of 19 April 2019, a total of 186 pediatric deaths had been reported to CDC during the 2017-2018 season. (171 during the 2012-2013 season).

2. How effective was the 2017-2018 Flu Vaccine?

The overall vaccine effectiveness of the 2017-2018 flu vaccine against both influenza A and B viruses is estimated to be 40%.

Protection by virus type was:

25% against A(H3N2),
65% against A(H1N1),
49% against influenza B viruses.

- in "National Center for Immunization and Respiratory Diseases", CDC, 5 September 2019.

2018-2019 United States - Flu Season

"34,200 deaths from Influenza

Influenza activity in the United States during the 2018–2019 season began to increase in November and remained at high levels for several weeks **during January–February.**

Influenza A viruses were the predominant circulating viruses last year. While influenza A(H1N1pdm09) viruses predominated from **October 2018 to mid February 2019,** influenza A(H3N2) viruses were more commonly reported starting in late February 2019." - in "CDC", 2020.

2019-2020 United States - Flu Season
(Preliminary Burden Estimates)

Flu Season in the United States by: Influenza A & B virus, A(H1N1)pdm09 virus, and A(H3N2) virus.

U.S. Deaths by Flu

"24,000 to 62,000 people have died in the United States from Influenza between the 1 October 2019, through, 4 April 2020.

This season starts around mid November and peaks by March, (estimates are preliminary and based on data from CDC's weekly influenza surveillance reports summarizing key influenza activity indicators)." - in "Centers for Disease Control and Prevention, National Center for Immunization and Respiratory Diseases", 27 March 2020.

Is Pneumonia Increasing?

"An eminent authority writing to us states that whether a physician reports on a death certificate Lobar Pneumonia, Bronchopneumonia, Influenza or Bronchitis must rest in many cases on his whim.

But if we deal with large numbers it may be contended that the whimsy (chance?) fluctuations should average out and leave the mass statistics accurate-true if the fluctuations are really by chance and exempt from that formation and modification of mass habits which is observed in many organic fields.

All that we think it safe at present to infer is that pneumonia is neither increasing or decreasing, that the human organism is reasonably in equilibrium with its environment with respect to this disease." - Ewald Tomaneic, Edwin B. Wilson, Harvard School of Public Health, Boston, in "Proceedings of the National Academy of Sciences", 15 May 1924.

Deaths by COVID-19

112,374 deaths in Italy, population: 60 Million
76,037 deaths in Spain, population: 46 Million
572,849 deaths in the USA, population: 329 Million
126,927 deaths in the UK, population: 67 Million
97,722 deaths in France; population: 67 Million
78,174 deaths in Germany; population: 83 Million
166,892 deaths in India; population 1.3 Billion
53,111 deaths in South Africa, population: 56 Million
9 deaths in Beijing, China, population: 22 Million
7 deaths in Shanghai, 5th Global Financial Centre in China, population: 25 Million
205 deaths in Hong Kong, population: 7.5 Million
0 (zero) deaths in Macau, population: 700,000

As of 8 April 2021." - in "Coronavirus COVID-19 Global Cases Map developed by the Johns Hopkins Center for Systems Science and Engineering".

The Virus Travelled All Over the World From Wuhan

The virus did not stop in:

1. Beijing, 1,054 km; from Wuhan,
2. Shanghai, 690 km; from Wuhan,
3. Hong Kong, 919 km; from Wuhan,
4. Macau, 936 km; from Wuhan.

The October to March Pattern

The Winter Season Pattern

"The outbreak of influenza, which began in the spring of 1928, decreased as usual during the summer months and flared up into epidemic proportions during the fall of 1928, was responsible for much, if not all, of the increase in the death rate for the calendar year 1928." - in "Summary of Health Conditions", The West Virginia Medical Journal February, 1930.

> *"In 2014 when there were the first reports in March 2014 that there was Ebola virus infection in West Africa, and in 3 countries Sierra Leone, Liberia and Guinea.*
> ***It started around Christmas in 2013."*** *- Dr Peter Piot, MD in "Are We Ready for the Next Pandemic?", 29 June 2018.*

The Influenza Pandemic mortality (deaths from all causes each week), in America, and Europe during 1918-1919 , showed a peak between the **15 October to 15 November** 1918, and then from the **15 of February to the 15 of March** 1919. Thus it is curious to note that the "Covid-19" "Epidemic" was first reported in **December 2019**, and it peaked during **February and March** 2020. **It seems that viruses have a predilection for dates that fall from October until March.**

"Respiratory viruses are a possible etiology of infections in pediatric febrile neutropenic patients, considering that they are the most frequent cause of **fever in otherwise healthy children.** The most frequent was coronavirus, including 229E, NL63 and OC43 types, present in 7 patients. These coronaviruses were found from June to August, which is winter season in our hemisphere. We also detected one rhinovirus, one Syncicial Respiratory Virus (SRV) and one parainfluenza. There was viral co-detection in 4 patients, always including a coronavirus. There is the possibility that not only coronaviruses, but also other respiratory viruses could be detected in asymptomatic individuals. These viruses could possibly be the remaining of a recent infection or could even be part, in some cases and intermittently, of the human virome. The most common oncologic diagnosis was acute Lymphocytic Leukemia, in 10 patients. Other oncologic diagnosis included acute myeloid leukemia, Hodgkin's Lymphoma, Osteosarcoma, Ewing Sarcoma and Hepatoblastoma.

In 18 of the 23 episodes, a clinical diagnosis of infection was possible including:

a) Upper Respiratory Infection - 5
b) Oral Candidiasis - 5
c) Gastrointestinal Infection - 3
d) Catheter-related Infection - 2
e) Lower Respiratory Tract Infection - 1
f) Herpes Zoster - 1
g) Necrotizing Fasciitis – 1." - in "Coronaviruses in children with febrile neutropenia", The Brazilian Journal of Infectious Diseases, January-February 2014.

> ***"Influenza and influenza-like illness account for a significant number of presentations to Australian hospitals each year, with rates for 2015 reaching 80 per 1,000 presentations in the peak months of influenza season."*** *- in "Australian influenza surveillance report", No.10, Canberra: Department of Health, 2015.*

Then Something Happened that was Also Unexpected a few years ago in Brazil, there was an Epidemic Caused by Zika Virus

"Zika is the name of a forest in Uganda near Entebbe, it's owned by the Medical Research Council, and because in 1947, a virus isolated from monkeys in the Zika forest by the Uganda Virus Research Institute while they were looking for the ecology for the spread of yellow fever Vaccine and by accident they found this virus.

And it was a virus without a disease and you know as there are so many viruses.

And it took then about 70 years, before it was clear that this was also a major risk to health and it caused a huge epidemic first in the Pacific Islands, but then in particularly in Brazil.

And the biggest problem was not so much for adults because it gives you Dengue fever like syndromes, in other words a bad influenza plus skin rash, and joint aches, and so on but if you're pregnant the baby is born from mothers who are infected with Zika virus particularly during the first trimester are born with neurological complications and microcephaly so small brain small heads just like we've seen we had here with rubella German measles before there was a Vaccine.

> *"The Uganda Virus Research Institute is a medical research institute owned by the Uganda government that carries out research on communicable diseases in man and animals, with emphasis on viral transmitted infections. UVRI is a component of Uganda National Health Research Organization (UNHRO), an umbrella organization for health research within Uganda.* ***Was established in 1936 as the Yellow Fever Research Institute by the Rockefeller Foundation.*** *In 1947, scientists researching yellow fever placed a rhesus macaque in a cage in the Zika Forest.* ***The monkey developed a fever, and researchers***

> ***isolated from its serum a transmissible agent that was first described as Zika virus in 1952**. Other noteworthy arboviruses discovered at the institute include Chikungunya virus, West Nile virus, Bwamba virus, Semliki Forest virus, O'nyong'nyong virus, and Kadam virus." - in "Wikipedia", 2020.*

Since 1976 there have been many outbreaks all in Central Africa, around Congo in Gabon and Uganda, and so on.

And that was the dogma that this is a Central African thing because the viruses is most probably, we still don't know for sure is a fruit eating bat, and by the way but are very special animals from a biological perspective and they hardly ever developed cancer, but they can harbour all kinds of viruses that kill in no time other animals.

Another example is MERS (Middle East respiratory syndrome) another corona virus (MERS-CoV) infection that comes from camels, and it's spreading in the Middle East.

What do all this epidemic self in common Ebola influenza you know HIV and that is that their so-called zoonosis, a zoonosis is a an infection that affects us better comes originally from other animals, and HIV comes from chimpanzees originally you see bats that are you know our reservoir for several quite a few viruses corona viruses and probably ebola influenza there's a whole panoply of animals from you know particularly poultry that where the virus is yeah living in and and can mutate recombine and then when it jumps to people that's when you get this epidemic.

"**Other bacteria, such as the typhoid, colon, diphtheria, proteus, influenza, plague, and pyogenic organisms, have been found. The existence of psittakosis pneumonia, supposed to be contracted from animals, is denied by Lichtenstern.**" - Dr Arthur R. Edwards, MD, in "A Treatise on the Principles and Practice of Medicine", 1907.

There is a Certain Tendency in History, in People to Always Blame Others for a Problem

"For some historic reason Naples is often blamed for all kinds of things: Syphilis, Gonorrhoea, also, the Influenza. Actually in Spain, they called it the Naples disease. Basically what's bad news you blame the others." *- Dr Peter Piot, MD in "Are We Ready for the Next Pandemic?", 29 June 2018.*

"Using synthetic biology and reverse genetics, we describe the construction of a panel of isogenic severe acute respiratory syndrome (SARS) coronavirus (SARS-CoV) strains bearing variant spike glycoproteins that are representative of zoonotic strains found in palm civets and raccoon dogs, as well as isolates spanning the early, middle, and late phases of the SARS-CoV epidemic.

The recombinant viruses replicated efficiently in cell culture and demonstrated variable sensitivities to neutralization with antibodies.

The human, but not the zoonotic variants replicated efficiently in human airway epithelial cultures, supporting earlier hypotheses that zoonotic isolates are less pathogenic in humans." - Mark J. Cameron, University Health Network, University of Toronto, Canada,in "Synthetic Reconstruction of Zoonotic and Early Human Severe Acute Respiratory Syndrome Coronavirus Isolates That Produce Fatal Disease in Aged Mice", 2007.

"**The Species Barrier**

It was in this context that H5N1 appeared, a virus affecting chickens.

This did not suggest that this animal disease could invariably cross the species barrier and pass to humans.

It should be noted that the doctor who then managed this epizootic in China, Margaret Chan, a specialist in communicable diseases, would then take over the

management of WHO (Margaret Chan Fung Fu-chun, OBE, JP, FRCP, Chinese-Canadian physician, who served as the Director-General of the World Health Organization delegating the People's Republic of China for 2006–2017.

Chan was elected by the Executive Board of WHO on 8 November 2006, and was endorsed in a special meeting of the World Health Assembly on the following day.

Chan has previously served as Director of Health in the Hong Kong Government 1994–2003). Doctor Chan will play a significant role in the excitement. She's not the only one.

The Madness H1N1

When we withdraw to generalists managing the strategy Vaccine; This is where the third act takes place, the appearance in Mexico of H1N1, a human flu virus this time.

For infectiologists, H1N1 is no stranger, it has already caused epidemics, including that of the Spanish flu.

But this is a new strain, a mixture of human, avian and porcine sequences.

The still, the first cases detected are fatal.

Except that instead of calm the game, WHO turns to Albert Osterhaus, the veterinarian, who mounts an experimental model in ferrets - **we have never understood why he set his sights on this species – and decrees that this flu will exterminate part of the population world.**

What he says catches the spirits more than anyone else world renowned scientist, epidemiologist Neil Ferguson, adds." - Dr Didier Raoult, MD in "The Truth about Vaccines", 2018.

"The seafood market, is in a densely-populated district of Wuhan, a metropolitan of 15 million people.
The probability was very low for the bats to fly to the market. According to municipal reports, and the testimonies of 31 residents and 28 visitors, the bat was never a food source in the city, and no bat was traded in the market." *- Professor Botao Xiao, Joint International Research Laboratory of Synthetic Biology and Medicine, School of Biology and Biological Engineering, South China University of Technology, and School of Physics, Huazhong University of Science and Technology; & Dr Lei Xiao, Tian You Hospital, Wuhan University of Science and Technology, China, in "The possible origins of 2019-nCoV coronavirus", 14 March 2020.*

"Results: Subytpe H5N1 and human-adapted subtype H1N1 and H3N2 viruses replicated efficiently in the lung tissue, whereas classic swine and low-pathogenicity avian viruses ***propagated only poorly."*** *- Viola K. Weinheimer, Division of Influenza, Respiratory Viruses, Robert Koch Institut, et al., in "Influenza A Viruses Target Type II Pneumocytes in the Human Lung", The Journal of Infectious Diseases, 1 December 2012.*

"Pneumonia: Other bacteria, such as the; Typhoid, Colon, Diphtheria, Proteus, Influenza, Plague, and Pyogenic Organisms, have been found. The existence of Psittakosis Pneumonia, supposed to be contracted from animals, is denied by Lichtenstern." *- Dr Edwards Robin, MD, in "A Treatise on the Principles and Practice of Medicine", 1907.*

The Lack of Sober Analyses and Sensible Predictions by the Medical Trade

The Imperial College London COVID19 Report

"The Report from scientists at Imperial College London it is hugely pessimistic. I just don't think there is a real connection between lockdowns, closing borders, closing schools and being safer." *- Dr Anders Tegnell, MD, Sweden State Epidemiologist, in "Sky News", 3 April 2020.*

"Neil Ferguson, Professor of Mathematical Biology and Head of Department of Infectious Disease Epidemiology Vice-Dean (Academic Development), Faculty of Medicine, School of Public Health.

Affiliations:

1. Abdul Latif Jameel Institute for Disease and Emergency Analytics.
2. Imperial College Network of Excellence in Malaria.
3. Medical Research Council's Centre for Global Infectious Disease Analysis.
4. Malaria Modelling Research Group.
5. Vaccine Research Network.

External Positions: Member, Pandemic Influenza Scientific Advisory Group, UK Department of Health, 2005." - in "Medical Research Council's for Global Infectious Disease Analysis", website, 2 April 2020.

"On the 3 March 2020 there were reports that "half a million could die". I was sceptical. I noted that in 1999 it had been said that BSE "could kill" half a million. SARS in 2003 had "25% chance of killing tens of millions". In 2009, the government said 65,000 "could die" of swine flu." *- Simon Jenkins, in "The Guardian", 2 April 2020.*

"It is predicted that a pandemic of psychological and societal injuries is to come as we face financial and emotional crises across the globe." *- in "Immortalists Magazine", May 2020.*

Johns Hopkins University COVID19 Report

"Scientists in Germany have taken a close look at the region that has been hit especially hard by the coronavirus. The affected community is Gangelt, Southwest of Düsseldorf. Initial results show that 15% of the population has tested positive for the virus. The scientists calculated a case fatality rate of 0,37% for the district. ***That's 5 times lower than what the US-based Johns Hopkins University projected for all of Germany."*** *- in "Study finds coronavirus less lethal than anticipated", DW, 10 Apr 2020.*

"The alarming alerts on possible epidemics have multiplied these last years.

Fear of the 2 Avian Flu, the H1N1 flu epidemic, SARS coronavirus, MERS coronavirus, Chinese coronavirus, Ebola, Chikungunya, Zika.

For all these disease models mathematics and predictions were made, which announced the death of millions of people.

All the allegedly frightening potential epidemics grouped together for 20 years have hardly exceeded 10,000 dead, in a world where there are 56 million deaths a year. Not very impressive.

In however other epidemics have been overlooked, including the huge Epidemic of Clostridium Difficile (a bacteria that can infect the bowel and cause diarrhoea.

The infection most commonly affects people who have recently been treated with antibiotics), for its part, kills between 60,000 and 100,000 people a year worldwide.

Finally, concerning the panic faced with vectorized diseases such as chikungunya or Zika, one can only be struck by the low mortality and few cases existing in France, compared to the enormous media coverage of which they were the subject and at the political cost of the decisions linked to all these alerts.

The sum of the deaths caused, in France, over 20 years, by all aforementioned diseases which have been the subject of terrifying predictions - apart from the flu that kills every year but hasn't killed more than the year of H1N1 – is ridiculous, compared to the figures announced by whistleblowers.

I've had the opportunity to say that, except for the mad cow for which I don't care the accounts, **all these diseases had only killed 4 people in 20 years.**

All these alarms launched in the country, all these posters in airports for something that left 4 dead! Not to mention, the billions spent on drugs, that have not seen the light of day, and vaccinations that have not worked.

All of this should give food for thought.

I have been faced with health crises and especially infectious since the very beginning of my medical studies.

I participated in the management of several real epidemics, I was involved in several health crises, and I was responsible for the Ministry of Health and Research to reflect on these health crises, including in the bioterrorism, and I am the most cited expert in the field of infectious diseases in the world.

That, gives me the duty, to put in perspective all of my experience on these health crises, their meaning, and how to understand them." - Dr Didier Raoult, MD in "Epidemics: Real Dangers and False Alarms; From Bird Flu to Covid-19", 2020.

*"**Mad Cow Disease:** Bovine spongiform encephalopathy (BSE) **is thought** to be due to an infection by a misfolded protein, known as a prion. Prions are misfolded proteins with the ability to transmit their misfolded shape onto normal variants of the same protein. The word prion derives from "proteinaceous infectious particle". **The hypothesized role of a protein as an infectious agent stands in contrast to all other known infectious agents such as viruses, bacteria, fungi and parasites, all of which contain nucleic acids (DNA, RNA or both).**" - in "Wikipedia", 16 May 2020.*

"In Marseille in 2013, extensively drug-resistant tuberculosis clone Beijing and Clostridium difficile O27 were the most common causes of severe emerging infectious diseases: 9 patients died. No patients infected with the most feared and publicized pneumonic viruses (except the well-known H1N1, H3N2, respiratory syncytial virus and rhinovirus) have been hospitalized in Marseilles during the past 10 years.

Following the emergence of new respiratory viral infections, there has been in recent years an explosion of publications in the best medical and scientific journals based on the fear of another catastrophic outbreak equivalent to 'Spanish flu'.

This fear started with the arrival of Severe Acute Respiratory Syndrome (SARS) from China.

What does this over-representation of emerging viral agents of pneumonias reflect?

Is it people's fear of the unknown, the power of the involved scientists, or perhaps the financial interest of the Vaccine and Pharmaceutical Industries?" - J. McConnell, Dr D. Raoult, MD, in "Emerging respiratory viruses: is it "much ado about nothing"?", Clinical Microbiology and Infection, March 2014.

> ***"Doomsday predictions are more frequently discussed in the popular media, and are probably also more likely to be accepted for publication in scientific journals. The inadvertent promotion of fear is likely to attract public funds**, and will, in retrospect, be applauded for any correct predictions, but forgotten when found to be incorrect." - A. Neuberger, M. Paul, A. Nizar, D. Raoult, in "Modelling in infectious diseases: between haphazard and hazard", Clinical Microbiology and Infection, November 2013.*

"The Robert Koch Institute provides the figures. Then you sit there as a listener or spectator: 20 dead again, how terrible! Do you know when I would start to panic?

If there are 20,000. Then we get close to what went on completely quietly 2 years ago. The 2018 influenza epidemic, with 25,000 deaths, never disconcerted the press.

The clinics had to deal with an additional 60,000 patients, which was no problem in the clinics either!

That is the main fear: the disease is presented as a terrible disease. The disease "per se" is like the flu in a normal winter. It is even weaker in the first week." - Dr Karin Mölling, MD, virologist whose research focused on retroviruses, particularly human immunodeficiency virus (HIV). Was professor and director of the Institute of Medical Virology at the University of Zurich from 1993 to 2008, in "Anti-Empire.com", 23 March 2020.

"The ill-founded opinions expressed by international experts, replicated by the media and social networks repeat the unnecessary panic that we have previously experienced.

The coronavirus identified in China in 2019 caused nothing less than a strong cold or flu, with no difference so far with cold or flu as we know.

Respiratory viral conditions are numerous and are caused by several viral families and species, among which the respiratory syncytial virus (especially in infants), influenza (influenza), human metapneumoviruses, adenoviruses, rhinoviruses, and various coronaviruses.

It is striking that earlier this year global health alerts have been triggered as a result of infections by a coronavirus detected in China, COVID-19, knowing that each year there are 3 Million newborns who die in the world of Pneumonia, and 50,000 adults in the USA for the same cause, without alarms being issued.

We are victims of a new sociological phenomenon, scientific-media harassment triggered by experts only on the basis of laboratory molecular diagnostic analysis results.

Communiqués issued from China and Geneva were replicated, without being confronted from a critical point of view, and above all, without stressing that coronaviruses have always infected humans and always caused diarrhoea, and what people call a banal cold or common flu.

Absurd forecasts were extrapolated, as in 2009 with the H1N1 influenza virus. There is no evidence to show that the 2019 coronavirus is more lethal than respiratory adenoviruses, influenza viruses, coronaviruses from previous years, or rhinoviruses responsible for the common cold." - Dr Pablo Goldschmidt, MD, virologist specializing in tropical diseases, Professor of Molecular Pharmacology, Université Pierre et Marie Curie, Paris, in "Coronavirus: Panic is unjustified", Clarin, 9 March 2020.

> *"I don't believe the numbers here, everything is politics, not math." - Dr Michael Levitt, in "Jerusalem Post", 20 March 2020.*

> *"What we need is to control the panic, in the grand scheme, we're going to be fine." - Dr Michael Levitt, Professor of biochemistry, Stanford University. Nobel Prize in Chemistry 2013, in "Los Angeles Times", 22 March 2020.*

The Australia's Example
The Media Hysteria, and the Scientific Erroneous Medical Trade Alarming Predictions

3 March 2020

"Economist Warwick McKibbin estimates: Virus could kill up to 100,000 Australians." - in "The Australian Financial Review", 3 March 2020.

12 March 2020

"Experts say that even in a 'best case' scenario 59,200 people are expected to die from the coronavirus in New South Wales alone. University of Sydney Professor Robert Booy, who has previously advised Australia's Chief Medical Officer on influenza pandemics." - in "Daily Mail", 12 March 2020.

16 March 2020

"Deputy Chief Medical Officer Paul Kelly, in a worst case scenario, 15 million people would get the coronavirus and 150,000 would die." - in "The Sydney Morning Herald", 16 March 2020.

21 March 2020

"Coronavirus: Even glass-half-full optimists can do the maths. If between 5 million and 15 million Australians are infected, doing the best-case maths on the mortality rate to follow would mean 35,000 - 105,000 Australians will die from the coronavirus." - Peter Van Onselen in "The Australian", 21 March 2020.

23 March 2020

Staying at Home and Away From Others (Social Distancing)

"The single most important action we can all take, in fighting coronavirus is to stay at home.

The government has introduced 3 new measures:

1. Requiring people to stay at home, except for very limited purposes.
2. Closing certain businesses and venues.
3. Stopping all gatherings of more than 2 people in public.

Every person in the UK must comply with these new measures, which came into effect on Monday 23 March.

The relevant authorities, including the police, have been given the powers to enforce them – including through fines and dispersing gatherings.

The government will look again at these measures after 3 weeks, and relax them if the evidence shows this is possible." - in "Gov.UK, 23 March 2020.

5 May 2020

Actual Number of Deaths Attributed to COVID-19 in Australia

"Australia 100 deaths as of 20 of May 2020" - in "Coronavirus COVID-19 Global Cases Map developed by the Johns Hopkins Center for Systems Science and Engineering".

"In quite a few cases, we have also found that the current corona infection has nothing whatsoever to do with the fatal outcome because other causes of death are present, for example, a brain haemorrhage or a heart attack.

[Covid19 is] not particularly dangerous viral disease.

All speculations about individual deaths that have not been expertly examined only fuel anxiety." - Dr Klaus Püschel, MD, forensic pathologist, director of the Institute of Forensic Medicine, University Medical Center Hamburg-Eppendorf, in "Von den Toten lernen für die Lebenden", Hamburger AbendBlatt, 2 April 2020.

Ischaemic Strokes

"Ischaemic Strokes are the most common type of stroke.

They happen when a blood clot blocks the flow of blood and oxygen to the brain. These blood clots typically form in areas where the arteries have been narrowed or blocked over time by fatty deposits known as plaques. This process is known as Atherosclerosis. Arteries may become narrower as you age, some things dangerously speed up the process.

These include:

1. **Obesity;**
2. **High Blood Pressure (hypertension);**
3. **Diabetes.**

Haemorrhagic Strokes

Haemorrhagic strokes (also known as cerebral haemorrhages or intracranial haemorrhages) are less common than ischaemic strokes. They happen when a blood vessel inside the skull bursts and bleeds into and around the brain. The main cause of haemorrhagic stroke is High Blood Pressure, which can weaken the arteries in the brain and make them more likely to split or rupture.

Things that increase the risk of High Blood Pressure include:

1. **Being overweight;**
2. **Drinking excessive amounts of alcohol;**
3. **Smoking;**
4. **A lack of exercise;**
5. **Stress." - in "nhs.uk", 8 April 2020.**

What People do when they are Forced into Lockdown

1. People tend to over eat when in forced lock-downs, either as a side effect of anxiety, or by the availability and proximity to food (specially with a huge increase with the consumption of unhealthy snacks such as potato chip bags, and confectionery sugar), and tend to drink an increased amount: sugar fizzy drinks, and beer, both of which, slow down lymph circulation

> ***"Many of the children with the new inflammatory disease, likened to Kawasaki disease and sepsis, had been diagnosed with Covid-19."*** *- in "Coronavirus could be causing new inflammatory condition in children, UK health officials warn", CNBC, 28 April 2020.*
>
> *"Kawasaki disease is sometimes called mucocutaneous lymph node syndrome because it also affects glands that swell during an infection (lymph nodes), skin, and the mucous membranes inside the mouth, nose and throat." - in "Kawasaki disease", Mayo Clinic, 31 October 2019.*

"Alcohol suppresses both the innate and the adaptive immune systems. Chronic alcohol use reduces the ability of white blood cells to effectively engulf and swallow harmful bacteria.

Excessive drinking also disrupts the production of cytokines, causing your body to either produce too much or not enough of these chemical messengers.

An abundance of cytokines can damage your tissues, whereas a lack of cytokines leaves you open to infection.

Chronic alcohol use also suppresses the development of Tcells and may impair the ability of Natural Killer (NK) cells to attack tumor cells.

This reduced function makes you more vulnerable to bacteria and viruses, and less capable of destroying cancerous cells.

With a compromised immune system, chronic drinkers are more liable to contract diseases like pneumonia and tuberculosis than people who do not drink too much.

There is also data linking alcohol's damage to the immune system with an increased susceptibility to contracting HIV infection.

HIV develops faster in chronic drinkers who already have the virus.

Drinking a lot on a single occasion also can compromise your immune system.

Drinking to intoxication can slow your body's ability to produce cytokines that ward off infections by causing inflammations. Without these inflammatory responses, your body's ability to defend itself against bacteria is significantly reduced. A recent study shows that slower inflammatory cytokine production can reduce your ability to fight off infections for up to 24 hours after getting drunk." - in "Beyond Hangovers, Understanding alcohol's impact on your health", National Institute on Alcohol Abuse and Alcoholism, NIH Publication No.15–7604, October 2015.

"The most common symptom of Hodgkin Lymphoma is a lump in the neck, under the arm, or in the groin, which is an enlarged lymph node. It doesn't usually hurt, but it may become painful after drinking alcohol." - in "Signs and Symptoms of Hodgkin Lymphoma", American Cancer Society, 18 April 2020.

"Acute, focal, disseminated, non-purulent, principally lymphocytic, infectious–toxic, epidemic polioencephalomyelitis". *- Th. Tobler, in "Pathological contributions to the knowledge of acute, herd-like disseminated, non-purulent, predominantly lymphocytic, infectiously toxic, epidemic polioencephalomyelitis (Encephalitis lethargica)", Swiss Medical Weekly Journal, No. 23, 1920.*

"Neutrophils are central to the control of infection within the bronchial mucosa.

The difference between the effect of influenza A and influenza B virus on neutrophil lysozyme release and bactericidal activity is consistent with epidemiologic evidence of greater morbidity and mortality following infection with strains of influenza A virus.

Morbidity and mortality usually involve secondary bacterial infection, which would occur in subjects with lung disease and in the elderly, whose airways are often colonized by bacteria.

The sudden reduction in the capacity to control bacterial colonization that would follow influenza A virus infection of sputum neutrophils could be critical in the pathogenesis of clinical airways infection with bacteria, and in the subsequent development of pneumonia.

The present study provides the first direct evidence of an acute and significant impact of influenza A virus on the protective function of the intrabronchial neutrophil.

It identifies a mechanism for the morbidity and mortality caused by bacterial infection of the bronchoalveolar space following infection with influenza A virus." - Gerald Pang, in "Influenza Virus Inhibits Lysozyme Secretion by Sputum Neutrophils in Subjects with Chronic Bronchial Sepsis", American Journal Respiratory Critical Care Medicine, Vol.161, 2000.

"Influenza virus infection is a serious threat, with the potential to cause severe pneumonia and death.

Primary and secondary immune barriers play a crucial role in safeguarding the host against influenza. Physical barriers of the immune system including soluble components like mucus, collectins, and antimicrobial peptides provide the first line of defence by mitigating virus exposure to underlying airway epithelial cells which are the principal site for Influenza A viruses (IAV) replication.

Innate immune cells are the first cells to respond to Influenza A viruses (IAV) infection in the respiratory tract.

Virus replication-induced production of cytokines from airway epithelium recruits innate immune cells to the site of infection. These leukocytes, namely, neutrophils, monocytes, macrophages, dendritic cells, eosinophils, natural killer cells, innate lymphoid cells, and Gamma Delta (γδ) T cells, become activated in response to Influenza A viruses, to contain the virus and protect the airway epithelium while triggering the adaptive arm of the immune system.

Innate immune cells provide the first line of cellular defence to combat Influenza A viruses (IAV) infection.

Leukocytes like neutrophils, monocytes, eosinophils, natural killer (NK) cells, Innate Lymphoid Cells (ILCs), and γδ T cells provide anti-influenza host protection by releasing preformed cytokines and granule contents that either directly or indirectly help the host to eliminate the threat posed by replicating virus.

I. Neutrophils are among the first innate cells to be recruited during Influenza A viruses IAV infection. While neutrophils are first to respond to any noxious stimuli, their role during influenza is complex and accumulation in the lungs is impacted both by virus strain and dose. Neutropenia (low level of neutrophils - neutrophils are a type of white blood cell - all white blood cells help the body fight infection); has been demonstrated to increase the pulmonary virus titer and mortality rate upon Influenza A viruses IAV infection suggesting a protective role for neutrophils during influenza. Phagocytosis, release of granular contents, and production of cytokines are major effector functions of neutrophils.

II. Monocytes, peripheral blood phagocytes, are recruited into the lungs during Influenza A viruses IAV infection.

III. The pulmonary macrophage population consists of Alveolar Macrophages (AMs) and interstitial macrophages (IMs). Macrophages are phenotypically classified as proinflammatory (M1) and anti-inflammatory (M2). As tissue resident professional phagocytes that safeguard the

airway against intruding pulmonary pathogens, AMs maintain lung homeostasis.

IV. Dendritic Cells (DCs) are professional Antigen-Presenting Cells (APCs) that patrol the body surfaces (skin, gut, or airway) for intruding microbes or insults. They play a key role in host immunity by bridging innate and adaptive arms of the immune system. Phagocytosis of infected cells by antigen-presenting cells (APCs) can activate adaptive immune responses that help to eliminate the infection.

V. Eosinophils: Epidemiologic data associated with the 2009 H1N1 pandemic suggested that asthmatics, presumably with pulmonary eosinophilia, were less likely to suffer from IAV-induced morbidity and mortality.

VI. As large granular lymphocytes representing about 10% of lung resident lymphocytes, Natural Killer (NK) cells accumulate in the respiratory tract in response to Influenza A viruses (IAV) infection. This increase correlates with an initial decrease in circulatory NK cells suggesting that during early IAV infection NK cells are recruited directly from blood. These cells provide immunoprotection during IAV infection by reducing inflammation, primarily the accumulation of inflammatory monocytes.

VII. The Innate Lymphoid Cells (ILC) family consists of cytotoxic NK cells and 3 noncytotoxic members, ILC1, ILC2, ILC3, that are innate counterparts of T cells that do not express antigen receptors.

Various insults activate ILC subsets:

a. ILC1 responds to viruses and intracellular bacteria.
b. ILC2 to extracellular parasites and allergens.
v. ILC3 to extracellular bacteria and fungi.

VIII. Innate-like T cells expressing γ and δ chains as receptors, $\gamma\delta$ T cells constitute around 1-5% of blood lymphocytes. Given that $\gamma\delta$ T cells respond antecedent to $\alpha\beta$

T cells during infection, they may serve a pivotal role in early-stage antiviral host defence during influenza." - Lamichhane, Samarasinghe, in "The Role of Innate Leukocytes during Influenza Virus Infection", Journal of Immunology Research, 12 September 2019.

"Our research demonstrates that there is a significant rate of Neutropenia (low level of neutrophils - neutrophils are a type of white blood cell - all white blood cells help the body fight infection), in adult patients presenting to hospital with confirmed cases of influenza and that for the 2015 season this was more common in the influenza B subgroup.

Importantly, Neutropenia was mild, and appeared transient. A recent prospective study has examined 850 adult patients with laboratory-confirmed influenza.

They demonstrated that leucopenia (defined as a white blood cells <4 cells/mm3) occurred in 8.3% of patients with confirmed influenza A and in 26.8% of patients with confirmed influenza B. Specific rates of neutropenia were not reported.

Another study, specifically focusing on the H1N1 strain of influenza A has demonstrated similar rates of leucopenia, and a 45.8% rate of lymphopenia.

From our data, it is important to note that no patients who were tested beyond day 10 following laboratory confirmation of influenza were found to be neutropenic, suggesting that the duration is likely short.

There is unlikely to be late-onset neutropenia (beyond day 10) as a result of influenza virus infection, and thus caution should be exercised in attributing late-onset neutropenia to influenza infection. In the majority of cases, the Neutropenia was not severe and therefore severe neutropenia (<0.5 × 109/L) should prompt consideration of another cause for the neutropenia. Prolonged neutropenia in these patients should also prompt investigation for other causes." - Higgins, Runnegar, Bird, Markey, in "Rates of neutropenia in adults with influenza A or B: a retrospective analysis of hospitalised patients in South East Queensland during 2015", Internal Medicine Journal, 2016.

Peribronchial Lymph Nodes

"In 115 cases congestion and oedema of the Peribronchial Lymph Nodes were grossly noted. In 11 cases no microscopic changes were demonstrable.

The glands often attained remarkable proportions, and it was not uncommon to see a mass the size of a walnut.

Such excessive enlargement was present in 32 instances.

The external appearance was generally a light reddish grey, occasionally a dark pinkish red.

The consistency varied from mushy softness to flaccidity.

The cut surface was practically always very moist, dripping blood stained fluid.

The degree of congestion varied, but the majority of cases were definitely congested, and, in some, tiny haemorrhages visible to the naked eye occurred.

Microscopically, the lymph sinuses were widely distended and often packed with very large mononuclear, pale staining, phagocytic cells, containing bacteria and cell remnants.

Other sinuses showed a granular debris with delicate threads of fibrin, and, in some, dense accumulations of red cells were intermingled with the other constituents.

Many cells resembled the phagocytic epithelial cells of the lung exúdate.

A number of camera lucida drawings of these cells made from both sources were compared and it seemed very probable that they belonged to the same group of elements.

The lymphoid tissue was generally loosely arranged, sometimes intermingled with a fine precipitate and occasionally fibrin.

An active proliferation, as indicated by great numbers of large cells of the lymphoid type, appeared to be going on.

Plasma cells occurred in considerable numbers in cases where the disease had persisted for some time.

The vessels throughout the glands were enormously congested, and now and then haemorrhagic foci were encountered.

Almost in every instance some of the vessels contained

smooth hyaline or conglutination, and, in a few cases, fibrin thrombi.

The vascular endothelium was considerably swollen, the nuclei being often very large and the cytoplasm protruding into the lumen of the vessel.

We believe that it is justifiable to look on the phagocytic cells in the lymph sinuses as of mixed origin.

Part of them appear to be derivatives of vascular endothelium corresponding to the endothelial leukocytes that Mallory has described.

Others are probably epithelial, being carried to the lymph sinuses from the lung.

These latter are differentiated by poorer staining, frequent vacuolization and other evidences of degeneration.

On the whole, bacterial phagocytosis in the lymph node was rare.

The perivascular spaces were packed with cells similar to those described, the relative absence of polynuclear elements being striking.

To summarize the changes in the lymphatic glands: marked congestion and oedema, acute sinus catarrh, frequent hyaline and conglutination thrombosis, and relative scarcity of polynuclear cells." - Dr Baldwin Lucke, MD, Toynbee Wight, MD, Edwin Kime, MD in "Pathologic Anatomy and Bacteriology of Influenza", Archives of Internal Medicine, August 1919.

2. People under Lockdown Smoke More.

3. And by consequence people under Lockdowns are forced into a greater Lack of Exercise.

4. During Lockdowns, levels of Stress are placed upon the entire population.

Stress and Colds

"The rates of both respiratory infection (P<0.005) and clinical colds (P<0.02) increased in a dose-response manner with increases in the degree of psychological stress.

Infection rates ranged from approximately 74% to approximately 90%, according to levels of psychological stress, and the incidence of clinical colds ranged from approximately 27% to 47%.

These effects were not altered when we controlled for age, sex, education, allergic status, weight, the season, the number of subjects housed together, the infectious status of subjects sharing the same housing, and virus-specific antibody status at base line (before challenge).

Moreover, the associations observed were similar for all 5 challenge viruses (rhinoviruses, coronaviruses, and respiratory syncytial virus).

Conclusions: Psychological Stress was associated in a dose-response manner with an increased risk of Acute Infectious Respiratory Illness, and this risk was attributable to increased rates of infection rather than to an increased frequency of symptoms after infection." - New England Journal of Medicine, 1991.

"As reported in similar analyses of these data ("Psychological stress and susceptibility to the common cold", 1991), in a multiple logistic regression, ***exposure to a recent major stressful life event was associated with an increased risk for developing a cold*** *following exposure to rhinovirus (RV) (OR = 1.99, CI = 1.04, 3.08). This association was similar across the 2 rhinoviruses viruses (P > 0.16 for stress-by-virus interaction)." - in "Chronic stress, glucocorticoid receptor resistance, inflammation, and disease risk", PNAS, 17 April 2012.*

"Anxiety is a leading cause of sleep dysfunction, and not getting enough rest may have negative effects on your health. Sleep plays a powerful role in supporting healthy immune system function; in fact, these two things are closely connected. A lack of sleep can increase the likelihood of infection." *- in "Good Sleep Hygiene May Help Protect Against Infectious Diseases", Institute for Functional Medicine, April 2020.*

"If dogs were only properly housed, fed, and treated generally as they should be, there would be no need to innoculate puppies with attenuated virus, successful prevention will never be achieved by inoculation of distemper vaccine." *- Dr McDonagh, London Zoological Gardens*

"Immunization with an attenuated virus cannot prevent distemper. I have treated many dogs, which have developed distemper despite 2 or 3 injections. Fits, Chorea, and Hysteria in dogs have become more frequent since the use of the Field distemper vaccine." *- Professor James Eustace Radclyffe McDonagh, FRCS*

Influenza

"It is an old proverb that too many cooks spoil the broth; certainly, in the case of influenza, the (roughly) annual announcement of a fresh causal organism for the past 15 years has not conduced to the solution of the problem; moreover, this fickleness has militated against effectively launching a serum or vaccine on the market.

Had it been otherwise, we may assume influenza might have disappeared from our midst, just as smallpox has almost vanished except in those countries where vaccination and re-vaccination are most enforced.

On the other hand, McDonagh has stated that preventive vaccines serve but to delay the natural decline of epidemic diseases; so perhaps things are just as well as they are.

Recently, bacteriologists have succeeded in making some ferrets sick-unto-death by injecting them with the nasal secretions of patients, **but according to McDonagh the effects of such naso-pharyngeal washings prove nothing at all.**" - in "Hearings Before the Subcommittee, Public Health, Hospitals and Charities, Committee on the District of Columbia, House of Representatives", January 1938.

Encephalitis

Influenza, **"may be the cause of encephalitis or encephalomyelitis, although uncertainty surrounding its diagnosis has hardly yet been dispelled; a large number of nervous and mental syndromes were described in relation to the pandemic of 1918–19. Yet the possible connexion of some of these cases with encephalitis of the lethargic type cannot be ignored, and raises questions extremely difficult to answer."** - S. Wilson, in "Epidemic Encephalitis", Wilson's Neurology 2, Vol. 1, 1955.

"Epidemic encephalitis has engaged attention so extensively throughout this country for the past 2 years that its clinical, pathological and etiological features are now matters of general medical importance. **Its concurrence with influenza emphasizes this importance and raises new questions in an already perplexing epidemic problem.**

The characteristic clinical features in this lethargic group of cases is the pronounced lethargy which was common to them all, together with an elevation of temperature.

Three of the 4 patients had previously suffered from Influenza within a relatively short time of the onset of the Encephalitis. In 3 of the cases, cranial nerve involvement causing oculomotor and bulbar palsies occurred.

Only 1 of the cases terminated fatally, and that after a rapid course of 6 days duration.

Of the patients who recovered, one showed no ill effects of the disease, **one had a prolonged Asthenia, and the 3rd is giving some evidence of a tendency in the direction of a**

Parkinsonian Syndrome. These 2 cases are presented as typical of the cataleptic variety of the disease. One of them had previously suffered from influenza, while in the other no such history is obtainable. They are so strikingly alike in their principal clinical features as to justify the recognition of the cataleptic type of epidemic encephalitis. **This group of cases has its chief interest in the fact that all developed clearly defined Parkinsonian Symptoms. Four of these cases, in addition to the suppression of the automatic associated movements, the, slowness of somatic movement, the characteristic attitude and facies, presented the agitans tremor.** One case, however, having all of the other cardinal symptoms had no tremor. **Two of the 5 cases developed a moderate degree of somnolence during the course of the disease;** on the other hand, 3 of these patients showed a marked restlessness, not only at the beginning of the disease, but more or less throughout its entire course, a fact which makes (them stand out in contrast to the other types of Epidemic Encephalitis already described. **Three of the patients had suffered from an attack of influenza a short time before the onset of the encephalitis.**

Nature of the Disease

Whether this is a new disease or a recent outcropping of an old epidemic tendency is a much debated subject. **The occurrence of prolonged and profound sleep in connection with epidemic diseases is not new in medical history.** Such somnolence has been described in connection with many epidemics of influenza since the earliest times. **Zuelzer reports the fact that in an epidemic of influenza occurring in 1712, profound sleep was so frequent and pronounced a symptom that in Tubingen the disease came to be known as the Sleeping Sickness.** In more recent times, Longuet in 1892 gives an account of a mysterious disease known as "Nona" also "Nonna." **This was said to have occurred especially in northern Italy and Hungary and to be characterized by lethargy and weakness. Much has been written concerning the relation of epidemic encephalitis to influenza.**

Relation to Influenza

The relation of this disease to influenza has given rise to considerable discussion in this country. A large proportion of cases reported here had suffered from influenza at periods varying from 1 week to 6 months previously." - Dr Frederick Tilney, MD, Dr Hubert Shattuck Howein, MD in "Epidemic Encephalitis, (Encephalitis Lethargica)", 1920.

"**Symptoms of Encephalitis:**

Infectious encephalitis usually begins with a "flu-like illness" or headache. Typically more serious symptoms follow hours to days, or sometimes weeks later. The most serious finding is an alteration in the level of consciousness.

This can range from mild confusion or drowsiness, to loss of consciousness and coma.

Other symptoms include a high temperature, seizures (fits), aversion to bright lights, inability to speak or control movement, sensory changes, neck stiffness or uncharacteristic behaviour." - in "What is Encephalitis", Encephalitis Society, July 2017.

"**Meningitis:** Is an infection of the meninges, the membranes that surround the brain and spinal cord.

Encephalitis: Is inflammation of the brain itself. Anyone can get encephalitis or meningitis. Causes of encephalitis and meningitis include; viruses, bacteria, fungus, and parasites.

Symptoms of encephalitis include: loss of consciousness, seizures, muscle weakness, or sudden severe dementia.

Other symptoms include:

- Sudden fever
- Headache
- Vomiting

- Heightened sensitivity to light
- Stiff neck and back
- Confusion and impaired judgment
- Drowsiness
- Weak muscles
- A clumsy and unsteady gait
- Irritability
- In more severe cases, people may have problems with speech or hearing, vision problems, and hallucinations.

Symptoms of meningitis, which may appear suddenly:

- High fever
- Severe and persistent headache
- Stiff neck
- Nausea
- Sensitivity to bright light
- Vomiting
- Changes in behaviour such as confusion, sleepiness, difficulty waking up

In infants, symptoms of meningitis or encephalitis may include fever, vomiting, lethargy, body stiffness, unexplained irritability, and a full or bulging fontanel (the soft spot on the top of the head)." - in "Meningitis and Encephalitis Information Page", National Institute of Neurological Disorders and Strokes, NIH, 23 March 2019

> *"The facts in the history of influenza force one to assume a chronologic connection between influenza and the syndrome which has been called Encephalitis. A transition between the lesions appears histologically possible. The etiologic and experimental research on encephalitis has not revealed a separate causative agent.* ***The most probable opinion attributed the syndrome called epidemic encephalitis to the action of poisons that appear in the body in influenza".*** *- F. Lucksch, in "Archives of Pathology", 1928.*

"We knew from other diseases, such as yellow fever, that a virus might behave very differently in different hosts." *- Dr. Jean Macnamara, MD in "The Lancet, 19 August 1933.*

"We believe that the weight of 90 years of evidence, including the exceptional but largely forgotten work of an earlier generation of pathologists, indicates that the vast majority of pulmonary deaths from pandemic influenza viruses have resulted from poorly understood interactions between the infecting virus and **secondary infections due to bacteria that colonize the upper respiratory tract.**

The data are consistent with a natural history in which the virus, highly cytopathic to bronchial and bronchiolar epithelial cells, extends rapidly and diffusely down the respiratory tree, damages the epithelium sufficiently to break down the mucociliary barrier to bacterial spread, and if able to gain access to the distal respiratory tree (perhaps on the basis of receptor affinity), **creates both a direct pathway for secondary bacterial spread and an environment (cell necrosis and proteinaceous oedema fluid) favourable to bacterial growth."** - David Morens, Jeffery Taubenberger, Anthony Fauci, National Institute of Allergy and Infectious Diseases, National Institutes of Health, in "Predominant Role of Bacterial Pneumonia as a Cause of Death in Pandemic Influenza", The Journal of Infectious Diseases, 1 October 2008.

"We are advising those who are at increased risk of severe illness from coronavirus (COVID-19) to be particularly stringent in following social distancing measures:

1. Aged 70 or older (regardless of medical conditions)
2. Under 70 with an underlying health condition listed below (i.e., anyone instructed to get a flu jab as an adult each year on medical grounds):

a) Chronic (long-term) Respiratory Diseases: Asthma, Chronic Obstructive Pulmonary Disease, Emphysema or Bronchitis

b) Chronic Heart Disease, such as; Heart Failure
c) Chronic Kidney Disease
d) Chronic Liver Disease, such as Hepatitis
e) Chronic Neurological Conditions: Parkinson's Disease, Motor Neurone Disease, Multiple Sclerosis, Learning Disability or Cerebral Palsy
f) Diabetes
g) Problems with Spleen: Sickle Cell Disease or had spleen removed
h) Weakened Immune System as the result of conditions such as HIV and AIDS, or medicines (medical drugs) such as steroid tablets or chemotherapy
i) Seriously overweight (a body mass index of 40 or above)

3. Those who are pregnant."
- in "Guidance on social distancing for everyone in the UK", Public Health England, 30 March 2020.

But What Exactly Is a "Flu-Related Death"? How Does the Flu Kill?

> ***"The presence of the virus itself isn't going to be what kills you. An infectious disease always has a complex interaction with its host."*** *- Dr Amesh Adalja, MD, infectious disease physician, Johns Hopkins University Center for Health Security.*

"SARS appears to be a highly contagious, rapidly spreading viral respiratory infection caused by a new coronavirus not previously seen.
Clinical features range from mild to severe acute hypoxemic respiratory failure, to death.

Pathology: Patients that had a lung biopsy or autopsy lung specimen (ranging from 8 to 24 days after the onset of illness) for examination revealed features of diffuse alveolar damage with varying degrees of severity.

In those with samples obtained early in the course of the illness (#10 days), there was evidence of edema, hyaline membrane formation, and pneumocyte proliferation.

In addition, there were cellular "fibromyxoid" organizing exudates in the airspaces. There was also evidence of lymphocytic interstitial infiltrates. Multinucleated and vacuolated pneumocytes were observed." - Manocha, MD; Walley, MD; Russell, MD in "Severe Acute Respiratory Distress Syndrome (SARS): A critical care perspective", Critical Care Medicine, November 2003.

"The overwhelming viral hoard triggers a strong response from the immune system, which sends battalions of white blood cells, antibodies and inflammatory molecules to eliminate the threat.

T cells attack and destroy tissue harbouring the virus, particularly in the respiratory tract and lungs where the virus tends to take hold.

In most healthy adults this process works, and they recover within days or weeks. But sometimes the immune system's reaction is too strong, destroying so much tissue in the lungs that they can no longer deliver enough oxygen to the blood, resulting in hypoxia and death.

Typically, bacteria Streptococcus or Staphylococcus infect the lungs.

A bacterial infection in the respiratory tract can potentially spread to other parts of the body and the blood, even leading to septic shock: a life-threatening, body-wide, aggressive inflammatory response that damages multiple organs." - in "Scientific American", 18 December 2017.

> *"The health authority in the Grand Est region said **2/3, of its 620 old people's homes, had been affected by the coronavirus pandemic and 570 residents had died."** - in "Tragedy unfolds as virus deaths rise in Europe's homes for elderly", Financial Times, 2 April 2020.*

"Nursing homes data, which account for more than 30% of total fatalities." *- in "France to extend lockdown, coronavirus death toll close to 11,000", Reuters, 8 April 2020.*

"Care homes in the Madrid region alone have reported the deaths of 4,260. In France almost a third of all coronavirus deaths have been of residents in care homes, a total of 3,237 people have died in care homes." *- in "Care homes across globe in spotlight over Covid-19 death rates, Residential homes have emerged as key breeding ground for infections from Madrid to New York", The Guardian, 9 April 2020.*

"A novel swine-origin influenza A (H1N1) virus caused worldwide outbreaks **starting in April 2009.**

The aim of this study was to evaluate the clinical characteristics and outcomes of pandemic 2009 H1N1 pneumonia by comparing to Community-Acquired Pneumonia (CAP) of other origin.

This study shows that clinical characteristics and outcomes of 2009 H1N1 pneumonia are comparable to those of CAP of other origin.

Our analysis showed that the presence of underlying medical conditions known to predispose to complications of influenza was common." - in "Comparison of Clinical Features and Outcomes of Hospitalized Adult Patients With Novel Influenza A (H1N1) Pneumonia and Other Pneumonia", Academic Emergency Medicine, 13 January 2013.

Koch Postulate

"In 1890, Robert Koch formulated postulates defining the criteria required to incriminate a bug (firstly a parasite) as the causative agent of infectious diseases, for which he was awarded the Nobel Prize for Medicine in 1905.

His theory was sustained by the formulation:

1 pathogen + 1 host = 1 disease.

This postulate generated serious criticism at that time and Koch was himself aware that his rules were only preliminary. Indeed, **he was never able to demonstrate his postulates for cholera because of the lack of a reproducible animal model, despite the fact that he had isolated vibrios as a potential cause of cholera. In addition, von Pettenkofer even ingested Koch's cholera vibrios orally in front of his students, without falling ill.** A recent discovery has fundamentally challenged the Koch postulate. Lugdunin is a bactericidal agent secreted by Staphylococcus lugdunensis that prohibits colonization by Staphylococcus aureus. Zipperer A, et al. demonstrated that human nasal colonization by S. lugdunensis was associated with a significant reduction in the carriage of S. aureus. The proof of concept of the bactericidal component produced by commensal bacteria could inhibit pathogenic bacteria.

Conclusion: Culturing a microorganism continues to be a fundamental step leading to genome sequencing, the advent of new specific tools, and antibiotic susceptibility testing.

In addition, recent advances relating to the influence of human microbiota on human health and diseases have created a sudden shift in interest in commensal bacteria.

At the same time, the rebirth of culture in clinical microbiology through culturomics has led to the Koch postulate evolving from:

''1 pathogen + 1 host = 1 disease'' towards a perpetual balance between good and bad microorganisms that can be summarized by:

''1 microorganism + other microorganisms + 1 host = 1 disease''. - Jean-Christophe Lagier, Gregory Dubourg, Sophie Amrane, Didier Raoult, in "Koch Postulate: Why do we Should Grow Bacteria", Archives of Medical Research, 2018.

The Common Virus in Permanently Circulation

"SARS-CoV-2 (Covid-19), the novel coronavirus from China, is spreading around the world, causing a huge reaction despite its current low incidence outside China and the Far East.

Coronaviridae are in permanent circulation; 4 common human coronaviruses (HKU1, NL63, OC43, E229) cause 10–20% of respiratory infections worldwide (millions of cases), and are present in all continents.

This article compares the incidence and mortality rates of these 4 common coronaviruses with those of SARS-CoV-2 (Covid-19) in Organisation for Economic Co-operation and Development (OECD) countries.

It is Concluded that the problem of SARS-CoV-2 (Covid-19) is probably Being Overestimated, as 2.6 Million People Die from respiratory infections (excluding tuberculosis) per year have been noted in recent years worldwide.

It is clear that there are chronic carriers as well as asymptomatic carriers.

In OECD countries, SARS-CoV-2 does not seem to be deadlier than other circulating viruses. In addition to coronaviruses, there are 16 endemic viruses in common circulation in developed countries:

1. Adenovirus
2. Bocavirus
3. Cytomegalovirus
4. Enterovirus
5. Influenza A H1N1 virus
6. Influenza A H3N2 virus
7. Influenza B virus
8. Metapneumovirus
9. Parainfluenzae virus 1
10. Parainfluenzae virus 2
11. Parainfluenzae virus 3
12. Parainfluenzae virus 4

13. Parechovirus
14. Picornavirus
15. Rhinovirus
16. Syncytial respiratory virus". - Y. Roussel, A. Giraud-Gatineau, M.-T. Jimeno, Didier Raoult, et al., in "SARS-CoV-2: fear versus data", International Journal of Antimicrobial Agents, 5 April 2020.

> *"There are 219 virus species that are known to be able to infect humans. The first of these to be discovered was yellow fever virus in 1901, and* ***3 to 4 new species are still being found every year. Humans are constantly exposed to a huge diversity of viruses." - in "Human viruses: discovery and emergence", Philosophical Transactions B, Biological Sciences, Royal Society, London, 19 October 2012.***

Please Note that Viruses don't exist please read the Book:

"VIRUSES - The Elusive 100 Year Search for the Missing "Viruses", Or The Farce And Fraud of Virology Explained in Detail", 2024.

"Results show that in 41% of cases, one or several possible viral etiologic agents were identified.
The Pandemic Influenza virus (H1N1sw) was found in 15% of cases; but:

1. Rhinoviruses
2. Pneumoviruses
3. Coronaviruses
4. Enteroviruses
5. Polyomaviruses
6. Parainfluenza viruses

Could also be identified.
No case of multiple infection implicating influenza and another agent was detected.

During the investigation process, 1 nasal swab could be sampled from 95% of probable cases and 85% of ''non-cases''. Samples were submitted to H1N1sw detection.

Interestingly, the virus was detected in 7 of the 67 ''non-cases'' tested (10,4%).'' - Nougaire de A, Ninove L, Zandotti C, Salez N, Mantey K, in "Novel Virus Influenza A (H1N1sw) in South-Eastern France, April-August 2009", PLoS ONE, 17 February 2010.

What You Need to Know About Infectious Disease

"How Infection Works:

There is a close connection between microbes and humans.

Microbes occupy all of our body surfaces, including the; skin, gut, and mucous membranes.

Our bodies contain at least 10 times more bacterial cells, than human ones, blurring the line between where microbes end, and humans begin.

Microbes in the human Gastrointestinal Tract alone comprise at least 10 Trillion organisms, representing more than 1,000 species, which are thought to prevent the gut from being colonized by disease-causing organisms.

Among their other beneficial roles, microbes synthesize vitamins, break down food into absorbable nutrients, and stimulate our immune systems." - in "What You Need to Know About Infectious Disease", National Academy of Sciences, 2010.

The Common Symptoms that viruses Cause

"1. Adenovirus

The virus shows symptoms typical of adenoviral infections. Although these infections are common in humans, **they are rarely fatal.**

Symptoms include:

I. Cold
II. Pharyngitis (Sore Throat)
III. Bronchitis
IV. Diarrhea
V. Pneumonia
VI. Conjunctivitis (Eye infection)
VII. Fever
VIII. Cystitis (bladder inflammation, infection)
IX. Rash illness

The viral infection presents with symptoms similar to those of other common bacterial and viral infections, such as influenza.

2. Bocavirus

HBoV1 is strongly implicated in causing some cases of lower respiratory tract infection, and several of the viruses have been **linked to Gastroenteritis.**

3. Cytomegalovirus

The 8 species in this genus include the type species, Human betaherpesvirus 5 (HCMV, human cytomegalovirus, HHV-5). Diseases associated with HHV-5 include mononucleosis (glandular fever), and pneumonia.

4. Enterovirus

Enteroviruses affect millions of people worldwide each year and are often found in the respiratory secretions (e.g., saliva, sputum, or nasal mucus) and stool of an infected person. Historically, poliomyelitis was the most significant disease caused by an enterovirus, namely poliovirus.

There are 81 non-polio and 3 polio enteroviruses that can cause disease in humans.

Of the 81 non-polio types, there are 22 Coxsackie A viruses, 6 Coxsackie B viruses, 28 echoviruses, and 25 other enteroviruses.

Poliovirus, as well as coxsackie and echovirus, is spread through the fecal-oral route.

Infection can result in a wide variety of symptoms, including those of: mild respiratory illness (the common cold), hand, foot and mouth disease, acute hemorrhagic conjunctivitis, aseptic meningitis, myocarditis, severe neonatal sepsis-like disease, acute flaccid paralysis, and the related acute flaccid myelitis.

5. Influenza A H1N1 virus
6. Influenza A H3N2 virus
7. Influenza B virus
8. Metapneumovirus
9. Parainfluenzae virus 1
10. Parainfluenzae virus 2
11. Parainfluenzae virus 3
12. Parainfluenzae virus 4
13. Parechovirus
14. Picornavirus
15. Rhinovirus
16. Syncytial respiratory virus". - in "Wikipedia", 12 April 2020.

Please Note that Viruses don't exist please read the Book:
"VIRUSES - The Elusive 100 Year Search for the Missing "Viruses", Or The Farce And Fraud of Virology Explained in Detail", 2024.

Understanding of Human-Virus Relations

"The lives and livelihoods of our fellow citizens are put at risk to ward off a non-existent danger. The measures now imposed are a disaster for the entire population. They will do huge damage, but in return they will not do any good. Corona viruses have been with us since time immemorial and ***play a negligible role in medicine. Most infected people do not become seriously ill.*** *Older people with pre-existing conditions, especially the lungs and heart, can be seriously at risk.* ***The claim that Covid-19 is a particularly dangerous virus variant has arisen from uncritical and incorrect interpretation of internationally collected case data. The truth is that Covid-19 is not fundamentally different from its harmless siblings."*** *- Prof. Dr Sucharit Bhakdi, MD, was the Director of the Institute for Medical Microbiology and Hygiene at Johannes Gutenburg University Mainz for 22 years. He is one of the most internationally respected infectiologists, and most cited medical researchers in Germany, 19 March 2020.*

All the Gut's a Stage, and All The Microbes Merely Players

"The microbiome is an ecosystem of microscopic life (bacteria, fungi, etc...) that exists within and on our bodies. The genes contained within the microbiome outnumber our own 100 to 1. We are colonized by our microbiome at birth, and the nature of our birth (vaginal or C-section) and the food we eat (breast milk or not) significantly influence which specific organisms colonize us. The host's genetic variation affects microbiome composition, and diet shapes gut microbiota.

Research also suggested that humans have even acquired genetic material, in our own DNA, directly from our microbiome through horizontal gene transfer." *- Cathy Willermet, in "Biological Anthropology in 2015", American Anthropologist, 2016.*

1. "Median age of 81 years of age."

"The median age of death from Ischemic Stroke was 81 years." *- in "The burden, trends, and demographics of mortality from subarachnoid hemorrhage", Neurology,* ***1 May 1998.***

"Patients who died ranged in age with a ***median age of 81 years of age."*** *- in "Influenza in Sweden - Season 2018–2019", The Public Health Agency of Sweden,* ***24 September 2019.***

"The average age of Covid-2019 positive and deceased patients is 81 years." *- in "Istituto Superiore di Sanità", The Public Health Agency of Italy,* ***5 March 2020.***

2. Seasonal an in particular from November to March being critical the February month.
Both in the South and the North Hemisphere.

"At the Common Cold Research Unit, *dedicated scientists sprayed cold viruses into people's noses and conducted various other experiments to discover just how people catch colds.* ***They and other research groups have found that what "everybody knows" about colds may not necessarily be true."*** *- Alvin Silverstein in "Common Cold and Flu", 1994.*

"Taking inspiration from more-than-human and animal geographies, and the work of Donna Haraway "The Companion Species Manifesto", (Haraway's approach

situates our understanding of human-virus relations within a process of co-evolution, whereby viral and genetic material shared across species serves as testimony to a shared history of domestication and what Bingham calls "living together"), this paper examines the **UK's Common Cold Research Unit** where humans and viruses were encouraged to meet and mingle so scientists could study the common cold.

Two key arguments are made:

1. That focusing on how scientists sought to accommodate viruses at the **Common Cold Research Unit** draws attention to the risks and benefits for both humans and viruses of reconfiguring relations between them.

2. Echoing recent moves in health geography towards embodied understandings of health and disease, a case for recognizing how human-virus relations are cultured through embodied communication. **I conclude that rather than seeing viruses as an external threat to be eradicated, we might recognize how we have learned and are learning to live endemically with our viral companions."** - Beth Greenhough in "Where species meet and mingle: endemic human-virus relations, embodied communication and more-than-human agency at the Common Cold Unit 1946–1990", Cultural Geographies, 6 January 2012.

A Note Concerning The Common Cold Research Unit

The Common Cold Research Unit was established in the UK by an individual that went to the USA to work in the Rockefeller Institute Laboratory, there he became acquainted in how to find "Viruses", he then returned to the UK and established **The Common Cold Research Unit,** which for 40 years "discovered" the largest amount of species of "viruses". Among the "viruses", the CCRU "discovered" was the "Coronavirus." This story of events is told on another books which has been published by us.

"What you eat is going to impact your immune system." *- Dr Aseem Malhotra, MD in "Sky News", March 2020.*

"The connection with low-Vitamin diet is for the barlow and the proven Scurvy.

After all, it is striking that not all but only a certain number of children fall ill with the same diet.

The lack of the Vitamin cannot therefore be the sole triggering cause, there must also be a weakness in the organism that is somehow justified, so that only through the interaction of both factors does the disease break out just as much as an infectious disease, in which the pathogen is also responsible alone does not mean illness.

Tobler also writes: "We ask to us, whether the organism itself has the ability to build up the vital substance, and whether perhaps the appropriate food only creates the necessary preconditions for its production." - in "Diseases; rickets", Advances in Internal Medicine and Pediatrics, 1922.

ANEPIDEM

For the Treatment of the Common Cold and Influenza

"During the past few years Anepidem has proved of the greatest value in the treatment of the common cold, influenza and its complications, and many other seasonal manifestations of disease. (Anepidem is the name given to a potency (30c) of a bacterial and fungal extract of an emulsion).

Anepidem may be administered internally or by injection.

Treatment should be begun as soon as possible after the onset of symptoms; one disc at hourly or 2-hourly intervals up to 6, or one injection, is usually sufficient to abort a severe cold or an attack of influenza.

Anepidem is prepared from the pathogenic mutation forms of the Bacillus coli communis and the Streptococcus faecalis.

Anepidem (Gonococcal) is also available and has given remarkable results in practice.

Prevention, to be adequate, must be aimed at nullifying the action of climate, which is the principal factor regulating infections from within.

This can be done only by raising the resistance of the individual.

All this necessitates is the inculcation of the fundamental ways of living into the mind of man.

Until this is done, there is a use for Anepidem (preventive), but the duration of the artificial immunity this establishes varies so in different beings, and is never long enough to do real service.

The combative methods in use today are better, and their value must increase as time goes on, and fresh strains of the pathogenic micro-organisms are added to the emulsions, from which Anepidem (treatment) is prepared.

Anepidem (treatment) can be injected or taken internally, and there are 3 forms.

The preparation to be injected contains the washings of 1,000 million micro-organisms.

Never more than 2 injections are required, and a single dose usually suffices.

The preparation to be taken internally contains the washings of one million microorganisms, potentised to 30 c.

The product is put up in discs, and one has to be taken every 1 to 2 hours.

As a rule 6 suffice, but this number can be exceeded and repeated as often as is considered necessary. The sooner the chosen preparation is prescribed the better the result.

Patients have frequently noticed a change for the better to take place almost immediately after swallowing the first disc, and the author has known the worst cold and attack of so-called "influenza" to be banished within the space of 24 hours.

Other patients may experience a temporary aggravation of the infection for 20 to 24 hours before it finally disappears, and a few remain completely untouched by the remedy.

For ordinary purposes Anepidem may be prescribed, the form prepared from the most common parent mutation forms of the Bacillus coli communis. Anepidem ii. is prepared from secondary micro-organisms, the streptococci and the pneumococci.

Anepidem iii. is prepared from the Salmonellae and the Bacillus typhosus, and the micro-organisms belonging to the dysentery-group." - Professor James Eustace Radclyffe McDonagh, FRCS, in "The Nature of Disease Journal", Vol. 3, 1934.

> *"Chick-embryo ciliated tracheal organ (CETO) cultures previously exposed to* ***Ascorbic Acid exhibited considerably increased resistance to infection*** *by Coronavirus (avian infectious bronchitis virus, IBV). These results suggest that different mechanisms operate for infection of cells by viruses of these different groups." - J.G. Atherton, C.C. Kratzing, A.E. Fisher in "****The effect of Ascorbic Acid*** *on infection of chick-embryo ciliated tracheal organ cultures by Coronavirus", Archives of Virology, Vol. 56, 1978.*

> ***"There are numerous reports indicating that Vitamin C may affect the immune system;*** *for example the function of phagocytes, transformation of T lymphocytes and production of interferon. In particular, Vitamin C increased the resistance of chick embryo tracheal organ cultures to infection caused by an avian coronavirus." - Dr Harri Hemilä, MD, Department of Public Health, University of Helsinki, Finland, in "Vitamin C and SARS coronavirus", Journal of Antimicrobial Chemotherapy, December 2003.*

"Why did Severe Acute Respiratory Syndrome (SARS) disappear?

Was it a huge success of international health regulations or a poorly understood phenomenon?

In conclusion, we argue that the interactions between microorganisms and humans are far too complex.

Most models used in epidemiological research still concentrate on one, known, pathogen, which causes a single disease.

It seems, however, that the reality at the microorganism level is much more complex, as organisms not only mutate, but continuously interact with the environment and with a large number of other organisms." - A. Neuberger, M. Paul, A. Nizar, D. Raoult, in "Modelling in infectious diseases: between haphazard and hazard", Clinical Microbiology and Infection, November 2013.

Tuberculosis Deaths Worldwide in 2018

"A total of 1.5 Million people died from Tuberculosis in 2018.

Worldwide Tuberculosis is one of the top 10 causes of death, and the leading cause from a single infectious agent.

Tuberculosis is caused by bacteria (Mycobacterium tuberculosis) that most often affect the lungs." - in "Tuberculosis", World Health Organization, 24 March 2020.

The Effects of Isolation

"The effects of isolation were studied by Elderton and Pearson (1915).

Their data consisted of the annual number of Diphtheria cases, the number of patients removed to hospital, and the number of deaths during a period of 9 years, 1904—1912, for about 8 towns or districts with large populations.

As a result of their investigation, they concluded that the extent to which isolation was practised had no appreciable influence on the prevalence of diphtheria, or on the death rate, but that it was inversely related to the case fatality, the coefficient of correlation being of the order of —0-5.

Woods (1928) analysed the data for London for the period 1923-6; the coefficients which she obtained were:

Isolation rate and Attack rate	r = • 147 ± • 127
Isolation rate and Death rate	r = • 371 ± • 112
Isolation rate and Case mortality	r = • 374 ± • 112

From which she concluded:

> *"As far as the analysis goes, and the method of correlation can show,* ***there is no evidence pointing to the advantageous results of isolation*** *of diphtheria in London."*

The positive coefficient between the isolation rate and the case mortality is certainly a surprising finding.

It will be noted that she attached a proviso to her conclusions regarding the applicability of the correlation method to her London data, and she also stated that:

> *"Owing to the large proportion of cases isolated in each of the boroughs and the consequent limitation of the possible range of variation of one factor, the meaning of the correlation is not always clear."*

But it may be argued that isolation "per se" is not the sole determinant of either morbidity or fatality." - William Thomas Russell, in "The Epidemiology of Diphtheria During the Last Forty Years", Medical Research Council, H.M. Stationery Office, 1943.

> ***"Isolation it decreases the body's immune system and puts patients more at risk."*** *- Dr Dan Erickson, MD, 22 April 2020.*

The Problem of the Advantages of Isolation

"The problem of the advantages of isolation, not only in the case of diphtheria but of other diseases of an infectious character, is likely, owing to modern views as to "carriers" and other sources of transmission, **to be much discussed in the near future. It is therefore well to consider what may be learnt from the statistics available.**

The questions which naturally arise are of the following kind:

1. In districts with a maximum of isolation is there a minimum of incidence?
2. In districts with a maximum of isolation is there a minimum death rate from the disease isolated?

There cannot be the slightest doubt that, if these 2 questions, were answered in the affirmative, and we could show that the incidence was markedly less and the death rate significantly smaller in districts where isolation was most stringently carried out, then these results would be advanced as a strong argument in favour of isolation.

It is conceivable that isolation of all cases during attack may be of far less importance than isolation of certain special cases for a shorter or longer period well subsequent to the attack, and after they would normally have resumed their ordinary avocations.

If no one of these problems can be fully answered, even in the case of a single disease, with the data at present available, at least light can be thrown on the lines which their solution in the future must take; and further something can be done to prevent hasty generalisation and excessive dogmatism as to the advantages or disadvantages of the isolation system.

Immunity

It is, on the hypothesis of natural selection, a plausible

view that the parasites - including under this term all disease organisms - which ultimately survive must tend to become innocuous to their hosts, and thus the decreasing virulence of certain diseases may be accounted for.

The organism is destroyed owing to the death of the host or its own death at his recovery, or it has been modified by selection so as to become innocuous to its host relative to his immunity.

But **Immunity is a matter of personal equation, and thus the function of the "carrier" in preserving and spreading a conceivably less nocuous form of the organism becomes clearer.**

We are not unaware of the view that the organism remains the same, but that the immunity is increased owing to "practise" of the leucocytes, and further compels us to assume two types of immunity, the one which destroys the organism, and the other which without modifying it, establishes, so to speak, a mutual: "modus vivendi".

Conclusions

No influence of greater isolation in reducing the attack-rate from diphtheria is discoverable.

In fact there is a sensible, if not large, positive association between the isolation-rate and attack-rate.

The attack-rate appears to be greater in the more prosperous towns, and in towns of somewhat better sanitary conditions.

We have not found the prevalence of diphtheria associated with overcrowding, or with the conditions leading to high infant mortality.

Generally all the correlations are of a low order; they contain, however, nothing to support the theory that isolation markedly limits the incidence of diphtheria; the disease itself does not appear where overcrowding is greatest nor where the population is most dense." - Elderton, Pearson, FRS in "The Influence of Isolation on the Diphtheria Attack - and Death – Rates", Biometrika, 1915.

Say A Ban Wont Help

"Disease Fight Up To Citizenry U.S. Health Officer Says: Dr B. A. Wilkes, MD Acting Assistant Surgeon of the United States Public Health Service with rank of lieutenant: "The individual co-operation of the citizenry is the most essential thing," Doctor Wilkes told Mayor Cowgill, W. P. Motley, head of the Health Board:

"A general ban is not necessary by any means, nor is it necessary to hamper the business life of the city while conducting a health campaign.

Most effective health campaigns have been conducted in other cities without any sort of ban.

That is the first thing called for by excitable persons, but experience has proved it a failure." *- in "Kansas City Star", 11 December 1918.*

If one looks at Bans (Lockdowns) placed in the US cities during the 1918 "flu pandemic", it shows clearly that more persons died during the times of public gathering bans, and social distancing measures, such as school and church closures, and the graphics show the peak of deaths happening during such periods.

Please see the following for more information:

1. "Nonpharmaceutical Interventions Implemented by US Cities During the 1918-1919 Influenza Pandemic", JAMA, 8 August 2007.

2. nationalgeographic.com/history/2020/03/how-cities-flattened-curve-1918-spanish-flu-pandemic-coronavirus/

"Reinhard Busse, Head of the Department of Management in Health Care at the TU Berlin, and Co-Director of the European Observatory on Health Systems and Policies, emphasized that the Italian situation ***"would by no means be overwhelming us".*** *This is still very easy to handle with the current structures. Germany has over 27,000 intensive care beds." - in "According to experts, Covid-19 overloads German hospitals", Deutsches Ärzteblatt,* ***12 March 2020.***

Sweden Lock-down: What Lock-down?

"While swathes of Europe's population endure lock-down conditions in the face of the coronavirus outbreak, ***one country stands almost alone in allowing life to go on much closer to normal."*** *- Maddy Savage, Stockholm, in "BBC News", 29 March 2020.*

"Sweden reported coronavirus deaths: 3,743." - in "Coronavirus COVID-19 Global Cases Map developed by the Johns Hopkins Center for Systems Science and Engineering", 20 May 2020.

In Brazil during the coronavirus panic, the Brazilian Government refused to implement bans and lock-downs.

"Germ; may refer to not just a bacteria but to any type of microorganism, or even non-living pathogen that can cause disease, such as protists, fungi, prions, or viroids." - in "Wikipedia", March 2020.

"The symptoms of Covid-19 are generally similar to those of the Common Flu, or those of a Cold, *accompanied by fever and fatigue, dry cough and difficulty breathing.* ***More than 95% of people who get sick recover."*** *- in "Newtral",* ***1 February 2020.***

"In an autopsy series (J. Infect Dis. 2013) that tested for respiratory viruses in specimens from 57 elderly persons who died during the 2016 to 2017 influenza season, influenza **viruses were detected in 18% of the specimens,** while any kind of respiratory virus was found in 47%.

In some people who die from viral respiratory pathogens, more than one virus is found upon autopsy, and **bacteria are often superimposed.**

"Mild" coronaviruses infect tens of millions of people every year, and account for 3% to 11% of those hospitalized in the US, with lower respiratory infections each winter.

"Mild" coronaviruses may be implicated in several thousands of deaths every year worldwide, though the vast majority of them are not documented with precise testing.

Instead, they are lost among 60 million deaths from various causes every year." - Dr John P. A. Ioannidis, MD, Professor of Medicine, in "A fiasco in the making? As the coronavirus pandemic takes hold, we are making decisions without reliable data", 17 March 2020.

> ***"The question the model set out to ask was whether lockdown states experience fewer Covid-19 cases and deaths than social-distancing states, adjusted for all variables. The answer? No. The impact of state-response strategy on both my cases and deaths measures was utterly insignificant."*** *- Wilfred Reilly, in "There is no empirical evidence for these lockdowns. Comparing US states shows there is no relationship between lockdowns and lower Covid-19 deaths", Spiked,* ***22 April 2020.***

> ***"It worries me; because it seems to me, to threaten the stability of the state. If you have a lot of people, who have in effect been deprived with perfectly reasonable livings by government action*** *which may well in time be seen to have been precipitous and mistaken." - Peter Hitchens, in "Hysterical Reaction to Covid19 & public support of lockdown is scary & dangerous", New Culture Forum, 17 April 2020.*

End All Restrictions, They Were Unnecessary, University Researchers Say

"We Focus on the Case of 2 Groups:

1. High-Risk
2. Low-Risk populations

We demonstrate that treating 2 groups as the same **brings no additional benefit while causing significant economic suffering.**

Assuming that the population abides by pandemic public health countermeasures, thereby effectively reducing transmission of the disease, and given the health system capacity at or above the threshold, the country can impose no quarantine at all.

Examples include: Singapore, Hong Kong, Taiwan, and Sweden. None of them enforced any lockdown, which is consistent with our results." - David Gershon, Alexander Lipton, The Hebrew University of Jerusalem, in "Managing COVID-19 Pandemic without Destructing the Economy", arXiv, 23 April 2020.

The 1918 Philadelphia 3rd October Parade

Fact Checked

"**Claim**

In 1918 Philadelphia ended quarantine to throw a parade for the war effort.

Conclusion

Philadelphia wasn't in quarantine to start with when it held this parade." - in "Full Fact", 23 April 2020.

Severe Shortage of Health Staff

"75% of Philadelphia's hospitals' medical and surgical staffs were overseas." *- James F. Armstrong, RN, BSN, CCRN, in "Philadelphia, Nurses, and the Spanish Influenza Pandemic of 1918", Naval History and Heritage Command, 7 April 2015.*

"The Pennsylvania Hospital staff was at about half-strength. Its ability to care for civilians was limited by the large number of convalescing U.S. sailors filling the wards.
In October, 1918, the world-wide influenza epidemic struck the hospital. The already depleted nursing staff was hit hard - 52 nurses became ill and four died." - in "History of Pennsylvania Hospital", Penn Medicine, 2017.

Medical Drugs

"As the death toll mounted, a frantic public stripped medicines from pharmacy shelves.

Alcohol Prescriptions

Students from Philadelphia College of Pharmacy and Temple University assisted in filling prescriptions, mostly for whiskey, as it was the only place one could get it." - James F. Armstrong, RN, BSN, CCRN, in "Philadelphia, Nurses, and the Spanish Influenza Pandemic of 1918", Naval History and Heritage Command, 7 April 2015.

Air Pollution

"The United States was crippled by the brutal flu that swept through the country in the midst of the First World War, but nowhere was hit more forcefully than the powerhouse industrial cities of Pennsylvania, the nation's primary manufacturing hub for ships and steel needed in the war effort." *- in "The Killer Flu of 1918: A Philadelphia Story", The New York Times, 10 April 2020.*

"Together environmental air pollution and infectious diseases accounted for almost 25% of all global deaths in 2012 (WHO, 2014). While the health impacts of air pollution and infectious disease are often assumed to be distinct and are typically studied separately, a small emerging literature has begun to examine the extent to which pollution exacerbates infectious disease. This paper provided new evidence on the extent to which air pollution exacerbated infant and all-age mortality during 1918-1919 influenza pandemic. The effects of air pollution are sizeable. Cities with above median levels of coal-fired capacity collectively experienced thousands of excess infant deaths and tens of thousands of excess all-age deaths during the pandemic.

Baseline city health conditions, as measured by typhoid deaths, also played an important role. Together with distance to World War I bases, these factors explain 76% and 44% of the cross-city variation in infant and all-age pandemic mortality.

The 1918 influenza pandemic was an exceptional episode, with death rates 5 to 20 times higher than subsequent pandemics.

Our findings highlight the need for research on the impact of air pollution on later pandemics. Air pollution is particularly important today, because a far greater share of the global population live in heavily polluted cities than did in the early 20th century.

Moreover, many cities in the developing world do not yet have reliable clean drinking water. Thus, preventative approaches including pollution abatement, improvements in access to clean drinking water are likely to be critical for mitigating mortality." - Karen Clay, Joshua Lewis, Edson Severnini, in "Pollution, Infectious Disease, and Mortality: Evidence from the 1918 Spanish Influenza Pandemic", Institute for the Study of Labor, Bonn, October 2015.

"Pennsylvania and its communities experienced an especially violent epidemic; with more than 60,000 dead, lost more lives than any other state. Furthermore, the 3 worst-hit major cities in America were Pittsburgh, Scranton and Philadelphia. It was not coincidence that so many deaths occurred in one state and its 3 largest cities.

Instead, the coal mines and steel mills that compromised the respiratory health of so many, to say nothing of the deplorable standards of living tolerated by the state in the coal patches and mill towns, added strength to an attack by history's most virulent influenza virus.

Philadelphia's terrible outbreak resulted from a combination of factors, including its position as a major wartime port and manufacturing centre.

This combination proved fatal, as its population swelled with hundreds of thousands of labourers who crowded into housing that included hastily constructed workers barracks and stuffed boarding rooms.

Poor living conditions combined with high-density housing facilitated the spread of respiratory diseases of all sorts, especially Pneumonia, and ultimately Influenza.

The nuns rapidly staffed the city's hospitals. One nun recalled: **"25 or 30 men in each ward and adjoining shack. Most of these were men who had come to Philadelphia to work in ammunition plants." Pittsburgh offers a compelling case study for scholars interested in the role of environmental factors, air pollution most significantly, in increasing the lethality** of the virus **and its subsequent opportunistic bacterial infections. O'Hara's observations are especially important for the insight they shed on the effects of aggravating factors. He commented, for instance, that "young men who wheezed in their 20's from miner's asthma stood no chance when flu came to town."**

This observation alone indicates that contemporaries were aware of the consequences of poor pulmonary health." - James E. Higgins, in **"A Lost History: Writing the Influenza Epidemic in Pennsylvania, 1918–1922"**, Pennsylvania History: A Journal of Mid-Atlantic Studies, Vol.85, No.3, 2018.

Overcrowding

"The increased demand for labour during the war. Philadelphia enjoyed a boom in employment in its industries, overcrowding turned the city's housing deficiencies into a legitimate public health crisis, in 1918 made the slums and tenement districts a fertile source for influenza. Those born of foreign parents in the Russian, Hungarian, and Italian communities, among others, died at a higher rate." *- Thomas Wirth, in "Influenza ("Spanish Flu" Pandemic, 1918-19)", Encyclopedia of Greater Philadelphia, 2011.*

"I'm not a fan of lock-down. Italy has imposed a lock-down and has the opposite effect." - Dr Frank Ulrich Montgomery, MD, Radiologist, former President of the German Medical Association and Deputy Chairman of the World Medical Association, *in "General Anzeiger", 18 March 2020.*

"A universal quarantine may not be worth the costs it imposes on the economy, community and individual mental and physical health. *We should undertake immediate steps to evaluate the empirical basis of the current lockdowns." - Dr Eran Bendavid, MD Dr Jay Bhattacharya, MD, professors of medicine and public health at Stanford University, in "Is the Coronavirus as Deadly as They Say?", Wall Street Journal, 24 March 2020.*

"I am deeply concerned that the social, economic and public health consequences of this near-total meltdown of normal life; schools and businesses closed, gatherings banned, will be long-lasting and calamitous, possibly graver than the direct toll of the virus itself. *The stock market will bounce back in time,* ***but many businesses never will.***

The unemployment, impoverishment and despair likely to result will be public health scourges of the first order." *- Dr. David Katz, MD, founding director of the Yale University Prevention Research Center, in "Is Our Fight Against Coronavirus Worse Than the Disease?", New York Times, 20 March 2020.*

"Consider the effect of shutting down offices, schools, transportation systems, restaurants, hotels, stores, theatres, concert halls, sporting events and other venues indefinitely, and leaving all of their workers unemployed and on the public dole.

The likely result would be not just a depression but a complete economic breakdown, with countless permanently lost jobs.

The best alternative will probably entail letting those at low risk for serious disease continue to work, keep business and manufacturing operating, and "run" society, while at the same time advising higher-risk individuals to protect themselves through physical distancing and ramping up our health-care capacity as aggressively as possible.

With this battle plan, we could gradually build up immunity without destroying the financial structure on which our lives are based." - Dr Michael T. Osterholm, Professor in the Division of Environmental Health Sciences, School of Public Health, in "Facing covid-19 reality: A national lockdown is no cure", Washington Post, 21 March 2020.

"We cannot close down the whole world permanently." *- Dr Peter Goetzsche, MD, Professor of Clinical Research Design and Analysis, University of Copenhagen, in "Corona: an epidemic of mass panic", 21 March 2020.*

The Detrimental Effects of Bans upon Health

Lack of Movement Weakens the Immune System

"Muscle contraction brings about movement and locomotion in animals. However, **muscles have also been implicated in several atypical physiological processes including immune response.**

Our results suggest that physiologically fit muscles might boost the innate immune response of an individual." - in **"Muscles provide protection during microbial infection by activating innate immune response pathways",** Disease Models & Mechanisms, 2016.

> ***"Pooling of lymphatic fluids can lead to blockages and swelling known as lymphostatic oedema. This occurs through the accumulation of toxins, reducing the function of cells and potentially leading to metabolic and infectious complications. The lymph system requires breathing and movement from the body's muscles to help move fluids and remove waste from the body."*** *- in "Exercise, lifestyle and the lymphatic system", Clinical Prevention + Rehabilitation, 20 March 2018.*

Leukocyte Redeployment During Exercise and Recovery

"A single exercise bout causes profound changes in the number and composition of blood leukocytes that may persist long into exercise recovery.

All major leukocyte subpopulations tend to increase in number during exercise as a result of hemodynamic shear stress and/or catecholamines acting on leukocyte β2-adrenergic receptors.

Physical treatments that are used after exercise (e.g.,

Hydrotherapy and Massage) may enhance the athlete's sense of well-being and should be considered as adjunct therapies for maintaining immune health." - in "Recovery of the immune system after exercise", Journal of Applied Physiology, May 2017.

"The immune system is a network of special cells, tissues, proteins, and organs that work together to protect the body from potentially damaging foreign invaders and disease. When our immune system functions properly it detects threats, such as bacteria, parasites, it triggers an immune response to destroy them. Many factors, including diet, exercise, and sleep, can impact immune response." *- in "Medical News Today", 25 January 2018.*

Stress Weakens the Immune System

"People who are older or already sick are more prone to stress-related immune changes.

A 2002 study by John Hopkins School of Medicine reported that even **chronic, sub-clinical mild depression may suppress an older person's immune system.**

Those with chronic mild depression had weaker lymphocyte-T cell responses to 2 mitogens, which model how the body responds to bacteria.

Health psychologists found that social isolation and feelings of loneliness each independently weakened 1st year students immunity.

In the study, students got flu shots at the Carnegie Mellon University health center." - in "American Psychological Association", 23 February 2006.

"The immune system is integral to the body's defence against infection. It also influences other physiological systems and processes, including: tissue repair, metabolism, thermoregulation, sleep/fatigue, and mental health. Sleep disturbances can depress immunity, increase inflammation, and promote adverse health outcomes in the general population." *- in "Recovery of the immune system after exercise", Journal of Applied Physiology, May 2017.*

Interconnection Between the Nervous and Immune System

"A newly-discovered Reflex Arc mediates a process which leads to a disruption in the hormones secreted by the adrenal glands which, in turn, results in an increased susceptibility to bacterial infections." - Charité, Universitätsmedizin, Berlin, in **"An interconnection between the nervous and immune system, Neuroendocrine reflex triggers infections"**, 19 September 2017.

"Disruption of Immune Organ Function, is the result of an Immune System Dysregulation which affects the entire body." *- Dr Harald Prüß, Department of Neurology and the DZNE, Universitätsmedizin Berlin, 19 September 2017.*

"So last year 37,000 Americans died from the common Flu. It averages between 27,000 and 70,000 per year. Nothing is shut down, life & the economy go on. Think about that!" *- Donald Trump, US President, in "Twitter",* ***9 March 2020.***

"Stay at home: Only go outside for food, health reasons or work (but only if you cannot work from home)." - in "Guidance on social distancing for everyone in the UK", Public Health England, 30 March 2020.

"We have to keep these serious social measures as short and as low as possible, because they could potentially cause more illnesses and deaths than the coronavirus itself.

I believe that it is imperative that we consider the impact on other areas of health and society.

We as a society must not focus solely on the victims of the corona virus.

We know that unemployment, for example, causes illness and even increased mortality.

It can also drive people into suicide.

Restricting freedom of movement is likely to have a further negative impact on public health.

It is not so easy to calculate such consequences directly, but they still happen and they can possibly be more serious than the consequences of the infections themselves." - Dr Gérard Krause, MD, head the Department for Epidemiology at the Helmholtz Centre for Infection in Braunschweig; director of the Institute for Infectious Disease Epidemiology at TWINCORE, Hannover; Chair of the PhD Program Epidemiology at the Hannover Medical School; coordinates the Translational Infrastructure Epidemiology at the German Centre for Infection Research, in "ZDF", 29 March 2020.

The Treatment of Influenza With Vitamin D

"Vitamin D helps regulate the amount of Calcium and Phosphate in the body.

These nutrients are needed to keep bones, teeth and muscles healthy.

A lack of Vitamin D can lead to bone deformities such as rickets in children, and bone pain caused by a condition called osteomalacia in adults.

Good sources of Vitamin D: From about late March to early April to the end of September, most people should be able to get all the Vitamin D they need from sunlight (UK).

The body creates Vitamin D from direct sunlight on the skin when outdoors.

But between October and early March we don't get enough vitamin D from sunlight.

People at risk of vitamin D deficiency - Some people won't get enough vitamin D from sunlight because they have very little or no sunshine exposure." - in NHS, 3 March 2017.

"Our study (data from 14 countries) reports a major new indication for Vitamin D supplementation: the prevention of acute respiratory tract infection.

We also show that people who are very deficient in Vitamin D and those receiving daily or weekly supplementation without additional bolus doses experienced particular benefit.

Our results add to the body of evidence supporting the introduction of public health measures such as food fortification to improve Vitamin D status, particularly in settings where profound Vitamin D deficiency is common." - in "Vitamin D supplementation to prevent acute respiratory tract infections: systematic review and meta-analysis of individual participant data", British Medical Journal, 15 February 2017.

> ***"High-dose vitamin D (1200 IU) is suitable for the prevention of seasonal influenza as evidenced by rapid relief from symptoms, rapid decrease in viral loads and disease recovery."*** *- in "Preventive Effects of Vitamin D on Seasonal Influenza A in Infants", "The Pediatric Infectious Disease Journal", August 2018.*

"Vitamin D plays an essential role in the regulation of metabolism, calcium and phosphorus absorption of bone health.

However, the effects of Vitamin D are not limited to mineral homeostasis and skeletal health maintenance.

The presence of vitamin D receptors (VDR) in other tissue and organs suggest that Vitamin D physiology extends well above and beyond bone homeostasis.

Additionally, the enzyme responsible for the conversion of 25[OH] D to its biologically active form [Vitamin D (1,25[OH]2 D)] has been identified in other tissues aside from kidneys." - in "Vitamin D: Deficiency, Sufficiency and Toxicity", Nutrients 2013.

"It is well known that there is a seasonality to influenza that correlates well with the seasonal drop in Vitamin D.

A colleague, and I have introduced Vitamin D, we now see very few patients in our clinics with the flu or influenza-like illness.

The results are dramatic, with complete resolution of symptoms in 48 to 72 hours." - Dr Gerry Schwalfenberg, MD in "Vitamin D for influenza", Canadian Family Physician, June 2015.

"The studies clearly show that Vitamin D, is undoubtedly, part of the complex factors which affect the immune response.

So, assessing Vitamin D status and maintaining optimal serum levels should be considered in all ageing adults and children, and micronutrients should be regarded as one of the essential factors which improve our health condition overall and also support our fight against diseases." - Beata M. Gruber-Bzura, in "Vitamin D and Influenza", International Journal of Molecular Sciences, 16 August 2018.

Coronavirus and Somatization

*"**It is normal to feel all the symptoms of the coronavirus without having been infected with the coronavirus.** We can feel fever, headache and even cough without having the disease." - Dr Emiliano Villavicencio, MD, 2020.*

"The fear caused by the Covid-19 can cause its symptoms in some patients. These symptoms are real, and can confuse people, making them believe that they have contracted the disease. But in the case of somatization the clinical picture is not caused by the virus**, but by a state of concern and anxiety. In the face of emergency, the number of patients with psychosomatic symptoms is increasing in the specialist's office. "Completely healthy patients can experience all the symptoms of the coronavirus, it is normal.**

Overexposure to the news about the coronavirus is behind the appearance of psychosomatic symptoms." - in "BBC News Mundo", 1 April 2020.

*"There is little chance that the emergence of SARS- CoV-2 could change this statistic significantly. **Fear could have a larger impact** than the virus itself; **a case of suicide motivated by the fear** of SARS-COV-2 has been reported in India." - Y. Roussel, A. Giraud-Gatineau, M.-T. Jimeno, Didier Raoult, et al., in "SARS-CoV-2: fear versus data", International Journal of Antimicrobial Agents, 5 April 2020.*

"Quarantine belongs back in the Middle Ages. Save your masks for robbing banks. **Stay calm and carry on. Let's not make our attempted cures worse than the disease."** - Dr Richard Schabas, MD, former Chief Medical Officer of Ontario, Medical Officer of Hastings and Prince Edward Public Health and Chief of Staff at York Central Hospital, in "Strictly by the numbers, the coronavirus does not register as a dire global crisis", Globe and Mail, 11 March 2020

NIH Institutes

Current Fiscal Year: 2020 Budget

The Department of Health and Human Services Appropriations Act and the 21st Century Cures Act, U.S.

Allocate: $41.915 Billion

To the NIH, Yearly Funding (Every 12 Months)

That is US$3.47 Billion - Each Month

0. Office of the Director (OD) US$2,252 Billion

1. National Cancer Institute (NCI) US$6.440 Billion

2. Institute of Allergy and Infectious Diseases (NIAID)

NIAID receives US$5.89 Billion. It includes US$511 Million for research related to combating antimicrobial resistance, an increase of US$50 Million. The appropriation also provides US$200 Million to advance basic, translational, and clinical research to develop a: Universal Influenza Vaccine, an increase of US$60 Million.

3. Heart, Lung, and Blood Institute (NHLBI) US$3.624 Billion

4. Institute on Aging (NIA) US$3,544 Billion

5. Institute of Neurological Disorders and Stroke (NINDS) US$2,445 Billion

6. Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) US$2,114 Billion

7. Institute of Mental Health (NIMH) US$2,038 Billion

8. Institute of General Medical Sciences (NIGMS)
US$1.706 Billion +
US$1,231 Billion (PHS Program Evaluation)

9. Institute Child and Human Development (NICHD)
US$1,557 Billion

10. Institute on Drug Abuse (NIDA) US$1,462 Billion

11. Eye Institute (NEI) US$824 Million

12. Institute of Environmental Health Sciences (NIEHS)
US$803 Million

13. Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) US$625 Millions

14. Human Genome Research Institute (NHGRI) US$606 Million

15. Institute on Alcohol Abuse and Alcoholism (NIAAA) US$545 Million

16. Institute on Deafness and Other Communication Disorders (NIDCD) US$491 Million

17. Institute of Dental and Craniofacial Research (NIDCR) US$477 Millions

18. Library of Medicine (NLM) US$457 Million

19. Institute of Biomedical Imaging and Bioengineering (NIBIB) US$404 Million

20. Institute on Minority Health and Health Disparities (NIMHD) US$336 Million

21. Institute of Nursing Research (NINR) US$169 Million

NIH Centers

22. NIH Clinical Center (CC)

About 11% of the Budget will sustain an in-house, or intramural, program of basic and clinical research and training activities managed by world class physicians and scientists. This intramural research program gives the nation the unparalleled ability to respond immediately to national and global health challenges. It includes the NIH Clinical Center, the largest hospital in the world totally dedicated to clinical research.

23. Center for Advancing Translational Sciences (NCATS) US$833 Million

Established to transform the translational science process so that new treatments and cures for disease can be delivered to patients faster. NCATS, 1 of 27 Institutes and Centers at the NIH, that strives to develop innovations to reduce, remove or bypass costly and time-consuming bottlenecks in the translational research pipeline in an effort to speed the delivery of new drugs, diagnostics and medical devices to patients.

24. Center for Information Technology (CIT) US$157 Million

25. Center for Complementary and Integrative Health (NCCIH) US$152 Million

26. Center for Scientific Review (CSR) US$130 Million (FY2019)

27. Fogarty International Center (FIC) US$81 Million" - in "NIH", 2020.

Medical Research Council

"In 2017/2018 the MRC's gross research expenditure, funded by our BEIS allocation and contributions from other bodies, was £814.1 Million, compared to £755.5 Million in 2016/2017." - in "Facts & figures", Medical Research Council UK, 2020.

*"**The prospect of domination of the nation's scholars by Federal employment, project allocation, and the power of money is ever present** and is gravely to be regarded. Yet in holding scientific discovery in respect, as we should, we must also be alert to the equal and opposite **danger that public policy could itself become the captive of a scientific-technological elite."** - Dwight D. Eisenhower, President of the United States, in "Eisenhower's farewell address to the nation", 17 January 1961.*

*"**Fauci has led the NIAID for more than 3 decades, advising the past 5 United States presidents on global health threats from the early days of the AIDS epidemic in the 1980s through to the current Zika virus outbreak**. During a forum on pandemic preparedness at Georgetown University, Fauci said **the Trump administration will not only be challenged by ongoing global health threats such as influenza and HIV, but also a surprise disease outbreak**.*
*Fauci and other health experts said Tuesday **that preventing disease pandemics often starts overseas and that a proper response means collaboration between not only the U.S. and other countries, but also the public and private health sectors. "We will definitely get surprised in the next few years**", he said." - in "Fauci: 'No doubt' Trump will face surprise infectious disease outbreak", Healio - Infectious Diseases News, 11 January 2017.*

"Medical Wisdom comes from Medical Science, which is based upon the observation of clinical proven facts, but having the ability to conclude the exact opposite of what is being observed, that which is logical and common sense. Thus the spirit of truth, has long departed from Medical Science." - Rui Alexandre Gabirro, Emunctologist

Chapter 19

The Sepsis Factor I

"Disease is very old, and nothing about it has changed. It is we who change as we learn to recognize what was formerly imperceptible, (the books are swarming with sentences from various ancient authors, which demonstrate that expectation was once done under a different name)." *- Dr Jean Marie Charcot, MD, in "De l'Expectation en Médecine", Thèse, 17 April 1857.*

"Septic pneumonia, the broncho-pneumonia due to aspiration of septic matter, and particles of food in cases of paralysis and coma, is far from uncommon. In some cases the appearance resembled that of lobar pneumonia. In several cases the pleural surfaces were coated with lymph, and in one case here was pus in the pleural cavity. Microscopically, the chief feature was leucocytic infiltration of the air vesicles. The microbes found in the lungs were chiefly staphylococci and diplococci. In a few cases the diphtheria bacillus was also found. In none of the cases was there any deglutition paraysis. *In several cases it was noticed that the membrane overhanging the larynx was in a dirty broken-up condition.* ***This supported the view that he pneumonia was a septic process due to the inhalation of septic particles****, which was borne out by the distribution of the pneumonic patches and he bacteriological findings. Dr Litchfield also analysed the notes of 200 necropsies made by him at the Royal Prince Alfred Hospital, Sydney, and* ***found that there were 25 cases of Acute Brain Disease.*** *Of these 8 showed well-marked broncho-pneumonia in association with purulent bronchitis. His last observations relate to pneumonia occurring immediately after operations under*

general anaesthesia. The records of the necropsies at the hospital during 1914-15 showed 8 cases. In several of them the pneumonia was of a scattered type and associated with purulent bronchitis." - in "The Lancet", 27 May 1916.

"Pittman showed that most strains of influenza bacilli derived from- cases of meningitis belonged to type b. Subsequently Sinclair and De Navasquez showed that a severe type of acute laryngitis associated with septicaemia was caused by a similar type b bacillus. Mulder confirmed Pittman observations that most nasopharyngeal strains were rough, but he found occasional smooth strains, and Straker has lately observed in one group of children that the nasopharyngeal carrier-rate of smooth strains can be as high as 8%." - in "The Lancet", 7 July 1945.

"Venous Disorders, are among the commonest ills in the western world. *Varicose Veins, are present in over 10% of the population, and using specialized techniques, Deep Vein Thrombosis can be detected in about a 3rd of all seriously ill hospital patients. Pulmonary Embolism, is one of the most dreaded complications of surgery.* ***In contrast, these conditions are exceedingly rare in all developing countries."*** *- Dr Denis Parsons Burkitt, MD, FRCSE, FRS in "Varicose Veins, Deep Vein Thrombosis, and Hemorrhoids", American Heart Journal, April 1973.*

"Over 120 years ago Virchow (1856) suggested that the possible causes of deep vein thrombosis could be divided into 3 main groups: local changes in the vessel wall, venous stasis, and changes in the coagulability of the blood. *It has recently been reasserted that the main aetiological factor is an increased tendency of the blood to clot (Doran, 1971). Venous return has been shown to fall to half its normal rate during operation (Doran et al., 1964; Clarke and Cotton, 1968), and even during*

postoperative bed recumbency (Wright et al., 1951). In keeping with these observations Gibbs (1959) and Sevitt and Gallagher (1959) showed that immobilizing a patient for more than 3 days induces a serious risk of deep vein thrombosis." - Dr Denis Parsons Burkitt, MD, FRCSE, FRS in "Varicose Veins, Deep Vein Thrombosis, and Haemorrhoids: Epidemiology and Suggested Aetiology", British Medical Journal, 3 June 1972.

***"Proper Nutrition and staying in good physical shape are also important not just for symptom relief but also for quality of life."** - in "Chronic Obstructive Pulmonary Disease", American Thoracic Society, 2019.*

"With evidence collected from autopsy studies on COVID-19 and basic science research on Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) and SARS-CoV, we have put forward several hypotheses about SARS-CoV-2 pathogenesis after multiple rounds of discussion among basic science researchers, pathologists, and clinicians working on COVID-19. We hypothesise that a process called Viral Sepsis is crucial to the disease mechanism of COVID-19. The dysregulated immune response also has an immune suppression stage following the proinflammatory phase. It is characterised by sustained and substantial reduction of the peripheral lymphocyte counts, mainly CD4 T and CD8 T cells in COVID-19 patients, and is associated with a high risk of developing secondary bacterial infection. This condition, known as lymphopenia, was also found in severe influenza and other respiratory viral infections." - Hui Li, et al., in "SARS-CoV-2 and viral sepsis: observations and hypotheses", The Lancet, 17 April 2020.

***"Every year in Germany we have 35,000 dying from multi-resistant germs. This is not mentioned at all."** - Dr Karin Mölling, MD, in "Anti-Empire.com", 23 March 2020.*

Etiology of the Epidemic Acute Respiratory Infections commonly called Influenza

"Epidemics of Acute Respiratory Infections have occurred at irregular intervals for centuries in various parts of the world, and their prevention has been one of the most formidable problems in preventive medicine.

These infections, different from other epidemic diseases, and at some time in its history almost every race of people has suffered from their ravages.

During these visitations, recorded in centuries of medical history, the general mortality is greatly increased; the etiologic agent, independent of its own virulence, may increase the death rate by combining with pre-existing diseases, or by lowering the resisting power of the person to such an extent that other more formidable infections gain a foothold and cannot be overcome.

Furthermore, it is striking that, notwithstanding the wide diversity of conditions under which these great epidemics have occurred, the clinical manifestations of the disease have always been the same.

Usually the symptoms are those of an acute infection of the upper respiratory tract, but occasionally of the intestinal tract, with a rapid course and characterized especially by a marked prostration of the patient.

The complications are quite numerous, and probably represent the most important factor in determining the mortality of these diseases.

Infections of the accessory nasal sinuses, lobar and lobular pneumonia, pleurisy, lymphadenitis and otitis media are common complications, while arthritis, pericarditis, abscesses, erysipelas, peritonitis, appendicitis, cholecystitis, illnesses diagnosed scarlet fever, and acute nephritis are frequently observed.

The pathologic anatomy of the disease is quite varied, and usually consists of the complicating morbid changes.

Acute inflammation of the mucosa of the respiratory passages, varying grades and types of lobar and lobular

pneumonia, generalized lymphadenopathy and infections of the various serous surfaces of the body may be mentioned as more or less typical of the pathologic anatomy of these infections.

Nothing can more forcibly indicate the definite character of the causative factor in these epidemic infections than this close similarity of symptoms and complications during several centuries and under such varying degrees of civilization.

Whatever this factor may be, it must have a universal distribution and a most variable pathogenicity. Aside from a few observations on previous isolated epidemics, the most important bacteriologic work on these diseases was done during the great pandemic of 1889-1892. Notwithstanding the great number of observations during this time, however, no observer has satisfactorily proved that one species of bacteria is of primary importance in the causation of the disease. The larger group of investigators, including Weichselbaum, Newman, Ribbert, Finkler, Friedrich, Jaccoud, Gaucher, Bouchard, and others found streptococci, pneumococci and staphylococci in the sputum and postmortem material from cases of influenza, and regarded the disease as a streptococcus or a mixed streptococcus and pneumococcus infection.

In 1892, however, Pfeiffer published his great work on influenza in which he described a small gram-negative hemoglobinophilic bacillus as the causative factor, and this work gained almost universal acceptance at this time.

The previously described bacteria-streptococci, pneumococci, and staphylococci, because of their frequent presence in the sputum of normal persons, were henceforth considered as secondary invaders and of minor importance in the etiology of influenza. Pfeiffer isolated influenza bacilli from the sputum and bronchial tissues of persons suffering from the disease, but **he was unable to find these organisms in the blood stream or satisfactorily to reproduce the disease in animals, although many attempts were made. Similar results were obtained by many of Pfeiffer's contemporaries.**

According to Pfeiffer, these gram-negative hemoglobinophilic bacilli cause true influenza, which he considered a local inflammation of the respiratory tract.

During the winter of 1915-1916, the United States was visited by a severe epidemic of acute respiratory infections which resembled in every detail the great epidemic of 1890. This outbreak was apparently first noticed in the middle western states, and it spread rapidly over the entire country, taking a heavy toll of human life.

December and January were the months in which these infections were most prevalent, and the epidemic had almost completely lost its impetus by March 1916.

During the height of this epidemic in Chicago, 61 cases of the disease were studied bacteriologically, and the results form the basis of this paper.

In all the cases the nasal discharge and sputum were examined, and in a few instances blood cultures were made. In 46 instances, hemolytic streptococci were found in predominating numbers, and in 6 of these cases these organisms were isolated from the nose and throat in pure culture.

Green-producing streptococci were found in 30 instances with 1 pure culture, and pneumococci in 30 cases with 4 pure cultures. Staphylococci were isolated in 50 cases, Micrococcus catarrhalis in 6, and Freidlander's bacillus in 1 case. In only 1 instance was the influenza bacillus found, and then in small numbers.

Anaerobic cultures were also made in the majority of cases, but there were no findings of any great interest.

The rhinitis bacillus, which has been described by Tunnicliff in connection with acute rhinitis, was found in the nasal discharge in 2 cases, and fusiform bacilli were not uncommonly observed in these anaerobic cultures.

The majority of the patients were studied early in the course of the disease, and, in the earliest of these, hemolytic streptococci were almost constantly found, especially in the throat. These different strains of streptococci grew on standard blood agar plates as small round semitranslucent colonies of variable moisture surrounded by a clear zone of

hemolysis 2-3 mm. in diameter. They were gram-positive, arranged in pairs and short chains, medium sized and slightly oblong, and occasionally faintly staining capsules were visible. **They were highly virulent for rabbits, doses of 1 c.c. of a 24-hour broth culture usually causing multiple arthritis and death** in 5-10 days.

The pneumococci isolated were usually in small numbers, and often normal persons which Cole and his associates call Group 4 or the atypical type of pneumococci.

The green-producing streptococci were also usually found in small numbers, and were in the instances studied relatively avirulent.

In regard to the staphylococci found, it is interesting to note that many of the strains were hemolytic when first isolated.

In many instances the attacks of grip were followed by atypical pneumonias, and bacteriologic studies of material from these cases, both antemortem and postmortem, revealed the presence in predominating numbers of hemolytic streptococci in most instances. **In no instance in which postmortem material was examined was the influenza bacillus found.** In 9 cases blood cultures were made, 4 of which were positive, 3 yielding hemolytic streptococci and 1 pneumococci in pure culture.

The most significant findings in this work were the hemolytic streptococcus, which, when present, was usually in predominating numbers, and the almost complete absence of the influenza bacilli, although the disease simulated in every detail the so-called true influenza.

The question of filtrable viruses cannot be excluded in such diseases, but in 3 early cases in which virus cultures were made no results were obtained.

The results seem to indicate that the virulent hemolytic streptococcus must be considered as an important factor in the etiology of these "grippal" diseases.

Whether or not the infection is primarily a streptococcus infection cannot be determined; but, as the disease progresses, this organism rapidly becomes of paramount importance.

The clinical symptoms are always the same. The onset is sudden with a chill and high fever, or with a profuse mucous nasal discharge which rapidly becomes purulent, and profound exhaustion. In exceptional cases, gastro-intestinal symptoms have been noted as premonitary manifestations. The course is rapid, and usually terminates favourably unless serious complications intervene.

The complications are, however, frequent, and determine the character of the prognosis. Pneumonia of a lobular type but in some instances lobar, pleuritis, empyema, abscesses, arthritis, acute nephritis, and conjunctivitis are the most common complications. The pathologic picture simulates that of human "grippal" infections, and it may be said that the 2 infections are quite similar in epidemiology, clinical manifestations, pathology and complications." - Dr George Mathers, MD in "The Proceedings of the Institute of Medicine of Chicago", 7 November 1916.

> *"Dr. Mathers presents the subject in an interesting and instructive manner.* ***First, his observations would indicate that the old idea of a definite clinical syndrome associated with a definite and specific organism was not entirely justifiable.*** *With reference to the 1st feature, the relation between a rather definite syndrome in these cases, of the influenzal type, and a definite organism not the influenza bacillus, it appears that the old conception of its etiology must be given up.* ***There are many instances where diseases once thought to be due to a single organism are known to be excited by a variety of organisms; this is equally true of pathologic lesions. Thus, we have in the diphtheric membrane as it occurs in the throat the disease diphtheria, and we recognize a diphtheritic membrane in the intestinal tract as well."*** *-Dr A. I. Kendall, MD in "The Proceedings of the Institute of Medicine of Chicago", 7 November 1916.*

*"**The so-called diplostreptococcus is perhaps the most important direct cause of influenza pneumonia and death.** It is interesting that in the epidemic of 1889-90 these cocci were noted repeatedly and were seriously considered as the possible cause of influenza by Finkler, Ribbert and others before Pfeiffer discovered his bacillus. In the Swiss, German and English literature of the present epidemic it is repeatedly emphasized as being often found in the exudates, lungs and heart blood.*
***Mathers in this country very early discovered this organism and clearly saw its significance,** finding it in sputum, puncture fluids and blood. **Nuzum, Hirsch and McKinney, Blanton and Irons and nearly every one working on influenza, have emphasized it. Selter, in Germany, sprayed his own throat and that of his assistant with a saline solution filtrate of throat washings of several patients, and both developed a mild attack of influenza.** He emphasized especially the possible symbiotic relationship between the filtrable virus and the commonly present diplostreptococcus.*
*From the Public Health Service and the Navy recently come the reports of extensive transmission experiments at Boston and San Francisco. **At Boston 68 men were inoculated, some with Pfeiffer's bacilli and others with unfiltered and filtered secretions, all without results. At San Francisco 10 men inoculated with Pfeiffer's bacillus or its filtrate did not react, 40 other men inoculated in various ways with unfiltered and filtered respiratory secretions all yielded negative results.***
Whatever the primary agent may be, it would seem to be clear that the more serious aspects of the disease (the complications and death) are caused very largely by pneumococci, streptococci and influenza bacilli acting alone or often together. In this respect it closely resembles other respiratory diseases like scarlet fever and measles." - Dr David J. Davis, MD, in "Proceedings of the Institute of Medicine Chicago", 1919.

"Influenza A virus (IAV), severe IAV, involving either seasonal or pandemic influenza virus, infects the upper respiratory tracts and induces Acute Respiratory Distress Syndrome (ARDS).

Clinically, the characteristic alveolar changes of influenza virus pneumonia include:

1. Capillary Thrombosis
2. Focal Necrosis, and Hyperemia of the Alveolar Wall
3. Inflammatory Infiltration, the Formation of Hyaline Membranes
4. Pulmonary Oedema

Small Vessel Thrombosis, Haemorrhage, and Diffuse Alveolar Damage are observed in severe Influenza Pneumonia, indicating disordered coagulation.

Severe IAV also causes Multiple Organ Dysfunction Syndrome, and Disseminated Intravascular Coagulation (DIC). Bacterial superinfection during influenza, primarily by Streptococcus Pneumoniae, often results in hospitalization and even the death of patients. **A secondary S. pneumoniae infection is held accountable for the overexpression of Tissue Factor (TF), the initiation of the coagulation cascade and thrombus formation, which contribute to severe hypoxia and death. Unlike the pathogenic bacterial superinfection, the colonization of commensal bacteria or pretreatment with probiotic bacteria can dampen influenza-mediated acute lung injury. Staphylococcus aureus, one of the most common commensal bacterium colonized in the airways, induces the polarization of M2 (phenotype) alveolar macrophages and inhibits the lethal inflammatory response to an IAV infection. Both oral and nasal pretreatment with the probiotic lactic acid bacteria strains (Lactobacillus rhamnosus) protects mice from PR8 lethality.** Pretreatment with L. rhamnosus significantly reduces coagulatory activation mainly through the downregulation of TF and the restoration of thrombomodulin levels.

Taken together, these studies show that bacteria in the airways affect the outcome of IAV pneumonia, and precise targeting of the bacteria should be considered in the treatment of influenza.

Conclusion: Influenza virus infection causes excessive activation of ECs and platelets, which triggers a coagulation cascade with concurrently impaired anti-coagulatory and fibrinolytic signaling. Such a pro-coagulant state can cause hemorrhagic fever and is often associated with ARDS in Severe Flu patients.

The aberrant coagulation system contributes to the severity of influenza at multiple levels.

1. The activated ECs, and platelets first produce pro-inflammatory cytokines and chemokines that enhance inflammatory cell infiltration and increase vascular permeability. Platelets are further activated under these circumstances.
2. Coagulation factors are activated, which further augment the inflammation via PARs on ECs, platelets and leukocytes.
3. The expression of anticoagulant components decreases as the ECs are activated.
4. Fibrinolytic proteases (such as plasmin) are activated by the upregulated coagulation, which has been hijacked by the influenza virus for viral replication and infectivity.

Understanding the cellular and molecular events of coagulation will contribute to the development of more precise therapeutics against IAV infections.

Drugs that target endothelial cell activation (S1P1 agonists CYM-5442 and RP-002), anti-platelet agents (Eptifibatide, Aspirin, MRS 2179 and Clopidogrel), Anticoagulants (recombinant activated PC and Ancrod), and Protease Inhibitors (6-AHA, PAI-1 and aprotinin155) effectively hamper pathogenic IAV infection in mice."

- Yan Yang, Hong Tang, in "Aberrant Coagulation Causes a Hyper-inflammatory Response in Severe Influenza Pneumonia", Cellular & Molecular Immunology, 4 April 2016.

For the all Clinical minded individuals, this article excels in its minute detailed, in its methodical clinical analyses and on the progression of symptoms, it gives a detailed graphic description of the main factors involved in Acute Respiratory Distress Syndrome (ARDS) scenario.

Bacteria, Endotoxin, Sepsis - Immunoglobulin M

"Both the prophylactic and therapeutic use of immunoglobulins are part of the clinician's daily considerations, since in almost all areas of medicine we are increasingly dealing with acquired immunodeficiencies.

During extensive surgical interventions, particularly in the case of catabolic tumour patients, but also in the case of polytraumatized patients, a considerable drop in the immunoglobulins can be observed, **which can only be compensated for inadequately even with a sufficient intake of calories.**

In the postoperative course, this reduction in immunoglobulin is associated with an increased risk of infection, increased infection morbidity and mortality." - E. Ungeheuer, D. Heinrich, in "Bakterien, Endotoxin, Sepsis - Immunglobulin M", 1985.

Damage to Cells by Pore-Forming Bacterial Toxins

"**Bacterial Toxins:** Staphylococcus Aureus a-toxin, and Streptolysin O (SLO)

In search of analogous phenomena in biology, we subsequently came across the a toxin from Staphylococcus aureus and the streptolysin O, a main toxin of streptococci.

Secondary Effects of Pore Formers: The formation of transmembrane pores is a very noticeable primary phenomenon, which inevitably leads to cell death if the target cell does not perform any repair processes.

Conclusion: Damage to cells by pore-forming proteins. pathophysiological reactions caused by a-toxin and streptolysin-0 are only 2 examples of subsequent processes that can be triggered by the attack of pore formers.

It is likely that a wide range of other, as yet undiscovered, biological processes can also be induced, the study of which will help us ultimately to better understand the interactions between bacterial products and the host organism." - Prof. Dr. Sucharit Bhakdi, MD in "Bakterien, Endotoxin, Sepsis - Immunglobulin M", 1985.

From Systemic Inflammatory Response Syndrome (SIRS); to Bacterial Sepsis with Shock; to Multiple Organ Dysfunction Syndrome (MODS); to Cardiovascular Collapse

"**Septic shock is the most common cause of mortality in the intensive care unit:**

It is the 10th leading cause of death overall in 2003, but it is preceded by SIRS and develops into septic shock with bacteremia, with or without endotoxemia, and is the most common cause of shock encountered by internists, non-coronary intensive care unit in the United States of America. Mortality ranges from 15% in patients with sepsis to 40% to 60% in patients with septic shock, **and are likely to have comorbid disease, with an adverse impact on survival.**

The lungs, urinary tract and intestines (impaired gut immunity) are the most common sites for bacterial invasion of the circulation.

Comorbidities associated with morbidity and mortality in sepsis include active cancer, diabetes, chronic lung disease, congestive heart failure, renal insufficiency, and liver disease (cirrhosis).

Age, specifically older than 65 years old, has been shown to be an independent predictor of mortality in sepsis.

There is a Continuum of Clinical Manifestations:

From Systemic Inflammatory Response Syndrome (SIRS) to Sepsis, to Severe Sepsis, to Septic Shock (Sepsis-1), to Multiple Organ Dysfunction Syndrome (MODS).

(Bacteria) and fungi can cause septic shock:

Bacterial infections are the most common cause of Septic Shock. Almost any bacterium can cause bacteremia. Bacteremia is not necessary for the development of Septic Shock. Sepsis, and Septic Shock in the immunocompromised patient is associated with a wide variety of bacteria and fungi.

Septicemia leads to: Organ Dysfunction; to Multiple Organ Dysfunction Syndrome, and progresses to Shock (Cardiovascular Collapse).

Death due to this condition has increased 82.6% from 1979 to 1997.

SIRS

Systemic Inflammatory Response Syndrome describes the inflammatory process, based on a combination of vital signs and blood work; of 2 or more of the following:

1. Temperature greater than 38 C or less than 36 C
2. Heart rate greater than 90 beats per minute
3. Respiration: Tachypnea greater than 20 breaths per minute or PaCO2 less than 32 mm Hg
4. Leukocyte count: White blood cell (WBC) count greater than 12,000 per cubic millimeter or fewer than 4000 per cubic millimeter, or greater than 10% immature (band) forms.

Sepsis

SIRS as the result of an infection

Severe Sepsis

1. Sepsis associated with organ dysfunction (1 or more), hypo-perfusion abnormality, or sepsis-induced hypotension.

2. Hypo-perfusion abnormalities may include; but are not limited to: Lactic Acidosis, Oliguria, or Acute Change in Mental Status.

Septic Shock

Sepsis-induced hypotension despite adequate fluid resuscitation. **Sepsis and its sequelae represent a continuum of clinical and pathophysiologic severity, resulting in progressive physiologic failure of several inter-dependent organ systems.**

The specific organ dysfunctions associated with Severe Sepsis, & Septic Shock are:

1. Lungs: Early fall in arterial PO2, manifesting as Acute Respiratory Distress Syndrome (ARDS): Capillary-leakage into alveoli; Tachypnea, Hyperpnea.

2. Kidneys Failure, as Acute Renal Injury (AKI): Oliguria, Anuria, Azotemia, Proteinuria (build-up of waste products in the blood, AKI can also affect other organs: brain, heart, lungs. Acute kidney injury is common in patients who are in the hospital, in intensive care units, and especially in older adults).

3. Brain: as Septic Encephalopathy.

4. Liver: Elevated levels of Serum Bilirubin, Alkaline Phosphatase, Cholestatic Jaundice.

5. Gastrointestinal Tract: Nausea, Vomiting, Diarrhoea, and Ileus.

6. Bone Marrow: as anaemia of critical illness.

7. Cardiovascular: as Septic Shock (hypotension).

8. Peripheral Nerves: as critical illness polyneuropathy.

9. Skeletal Muscle: as critical illness myopathy."

Sources:

- Larry H. Bernstein, "Transthyretin and the Systemic Inflammatory Response", Current Nutrition & Food Science, 2009;

- Professor Neal R. Chamberlain, A.T. Still University of Health Sciences, in "From Systemic Inflammatory Response Syndrome; to Bacterial Sepsis with Shock", 8 August 2004.

- Benjamin Bullock; Michael D. Benham, in "Bacterial Sepsis", StatPearls, 7 February 2019.

The Sepsis Factor II

"Sepsis (from the Greek - putrefaction and decay) is a potentially fatal whole-body inflammation (a Systemic Inflammatory Response Syndrome or SIRS) caused by severe infection.

1. Sepsis can continue even after the infection that caused it is gone.

2. Severe Sepsis: is sepsis complicated by organ dysfunction.

3. Septic Shock: is sepsis complicated by a high lactate level or by shock that does not improve after fluid resuscitation.

4. Bacteremia: is the presence of viable bacteria in the blood.

5. Septicemia: the presence of microorganisms or their toxins in the blood.

Sepsis causes millions of deaths globally each year.

Sepsis is caused by the immune system's response to a serious infection, most commonly bacteria, but also fungi and parasites in the blood, urinary tract, lungs, skin, or other tissues.

Sepsis can be thought of as falling within a continuum from infection to multiple organ dysfunction syndrome.

Common Symptoms of Sepsis include those related to a specific infection, but usually accompanied by:

1. High Fevers
2. Hot
3. Flushed Skin
4. Elevated Heart Rate
5. Hyperventilation,
6. Altered Mental Status
7. Swelling
8. Low Blood Pressure

In the elderly, or in people with weakened immune systems, the pattern of symptoms may be atypical, with hypothermia and without an easily localizable infection.

Signs and symptoms

In addition to symptoms related to the provoking infection, sepsis is frequently associated with either:

1. Fever or Hypothermia
2. Rapid Breathing
3. Elevated Heart Rate
4. Confusion
5. Edema

Early Signs are:

1. Elevated Heart Rate
2. Decreased Urination
3. Elevated Blood Sugar

Signs of Established Sepsis are:

1. Confusion
2. Metabolic Acidosis with compensatory respiratory alkalosis (which can manifest as faster breathing)
3. Low Blood Pressure
4. Decreased Systemic Vascular Resistance
5. Higher Cardiac Output
6. Dysfunctions of Blood Coagulation

Sepsis may also lead to a drop in blood pressure, resulting in shock.
This may result in light-headedness. Bruising or intense bleeding may also occur.

Cause

The Most Common Primary Sources of Infection Resulting in Sepsis are:

1. Lungs
2. Abdomen
3. Urinary Tract

Typically, 50% of all Sepsis cases start as an infection in the lungs. No source is found in one third of cases.

The infectious agents are usually bacteria but can also be fungi.

Gram-positive bacteria were the primary cause of sepsis before the introduction of antibiotics in the 1950s.

After the introduction of antibiotics, gram-negative bacteria became the predominant cause of sepsis from the 1960s to the 1980s. After the 1980s, **gram-positive bacteria, most commonly staphylococci, are thought to cause more than 50% of cases of sepsis.**

Other commonly implicated bacteria include Streptococcus pyogenes, Escherichia coli, Pseudomonas aeruginosa, and Klebsiella species.

Fungal sepsis accounts for approximately 5% of severe sepsis and septic shock cases; the most common cause of fungal sepsis is an infection by Candida species of yeast, a frequent hospital-acquired infection." - in "Wikipedia", 2014.

> ***"Sepsis (the presence in the blood of pathogenic microorganisms or their toxins)."*** *- in "The CDC's Case Definition of AIDS", 1992; see: L. Mandell, Kings County Medical Center, Brooklyn, NY, unpublished data, November 1991.*

"Sepsis is now defined as SIRS (Systemic Inflammatory Response Syndrome) due to an infection.

The condition does not represent the infection itself, but rather the body's systemic reaction to it.

It can be caused by infectious organisms including: bacteria and fungi; but may just as well be due to toxins.

The diagnosis of sepsis was determined by the International Sepsis Definition Conference in 2001, an account of which was published in Critical Care Medicine in April 2003. **It establishes sepsis as the diagnosis when an adult patient with an infection looks "sick," "septic" or "toxic"** and has any 2 or more of the following criteria:

Fever ≥101°F or hypothermia (<96.8°F)
Heart rate >90 beats/minute
Respiration rate >20 breaths/minute
White blood count >12,000 μL or <4,000 μL or with >10% bands
- Dr Richard D. Pinson, FACP, in "Sepsis: SIRS due to an infection", Hospitalist and American College of Physicians, January 2011.

"A 2016 task force, termed Sepsis-3.
The new proposal defines **sepsis as life-threatening organ dysfunction caused by a dysregulated host response to infection.**
The new definition abandoned use of host inflammatory response syndrome criteria (SIRS) in identification of Sepsis and eliminated the term Severe Sepsis.
An earlier sepsis definition, Sepsis-1, was developed at a 1991 consensus conference in which SIRS criteria were established.

Four SIRS criteria were defined:

1. Tachycardia (heart rate >90 beats/min)
2. Tachypnea (respiratory rate >20 breaths/min)
3. Fever or Hypothermia (temperature >38 or <36 ℃)
4. Leukocytosis, leukopenia, or bandemia (white blood cells >1,200/mm3, <4,000/mm3 or bandemia ≥10%).

Patients who met two or more of these criteria fulfilled the definition of SIRS, and Sepsis-1 was defined as infection or suspected infection leading to the onset of SIRS.
Sepsis complicated by Organ Dysfunction was termed; Severe Sepsis, which could progress to Septic Shock, defined as: "Sepsis-Induced Hypotension Persisting Despite Adequate Fluid Resuscitation." - Dr Paul Marik, MD, in "SIRS, qSOFA and new sepsis definition", Journal of Thoracic Disease, 2017.

*"**Sepsis is an infection which has evoked a systemic inflammatory response.** Clinically, the Systemic Inflammatory Response Syndrome (SIRS) is identified by 2 or more symptoms including: Fever or Hypothermia, Tachycardia, Tachypnoea and change in Blood Leucocyte Count. **All patients with SIRS and Bacteraemia developed Severe Sepsis,** or Septic Shock. **We found SIRS status on admission to be moderately associated with infection and strongly related to 28-day mortality."** - in "The Systemic Inflammatory Response Syndrome (SIRS) in acutely hospitalised medical patients: a cohort study", Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine, 27 December 2009.*

*"We hypothesize that improvements in the management of critically ill patients with serious infections will follow the **development of a staging system for sepsis that can better characterize the syndrome on the basis of predisposing factors and premorbid conditions, the nature of the underlying infection,** the characteristics of the host response, and the extent of the resultant organ dysfunction." - in "International Sepsis Definitions Conference 2001", Intensive Care Medicine, April 2003.*

"Bacterial Sepsis is a life-threatening condition that arises when the body's response to an infection injures its tissues and organs. Sepsis has recently been re-defined as life-threatening organ dysfunction caused by a dysregulated host response to infection. Sepsis, as a condition, was first introduced by Hippocrates (460 through 470 BC)." - Benjamin Bullock; Michael D. Benham, in "Bacterial Sepsis", StatPearls, 7 February 2019.

"As a particular example of an acute systemic inflammatory response, the Sepsis/SIRS concept is here discussed. Sepsis is a Syndrome in which immune mediators, induced by for example microbial invasion, injury or through other factors, induce an acute State of inflammation which leads to **abnormal homeostasis**, organ damage and eventually to lethal Shock.

Sepsis refers to a Systemic response to Serious infection.

Patients with Sepsis usually manifest fever, tachycardia, tachypnea, leukocytosis, and a localized site of infection.

Microbiologic cultures from blood or the infection site are frequently, though not invariably, positive. When this syndrome results in hypotension or multiple organ system failure (MOSF), the condition is called Sepsis or Septic shock. **Initially, micro-organisms proliferate at a nidus of infection.** The organisms may invade the bloodstream, resulting in positive blood cultures, or might grow locally and **release a variety of Substances into the bloodstream.**

Such Substances, when of pathogenic nature are grouped into 2 basic categories:

a) Endotoxins.
b) Exotoxins.

1. Endotoxins typically consist of Structural components of the micro-organisms, such as teichoic acid antigens from Staphylococci or endotoxins from gram-negative organisms like LPS).

Exotoxins (e.g., toxic shock Syndrome toxin-1, or Staphylococcal enterotoxin A, B or C) are synthesized and directly released by the micro-organisms.

As suggested by their name, both of these types of bacterial toxins have pathogenic effects, stimulating the release of a large number of endogenous host-derived immunological mediators from plasma protein precursors or cells (monocytes/macrophages, endothelial cells, neutrophils, T cells, and others).

Sepsis/SIRS is an acute systemic inflammatory response to a variety of noxious insults (particularly insults of an infectious origin such as a bacterial infection, **but also non-infectious insults are well known and often seen**).

The systemic inflammatory response seen with Sepsis/SIRS is caused by immunological processes that are activated by a variety of immunological mediators such as cytokines, chemokines, nitric oxide, and other immune mediating chemicals of the body. These immunological mediators are generally seen to cause the life-threatening systemic disease seen with Sepsis/SIRS.

These immunological mediators are, one the one hand, required locally, for example as effective antibacterial response, but are, in contrast, **potentially toxic when secreted into the circulation**.

When secreted into the circulation, these mediators can cause, in an upward spiral of cause and effect, the further systemic release of these mediators, in the end leading to severe disease, such as multiple organ failure and death.

Crucial inflammatory mediators are tumour necrosis factor-O.

In essence, Sepsis, or Septicemia, relates to the presence in the blood of pathogenic microorganisms or their toxins in combination with a systemic inflammatory disease associated with such presence.

Central in the development of sepsis in a subject is an infection of a subject with a microorganism which gives origin to the systemic release of immunological mediators by its presence in the blood of an affected subject or by the presence of its toxins in the blood of the subject.

Only when the presence gives rise to a disease that pertains to or affects the body as a whole, a systemic disease, one speaks of sepsis.

The field of sepsis is thus limited to those conditions that are **characterized by the presence of microorganisms or their toxins in the blood of a subject and simultaneously to (respectively) the Subject's Systemic response(s) to the microorganism or to a the Subject's Systemic response(s) the toxins.**

Sepsis herein includes: Severe Sepsis and Septic Shock. Whereby Severe Sepsis relates to Sepsis accompanied with Organ Dysfunction and Septic Shock relates to Sepsis accompanied with Hypotension or Perfusion Abnormalities or both.

SIRS relates to the type of severe systemic disease seen in cases of sepsis but also relates to systemic inflammatory disease wherein pathogenic micro organisms or their toxins are not present in the blood." - Nisar Khan, Robbert Bennerin, in "Administration of gene-regulatory peptides", Patent Application Pub. No.: US 2004/0202645 A1, 8 April 2003.

"Although burn wound sepsis was the most common complication in those patients over 70, cardiovascular and pulmonary complications were the most deadly, accounting for 68% of total deaths in this group." *- HQ Le, et al., in* ***"Burns in patients under 2 and over 70 years of age", Ann Plast Surg. Jul 1986.***

Influenza A Virus Infection Predisposes to Fatal Septicemia following Superinfection with Streptococcus Pneumoniae

"Studies have demonstrated that animals exposed to Streptococcus pneumoniae while recovering from influenza A virus infection exhibit exacerbated disease symptoms.

We describe a model of bacterial superinfection in which a mild, self-limiting influenza virus infection is followed by mild, self-limiting superinfection with S. pneumoniae serotype 3.

S. pneumoniae superinfection results in rapid dissemination of the bacterium from the respiratory tract and systemic spread to all major organs, resulting in fatal septicemia.

Influenza A virus infections are usually limited to the upper respiratory tract and cause mild symptoms, such as sore throat, sneezing, fever, headache, muscle fatigue, and inactivity.

Influenza virus infection is not often fatal in normal healthy adults, and mortality is usually due to Secondary Bacterial Superinfections. Interestingly: 44% to 57% of patients Hospitalized with Influenza test positive for Bacterial Pneumonia.

Clinical data have shown that the majority of all fatal secondary bacterial infections are associated with bacterial septicemia.

Streptococcus pneumoniae is the causative agent in the majority of patients suffering from bacterial co-infections and is the leading cause of community-acquired pneumonia. In addition to causing pneumonia, Streptococcus pneumoniae infection can result in:

1. Otitis media.
2. Sinusitis.
3. Meningitis.
4. Bacteremia.

In summary: We have established a murine model of fatal septicemia that closely mimics clinical exacerbation of influenza virus-associated respiratory disease by superinfection with serotype 3 pneumococci.

The use of mild, nonlethal doses of each organism is sufficient to establish a synergistic and highly virulent relationship between the 2 pathogens." - Janice L. Speshock, et al., in "Filamentous Influenza A Virus Infection Predisposes Mice to Fatal Septicemia following Superinfection with Streptococcus pneumoniae Serotype 3", Infection and Immunity, May 2007.

The Role of Sepsis

"Sepsis, happens when an infection you already have in your: skin, lungs, urinary tract, or somewhere else, that triggers a chain reaction throughout your body.

The symptoms of septicemia can overlap with symptoms of numerous other conditions, including bad cases of influenza and stomach flu (gastroenteritis).

Symptoms: A patient with sepsis might have the following signs;

1. High heart rate
2. Confusion or disorientation
3. Extreme pain or discomfort
4. Fever, shivering, or feeling very cold
5. Shortness of breath
6. Clammy or sweaty skin." - in "What is sepsis", CDC, 27 August 2019.

The Diagnosis

Two or more of the following conditions are necessary for septicemia (sepsis) to be diagnosed:

1. Body Temperature > 100.4 or < 96.8
2. Respiratory rate > 20 breaths per minute
3. White cell count > 12,000 or < 4000

"**Septicemia is a serious infection most often caused by Bacteria in the Bloodstream.** It's sometimes known as blood poisoning.

Septicemia often occurs in people with weak immune systems and can be very dangerous, especially for older adults.

The bacteria that cause septicemia don't start out in the bloodstream. Instead, the problem usually starts as a

bacterial infection elsewhere in the body - possibly as urinary tract infection, lung infection, infection in your digestive tract or a dental abscess.

As the infection gets worse, it can spread into your bloodstream, leading to septicemia.

Septicemia isn't quite the same thing as sepsis, even though many people use the two terms interchangeably.

Technically, "Septicemia" is defined as the infection in the bloodstream, while "Sepsis" is the body's response to this infection.

In septicemia, the problems arise from the toxins released by the bacteria into your bloodstream.

These toxins can have a severe impact on many of your organs.

In the worst cases, these toxins can actually cause your organs to shut down.

Septicemia is the 10th leading cause of death in the United States for older adults, and deaths from the condition are increasing in older Americans.

Septicemia is also known as: Blood Poisoning, Sepsis, and Systematic Inflammatory Response Syndrome (SIRS)." - in "Verywell Health", 30 March 2020.

Sources:

1. V.Y. Dombrovskiy, in "Rapid increase in hospitalization and mortality rates for severe sepsis in the United States: a trend analysis from 1993 to 2003", Critical Care Medicine, May 2007.

2. G.S.Martin, in "The Epidemiology of Sepsis in the United States from 1979 through 2000", New England Journal of Medicine, 17 April 2003.

3. "Septicemia fact sheet", National Library of Medicine.

4. M.E. Salive, in "Risk factors for septicemia-associated mortality in older adults", Public Health Reports", July-August 1993.

"Sepsis is a common condition that can be triggered by an infection. It is estimated that there are around 123,000 cases of sepsis in England every year, resulting in around 36,900 deaths (UK Sepsis Trust, 2015)." - in "Sepsis", Nice, July 2016.

Disseminated Intravascular Coagulation

"Disseminated Intravascular Coagulation (DIC) also known as Consumption Coagulopathy is a serious condition that causes abnormal blood clotting throughout the body's blood vessels." - in "National Heart, Lung, and Blood Institute", 8 Oct. 2019.

"DIC is a condition in which blood clots form throughout the body, blocking small blood vessels. Symptoms may include chest pain, shortness of breath, leg pain, problems speaking, or problems moving parts of the body.

As clotting factors and platelets are used up, bleeding may occur.

This may include blood in the urine, blood in the stool, or bleeding into the skin. Complications may include organ failure. Relatively common causes include sepsis, surgery, major trauma, cancer, and complications of pregnancy." - in "Wikipedia", April 2020.

"Disseminated Intravascular Coagulation (DIC) can occur when someone has:

1. Severe Sepsis
2. Septic Shock

Both blood clotting and difficulty with clotting may occur, causing a vicious cycle.

Small blood clots can develop throughout the bloodstream, especially in the capillaries, blocking the blood flow to many parts of the body. This blood flow is needed to bring oxygen and nutrients to the tissues.

On the reverse side of the cycle, DIC can cause increased bleeding because the body is using up so many of the blood clotting proteins for the multiple blood clots in the blood vessels that there are not enough of them left to clot the blood elsewhere.

DIC affects about 35% of patients who have Sepsis.

Sepsis and Septic Shock can result from an infection anywhere in the body, such as; Pneumonia, Influenza, or Urinary Tract Infections. Worldwide, 1/3 of people who develop sepsis die." - in "Sepsis Alliance", 13 December 2017.

Pathophysiology

"1. Slowly Evolving DIC: primarily causes Venous Thromboembolic manifestations (Deep Venous Thrombosis, Pulmonary Embolism).

2. Severe, Rapidly Evolving DIC: in contrast, causes thrombocytopenia, depletion of plasma coagulation factors, fibrinogen, and bleeding. Bleeding into organs, along with microvascular thromboses, may cause dysfunction and failure in multiple organs. Delayed dissolution of fibrin polymers by fibrinolysis may result in the mechanical disruption of Red Blood Cells (RBCs), producing schistocytes and mild intravascular hemolysis." - in "Merck Manual", January 2020.

Deep Vein Thrombosis & Pulmonary Embolism

"Deep Vein Thrombosis, is a condition in which a blood clot develops in the deep veins, most commonly in the lower extremities.

A Pulmonary Embolism occurs when a part of the clot breaks off and travels to the lungs, a potential life threat.

Venous Thromboembolism refers to Deep Vein Thrombosis, Pulmonary Embolism, or both.

Venous Thromboembolism is often recurrent, and long-term complications, such as post-thrombotic syndrome after a Deep Vein Thrombosis or chronic thromboembolic pulmonary hypertension after a PE, are frequent." - Nimia L. Reyes, Michele G. Beckman, Karon Abe, in "Deep Vein Thrombosis & Pulmonary Embolism", National Center for Emerging and Zoonotic Infectious Diseases, CDC, 24 June 2019.

It Was a Complete Chinese Tale

"They don't die from Pneumonia, they die from Thrombosis, and Cardiovascular Problems! The news arrive by Medical Chats on the Covid-19, in Italy and Spain.

It seems that the Chinese Communist Party, in addition to unleashing a Biological, and Psychological warfare, deceiving in its Figures, in the Results, and in the Treatment Mode: Forced Confinement to Break the West, instead of, Preventive Distancing.

It also deceived the western doctors in the Drug and Clinical treatments. Based on **only 3 autopsies (only 3; because they recommended immediate cremation**), the **Chinese doctors, and WHO officials said that people died of Pneumonia,** and that Ventilators were primarily needed in Intensive Care Units (ICUs), and that neither anticoagulants, anti-Inflammatory, nor antibiotics weren't necessary.

It turns out that; in Italy, after 70 autopsies, during the week of Easter, the Italian doctors discovered that the patients in the ICU, with only ventilators, were dying, 9 out of 10. They concluded with the 70 autopsies, that patients where dying not from Pneumonia, but from Thrombosis and Cardiovascular Problems, and that they do need, in addition to ventilators, certain types of anticoagulants, anti-inflammatories and antibiotics.

And how come the WHO, didn't notice that?

From that deception? In this, it is understood, the mortality in Italy, Spain and now in the USA.

Because heeding the Chinese deception, and the WHO, they were not focused on giving Anticoagulants, Antinflammatories, or Antibiotics to ICU Patients with Covid-19.

Doctors in Italy say that for several days that they have also been giving anticoagulants, anti-inflammatories and antibiotics, the number of deaths began to decrease.

I am sending you the Medical Recordings *(see: First Case Reports From Italy)*, that come from Italy, and documents from Spain *(see: Coagulation: D-Dimer and Covid-19)*.

The Death Curve began to drop in Italy and Spain, because contrary to the Chinese, the doctors began to use Anticoagulants, Anti-Inflammatory and Antibiotics." - Italian Medical Trade Doctors, in "WhatsApp Messenger group", 14 April 2020.

Coagulation: D-Dimer and Covid-19

"Sepsis is a complication of infectious diseases, especially bacterial, which is associated with an activation of coagulation, characterized by increased thrombin generation and decreased body's natural (anticoagulant) defences.

Thrombin is a coagulation enzyme that converts fibrinogen into fibrin, which is degraded by another defence system, called the fibrinolytic system, with the formation of a degradation product known as D-Dimer.

In recent years, the concept of immunothrombosis has been coined to describe the interaction between the immune system and the coagulation system in response to infection by microorganisms, to prevent their spread.

When these mechanisms are indiscriminately activated, as a consequence of a systemic infection, a condition called Disseminated Intravascular Coagulation (DIC) occurs, characterized by the presence of massive deposits of fibrin in the circulation, which leads to organic damage and worsens the prognosis of patients. Va**rious studies have demonstrated a link between the severity of coagulopathy, organ dysfunction, and mortality in patients with sepsis.**

The COVID-19 pandemic represents a good example of viral infection associated with a systemic inflammatory response and activation of coagulation in symptomatic patients.

DIC is a recognized complication of bacterial infections, coronavirus infection can also cause it and condition thrombotic phenomena in various territories.

For example, episodes of ischemia in the fingers of the lower extremities that can cause gangrene have been described.

Results from patients in Wuhan have shown that D-Dimer, a marker of thrombin generation and fibrinolysis, constitutes a relevant prognostic index of mortality.

These studies indicate that D-Dimer levels higher than 1000ng / mL are associated with an 18-fold higher risk of mortality, to the point that they are currently included in the screening of all symptomatic COVID-19 positive patients.

The fact that a coagulopathy is present in these patients has promoted antithrombotic strategies, especially in patients who enter the ICU and show organic damage or ischemic episodes." - Dr José A. Páramo Fernández, MD, Presidente de la Sociedad Española de Trombosis y Hemostasia, in "Coagulation: D-Dimer and Covid-19", 24 March 2020.

Covid-19 Associated Thrombotic Immune Response (RITAC)

"Our colleagues in Spain and Italy throughout these weeks have been transmitting their experience to us, with successes and mistakes, but with the aim that we do not suffer the same as them.

The RITAC protocol (as we have decided to call it), aims to decrease the need for respirators and to lower the mortality of seriously ill patients.

During the months of February and March 2020, it could be observed that the patients who are infected with Covid-

19 that are rapidly aggravating, present clinical and laboratory data, compatible with Macrophage Activation Syndrome.

Accompanying the uncontrolled macrophage response, pathological activation of thrombin is found in these patients, with multiple thrombotic events ranging from: Peripheral Ischaemia, Pulmonary Thromboembolism, to Disseminated Intravascular Coagulation (DIC).

These complications were the cause of death in many of these patients.

RITAC diagnostic criteria

Patient with confirmed Covid-19 infection with respiratory symptoms who has one or more of the following criteria:

1. D-dimer: > 1,000 ng / mL
2. Ferritin > 500 ng / mL
3. Rapidly progressive dyspnoea
4. Refractory hypoxaemia
5. Thrombotic phenomena
6. Shock

- Dr Mauricio Gauna, MD, Dr. Juan Bernava, MD in "Recomendaciones diagnósticas y terapéuticas ante la Respuesta Inmune Trombótica Asociada a Covid-19", April 2020.

> *"We report **2 cases** from Wuhan, China, presenting with fever, cough, and dyspnea secondary to COVID-19 Pneumonia. CT pulmonary angiography 6 days after admission confirmed acute pulmonary embolism." - Dr Y. Xie, MD, Dr X. Wang, MD, Dr P. Yang, MD, Dr S. Zhang, MD, in "COVID-19 Complicated by Acute Pulmonary Embolism", 16 March 2020.*

"The absence of major predisposing factors in this case of diffuse bilateral COVID-19 Pneumonia ***seems to confirm the role of severe infections as a precipitant factor for Acute Venous Thrombo-Embolism and the causal relationship."*** *- Dr G. Danzi, MD, Dr M. Loffi, MD, Dr G. Galeazzi, MD, Dr E. Gherbesi, MD in "Acute Pulmonary Embolism and COVID-19 Pneumonia: a random association?", European Heart Journal, 30 March 2020.*

"Patients with COVID-19 Pneumonia are at risk of Acute Pulmonary Embolism. The 10 incidences of ***Acute Pulmonary Embolism*** *in the 25 patients suggests a frequent occurrence. Hereby we call for more attention to be paid regarding to Acute Pulmonary Embolism in the course of COVID-19 treatment." - Dr J. Chen, MD, Dr X. Wang, MD, Dr S. Zhang, MD, et al. in "Findings of acute pulmonary embolism in COVID-19 patients", Manuscript Draft, THELANCETID-D-20-00678, The Lancet Infectious Diseases, April 2020.*

"Acutely ill patients with Severe Viral Pneumonia, and Acute Respiratory Distress Syndrome (ARDS), such as those with H1N1 infection, who have been admitted to hospital have a 23-times increased risk for ***Pulmonary Embolism****." - Dr Alex C Spyropoulos, MD, Dr Walter Ageno, MD, Dr Elliot S Barnathan, MD, in "Hospital-based use of thromboprophylaxis in patients with COVID-19", The Lancet, 21 April 2020.*

Severe Viral Pneumonia

"Pneumonia is a common illness with estimates of approximately 450 million cases per year. The most common viral pathogens were influenza, human metapneumovirus, and respiratory syncytial virus (RSV). Patients with viral infections were older, more likely to have cardiac disease,

and in general more frail compared with adults with bacterial pneumonia. Furthermore, all cases of viral **pneumonia occurred between October and May,** whereas bacterial pathogens had no seasonal predilection.

In this study, there were no differences in outcomes between viral or bacterial causes of pneumonia.

Viral pathogens isolated in order of highest to lowest frequency were rhinovirus, parainfluenza virus, human metapneumovirus, influenza, and RSV. **Again in this study, mortality was not different between bacterial and viral causes of pneumonia. Among the most common severe complications and causes of death from influenza are viral pneumonia and/or secondary bacterial pneumonia.**

Chronic lung disease is the most common comorbidity associated with influenza infection, followed by Neurologic Disease, Hemato-oncologic Disease, and Cardiac Disease." - Dr Clare Ramsey, MD, MSc, FRCPC, Dr Anand Kumar, MD, FRCPC, in "Influenza and Endemic Viral Pneumonia", Critical Care Clinics, October 2013.

> *"While most patients having COVID-19 Pneumonia will have a mild disease course, some patients will develop: Severe Respiratory Distress, Sepsis, and Septic Shock. Coagulopathy commonly occurs in Sepsis and may predict outcomes in severe COVID-19. In summary, patients with known COVID-19 disease may have* ***acute pulmonary embolism****." - Dr D. Rotzingera, MD, Dr C. Beigelman-Aubrya, MD, et al., in "Pulmonary Embolism in patients with COVID-19", 11 April 2020.*

Coagulopathy

"What is the prognosis in a patient with COVID-19-associated coagulopathy (CAC) and Disseminated Intravascular Coagulopathy (DIC)? In a study by Tang et al from Wuhan, 71% of non-survivors from COVID-19 infection met the criteria for Disseminated Intravascular Coagulopathy (DIC) compared to 0.4% of survivors.

Elevated D-dimer at admission and markedly increasing D-dimer levels (3- to 4-fold) over time were associated with high mortality, likely reflecting coagulation activation from **infection/sepsis, cytokine storm and impending organ failure."** - in "COVID-19 and Coagulopathy: Frequently Asked Questions", American Society of Hematology, 14 April 2020.

"The definition of Coagulopathy is "a condition in which the blood's ability to clot is impaired." However, for some clinicians, the term also covers Thrombotic States, and because of the complexity of the hemostatic pathways, the two conditions can exist simultaneously.

Some practitioners would consider that mildly abnormal results on coagulation screening without bleeding can also indicate a coagulopathy. Such states are common in patients in the intensive care unit (ICU) and require a clinicopathological approach to ensure that the correct diagnosis is made and the appropriate treatment administered. **As a general rule, dietary intake of Vitamin K, which is necessary for the formation of coagulation factors II, VII, IX, and X**, may be inadequate in critical care settings. Despite the lack of high-quality evidence and the inability of Vitamin K to correct a coagulopathy caused by liver disease, I recommend supplementation of Vitamin K1 for critical care patients at risk.

Thrombopoietin and most hemostatic proteins are synthesized in the liver. In cholestatic liver disease, there is reduced absorption of lipid-soluble vitamins, so reduced amounts of the Vitamin K–dependent coagulation factors II, VII, IX, and X are produced.

Acute alcohol intake inhibits platelet aggregation.

The cornerstone for managing this condition remains the management of the underlying cause (e.g., sepsis).

Sepsis is the most common cause of disseminated intravascular coagulation in critical care; systemic infection with a range of bacteria from Staphylococcus Aureus to Escherichia Coli is known to be associated with

this condition. Another study of Meningococcal Sepsis showed that a large amount of tissue factor was found on monocyte-derived circulating microparticles." - Dr Beverley J. Hunt, MD, in "Bleeding and Coagulopathies in Critical Care", New England Journal of Medicine, 27 February 2014.

Meningococcal Sepsis

> ***"Symptoms of meningococcal disease can first appear as a flu-like illness*** *and rapidly worsen.* ***The two most common types of meningococcal infections are meningitis and septicemia.*** *Doctors call septicemia (a bloodstream infection) caused by Neisseria meningitidis meningococcal septicemia or meningococcemia.* ***When someone has meningococcal septicemia, the bacteria enter the bloodstream and multiply, damaging the walls of the blood vessels. This causes bleeding into the skin and organs."*** *- in "Meningococcal Disease", National Center for Immunization and Respiratory Diseases, CDC, 7 June 2017.*

"We injected Escherichia coli endotoxin, beneath the eschar of sheep to determine whether burn tissue in the presence of endotoxin releases prostanoids, particularly thromboxane A2, (TxA2), and if increased local TxA2 **production can lead to distant lung dysfunction.**

We compared this response to the lung injury produced by the same dose given intravenously.

We noted a marked increase in burn tissue TxA2 production after subeschar endotoxin as reflected in significant increases in burn lymph and pulmonary artery TxB2 levels. **Circulating endotoxin was noted in one sheep.**

After intravenous (endotoxin), a significant increase in lung TxA2 production was noted and a characteristic two-phase lung injury was seen with an initial phase basically identical to that seen with the subeschar injection followed by an increase in lung protein permeability.

Burn tissue endotoxin can stimulate local TxA2 production leading to distant lung dysfunction without the need for circulating endotoxin.

The source of the TxA2 is the burn, while with endotoxemia the source is the lung." - RH Demling, et al., in **"Endotoxin-induced prostanoid production by the burn wound can cause distant lung dysfunction"**, Surgery, April 1986.

Chapter 20

First Case Reports From Italy

14 April 2020

"Thanks to the work of colleagues in Naples, Bergamo and Rovigo we have been able to understand much from the physiology and therapy, it is not Pneumonia in the strict sense, **the virus does not kill Pneumocytes** (1), only its type, but instead uses an inflammatory storm to create an Endothelial Vascular (2) with the subsequent Diffuse Thrombosis.

The lung is the most damaged because it is the most inflamed, damages the lung tissue, but people are also dying from Heart Attacks, Cerebrovascular Accidents, and many other Thrombotic Diseases (3).

In fact **we have practically abandoned the useless antiviral therapies** concentrating on those anti-inflammatory and anticoagulant, however the truth these therapies must be done immediately, even at home when patients respond very well, the later you make them, the less effective they are. In resuscitation **they are almost useless.**

If the Chinese had told us, we would not have invested in intensive care, but in that at domicile. Hopefully this is done in phase two even though **we have almost finished all those medications used at the wrong moment.**

And then there is data from an Anatomical Pathologist, who says:

> *"Just look at how the Bergamo Hospital performed 50 autopsies, and the Milan Luigi Sacco Hospital, 20 autopsies. Thus the Italian, is the highest statistic in the world.* ***The Chinese have made only 3 autopsies****."*

Everything that comes out seems to completely confirm the previous information, in a few words it seems that the exitus is determined by a Disseminated Intravascular Coagulation (DIC) (4), activated by virus, then interstitial pneumonia would have nothing to do with it.

It would have been just a diagnostic error.

We double the number of resuscitation sites in the Intensive Care Units (ICU) with orbiting costs.

In retrospect, I have to think about all these x-rays of the thorax, that were commented a month ago.

Those images were interpreted as Interstitial Pneumonia (5). They could actually be completely consistent with a DIC, that is with a Disseminated Intravascular Coagulation.

A Cardiologist From Another City Says

"I don't want to seem excessive, but I think that demonstrate the cause of the lethality of the coronavirus, in one such hospital there are 2 cardiologists who go around 150 beds to make echocardiograms, with enormous effort.

One of them is me, terrible fatigue.

However, what some assumed, but could not be sure, now we have the first data.

People go to the resuscitation, to the Intensive Care Units (ICU), due to generalized Venous Thromboembolism (VTE), especially pulmonary, if this were the case, **resuscitations and intubation's are useless.**

Because, first of all, you have to actually dissolve, prevent these Thromboembolisms.

A lung is ventilated where the blood does not reach, it does not serve you.

In fact 9 out of 10 die.

Because the problem is cardiovascular, not respiratory.

It's the venous micro thrombosis, not pneumonia that determines mortality.

And why the thrombus form?

Because inflammation (the textbook), induces thrombosis through a well known, complex physio-pathological mechanism. So, what the scientific literature, especially Chinese said until mid-March, was that anti-inflammatories should not be used. Now in Italy; anti-inflammatories and antibiotics are used, like in the influenzas, and the number of hospitalized patients falls. Many deaths, even of 40 years of age, had a history of high fever for 10, 15 days.

That where not treated properly. here the inflammation destroyed everything and prepared the ground for the formation of thrombus, because the main problem is not the virus, but the immune reaction, destroyed the cell where the virus enters. In fact our Covid departments, they never admitted patients with rheumatoid arthritis, because they are on cortisone therapy. That is the main reason why hospitalizations in Italy are decreasing and it is becoming a curable disease, at home. By taking good care of it at home, it avoids not only hospitalization, but also the risk of thrombosis. It was not easy to understand, because the signs of micro embolisms have faded, even in the echocardiogram.

But this weekend, I have compared the data of the first 50 patients, between those who breathe badly and those who do not, and the situation seems very clear; but for me, we could go back to normal life, and reopen business through quarantine, it is time to publish this data." - Italian MD, in "Voice Recording", Group of Italian Doctors of Medicine and Cardiologists, in a WhatsApp Messenger group, 14 April 2020.

1. Pneumocytes

"There are three major types of alveolar cell. Two types are pneumocytes or pneumonocytes known as type I and type II cells found in the alveolar wall, and a large phagocytic cell known as an alveolar macrophage that moves about in the lumens of the alveoli, and in the connective tissue between them." - in "Wikipedia", 2020.

Secondary Bacterial Pneumonia

"Secondary Bacterial Pneumonia is an important cause of influenza-associated death during both pandemic and inter-pandemic influenza.

Studies during the influenza pandemics of 1957 and 1968 revealed a bacterial etiology in about 70% of patients with fatal or life threatening pneumonia.

In inter-pandemic years, 44% to 57% of patients hospitalized with influenza have bacterial pneumonia, on average it is estimated that 25% of all deaths associated with influenza are due to Secondary Bacterial Pneumonia." - Ville T. Peltola, Department of Infectious Diseases, St. Jude Children's Research Hospital, Memphis, TN, USA, et al., in "The influenza virus neuraminidase contributes to secondary bacterial pneumonia", Journal of Infectious Diseases, July 2005.

"**Secondary Pneumonia caused by Staphylococcus Aureus is re-emerging as a primary cause of excess mortality associated with infection by the influenza A virus.** We have investigated in vitro the cellular and molecular mechanisms underlying this synergism.

Experimental data show a significant increase in the efficiency of internalisation of S. aureus into cultured pneumocytes during the early phases of viral infection, while a relevant increase in the efficiency of adhesion is evident only later during viral infection, suggesting that the 2 effects are based on different molecular mechanisms.

The occurrence of **Secondary Bacterial Pneumonia** (SBP) in patients infected by the Influenza A Virus (IAV) became of dramatic actuality following spread of the Spanish pandemic of 1918, when patients died for a pneumonia caused by Streptococcus pneumoniae or Staphylococcus aureus (S. aureus). SBP has been a prominent cause of mortality also during the pandemics of 1957 and 1968 and during common epidemic influenza seasons.

Although a number of common mechanisms were invoked to explain the occurrence of SBP, much attention

was devoted to specific synergisms, as the one involving IAV and Str. pneumoniae, in which the viral neuraminidase promotes bacterial adherence to epithelial cells. Similarly, the ability of Str. pyogenes to bind the Viral Hemagglutinin (HA) triggers the ability of this bacterium to promote a lethal invasive infection.

In the last epidemic seasons S. aureus reemerged as a major cause of influenza-associated SBP.

The enhanced prevalence of staphylococcal pneumonia, coupled with the dramatic rise in invasive community acquired S. aureus infections, mostly sustained by highly virulent, methicillin-resistant strains.

A characterisation of the cooperation involving IAV and S. aureus was repeatedly attempted in the past. All these studies agreed that infection with different influenza viruses promotes adhesion of S. aureus to infected cells.

Nevertheless, they could not clearly identify the molecular components involved in the cooperation, although they demonstrated that unidentified bacterial components interact with proteins shared by both infected and non-infected cells or unique to virus-infected cells.

Recently Braun et al. (2007) developed an animal model to study this cooperation and demonstrated that this coinfection promotes bacterial dissemination and results in a synergistic amplification of the inflammatory reactions that are normally associated with infection by each of the 2 pathogens." - Claudio Passariello, et al., in "Viral hemagglutinin is involved in promoting the internalisation of Staphylococcus aureus into human pneumocytes during influenza A H1N1 virus infection", International Journal of Medical Microbiology, 2011.

2. Endothelial Vascular

"The vascular endothelium, a monolayer of Endothelial Cells (EC), constitutes the inner cellular lining of arteries, veins and capillaries and therefore is in direct contact with the components and cells of blood.

The endothelium is not only a mere barrier between

blood and tissues but also an endocrine organ.

It actively controls the degree of vascular relaxation and constriction, and the extravasation of solutes, fluid, macromolecules and hormones, as well as that of platelets and blood cells. Through control of vascular tone, EC regulate the regional blood flow.

They also direct inflammatory cells to foreign materials, areas in need of repair or defence against infections.

In addition, EC are important in controlling blood fluidity, platelet adhesion and aggregation, leukocyte activation, adhesion, and transmigration.

They also tightly keep the balance between coagulation and fibrinolysis and play a major role in the regulation of immune responses, inflammation and angiogenesis.

To fulfil these different tasks, EC are heterogeneous and perform distinctly in the various organs and along the vascular tree.

Important morphological, physiological and phenotypic differences between EC in the different parts of the arterial tree as well as between arteries and veins optimally support their specified functions in these vascular areas.

This review updates the current knowledge about the morphology and function of endothelial cells, particularly their differences in different localizations around the body paying attention specifically to their different responses to physical, biochemical and environmental stimuli considering the different origins of the EC." - Anne Krüger-Genge, et al., in "Vascular Endothelial Cell Biology: An Update", International Journal of Molecular Sciences, 7 September 2019.

"Alterations of endothelial cells and the vasculature play a central role in the pathogenesis of a broad spectrum of the most dreadful of human diseases, as endothelial cells have the key function of participating in the maintenance of patent and functional capillaries.

The endothelium is directly involved in peripheral vascular disease, stroke, heart disease, diabetes, insulin

resistance, chronic kidney failure, tumor growth, metastasis, venous thrombosis, and severe viral infectious diseases. Dysfunction of the vascular endothelium is thus a hallmark of human diseases.

In this review the main endothelial abnormalities found in various human diseases such as cancer, diabetes mellitus, atherosclerosis, and viral infections are addressed.

The endothelium plays a key role in the pathogenesis of coagulation disorders in infectious diseases.

The endothelium is involved in both bacterial and non-bacterial infections and is important for the initiation and regulation of hemostasis.

The loss of the endothelium barrier and vascular leakage play a central role in the pathogenesis of hemorrhagic fever viruses in general.

This can be caused either directly by the viral infection and damage to the vascular endothelium or indirectly by a dysregulated immune response resulting in an excessive activation of the endothelium.

Disruption of the vascular endothelial barrier occurs in 2 severe disease syndromes:

1. Dengue Hemorrhagic Fever
2. Hantavirus Pulmonary Syndrome

Both viruses cause changes in vascular permeability without damaging the endothelium. In the leaky vascular endothelium seen in dengue severe syndrome, various mechanisms that have been considered include immune complex disease, T-cell-mediated reactions, antibodies cross-reacting with the vascular endothelium, enhancing antibodies, complement and its products, various soluble mediators including cytokines, selection of virulent strains, and viral virulence; but the most favoured are enhancing antibodies and memory T cells in a secondary infection that results in a cytokine "tsunami." - Peramaiyan Rajendran, et al., in "The Vascular Endothelium and Human Diseases", International Journal of Biological Sciences, 2013.

3. Thrombotic Disorders

"In healthy people, homeostatic balance exists between procoagulant (clotting) forces and anticoagulant and fibrinolytic forces.

Numerous factors can tip the balance in favour of coagulation, leading to the pathologic formation of thrombi in veins (e.g., deep venous thrombosis, DVT), arteries (e.g., myocardial infarction, ischemic stroke), or cardiac chambers.

Thrombi can obstruct blood flow at the site of formation or detach and embolize to block a distant blood vessel (e.g., pulmonary embolism, embolic stroke)." - Dr Joel L. Moake, MD, Baylor College of Medicine, in "Overview of Thrombotic Disorders", Merck, MSD Manuals, August 2019.

4. Disseminated Intravascular Coagulation (DIC)

"Disseminated intravascular coagulation (DIC) has been recognized as a complication of numerous infections. DIC has been most commonly associated with meningitis due to Neisseria meningitidis. Deykin has recently defined the DIC syndrome as:

> *"A response to an underlying illness that provokes a generalized activation of the hemostatic mechanism beyond that normally confined to areas of local vascular injury."*

Bacterial meningitis is reported in association with a variety of complications including disorders of the coagulation mechanism. The purpose of this communication is to report 2 infants with Hemophilus influenzae meningitis complicated by disseminated intravascular coagulation.

The physical findings in patients with DIC may include:

1. Petechiae (red or purple spot on the skin)
2. Purpura (skin haemorrhages; red or purple discoloured spots on the skin)

3. Gastrointestinal bleeding
4. Symmetrical peripheral gangrene
5. Or simply excessive oozing from sites of venipuncture (puncture of a vein with a needle to withdraw blood)."

- Dr George Pope, MD, Dr Carol Baker, MD, in "Hemophilus influenzae Meningitis Associated with Disseminated Intravascular Coagulation", Southern Medical Journal, December 1973.

> *"Infectious agents are known to produce DIC. There have been reports linking influenza A virus infection with DIC. The case of a 14-year-old boy in whom infection with influenza B virus resulted in DIC, Pneumonia and Acute Renal Failure is repeated. The mechanism by which viruses induce DIC, possible explanations include: agglutination and lysis of platelets, formation of procoagulant immune complexes derived from the combination of virus with circulating antibody and endothelial damage. The sequence of events observed in this case suggests that DIC was aetiologically important in both the respiratory and the renal failure." - Dr A.R. Luksza, MD, Dr D.K. Jones, MD, in "Influenza B virus infection complicated by pneumonia, acute renal failure and disseminated intravascular coagulation", Journal of Infection 1984.*

"The influenza B viral infection may cause Acute Kidney Injury (AKI) and DIC. When DIC is complicated with an influenza B viral infection, it is more likely to become fatal.

Influenza viral infections are prevalent in the winter and related symptoms include; high fever, general malaise, cough, and joint pain.

In addition, various complications are caused by an influenza viral infection, such as; respiratory complications, neuropsychiatric disorders, muscular disorders, cardiac dysfunction, ocular disorders, hepatic dysfunction, hematologic disorders, dysgeusia, and renal dysfunction,

with the latter most often reported as a complication in pediatric cases, while adult cases are rare.

There are few reports detailing influenza B virus infection cases, thus we examined reports about influenza A viral infections.

The suggested causes of renal dysfunction include a prerenal cause due to Rhabdomyolysis or Dehydration, Acute Tubular Necrosis associated with Hemolytic Uremic Syndrome (HUS) and DIC, and the influenza virus itself causing direct Interstitial Renal Injury." - Shohei Fukunaga, Chihiro Ishida, Akihisa Nakaoka, Takafumi Ito, in "A case of acute kidney injury and disseminated intravascular coagulation associated with influenza B viral infection", CEN Case Reports, May 2015.

"It is not uncommon to encounter a haemorrhagic tendency in some patients afflicted with certain virus infections. In the majority of these patients the haemorrhagic phenomena are mild, but in a few they may be severe and present the major problem for the clinician.

It is the purpose of this survey to present the evidence that indicates that the cause of the bleeding tendency in these infections is disseminated intravascular coagulation.

Disseminated intravascular coagulation is an intermediary pathogenetic mechanism in disease processes due to a wide variety of etiologic agents.

Among the agents that trigger clotting of the circulating blood are:

1. Intravascular Hemolysis
2. Tissue Thromboplastin
3. Bacterial Endotoxin
4. Proteolytic Enzymes
5. Particulate or colloidal matter
6. Anoxia and Anoxemia
7. Endothelial Damage,
8. ingestion of certain lipid substances

Evidence of disseminated intravascular coagulation comes from 3 sources:

1. Pathologic examination
2. Examination of the hemostatic mechanism
3. Clinical manifestations

Pathologic Evidence: In the majority of these diseases, tissue examination reveals platelet or fibrin thrombi, or both, in the arterioles, capillaries, or venules of many viscera.

If these microscopic thrombi are of sufficient duration they are associated with haemorrhage or ischemic necrosis of the organ involved.

The organs most frequently involved are:

1. Kidney
2. Brain
3. Pituitary
4. Lungs
5. Liver
6. Adrenals
7. Mucosa of the Gastrointestinal Tract

I. Evidence has been presented that one of the fundamental biologic properties of certain viruses is their ability to trigger the blood clotting mechanism in vivo. With the death of the endothelial cells, platelets agglutinate at the site and a thrombus forms.

II. Platelets and other procoagulant material may then be swept into the circulation and produce intravascular coagulation at a site distant from the damaged endothelium.

III. A few of these viruses cause hemolysis (destruction or rupturing (lysis) of red blood cells (erythrocytes)). The intravascular destruction of red blood cells (RBCs) from any cause promotes intravascular coagulation due to the release

of procoagulant substances from the RBCs (partial thromboplastin and adenosine diphosphate).

IV. No single mechanism needs to be sought for any one of these diseases. It is quite likely that multiple mechanisms may be responsible.

V. It is to be anticipated that the use of anticoagulant therapy in some of the other virus infections will reduce morbidity and mortality." - Dr Donald G. McKay, MD, Dr William Margaretten, MD, in "Disseminated Intravascular Coagulation in Virus Diseases", Archives Internal Medicine, Vol.120, August 1967.

"Despite the paucity of direct evidence that the influenza virus can cause human renal disease, the secondary pathways that may be triggered by viral infection may be even more significant in producing various degrees of renal dysfunction.

At least two of these pathways, rhabdomyolysis and DIC, were present in our series and most likely contributed largely towards the development of acute renal failure in two patients. The occurrence of rhabdomyolysis has been reported after influenza and other viral infections.

In addition to the leakage of myoglobin through the damaged muscle-cell membrane, other muscle components including creatine, serum glutamic oxaloacetic transaminase (SGOT), lactic dehydrogenase (LDH), creatine phosphokinase (CPK), potassium and many others are released into the circulation.

Acute renal failure may also develop in patients with influenza viral infections as a result of DIC. Previous studies have shown that certain viral infections can induce intravascular coagulation.

Possible mechanisms by which viruses can trigger the blood coagulation system include agglutination and lysis of platelets with release of coagulation factors into the circulation, the formation of procoagulant immune complexes from the combination of virus with circulating

antibody, and intravascular destruction of red blood cells producing hemolysis and a hemolytic uremic-like syndrome.

Additional factors commonly present in critically ill patients that have been shown to cause intravascular coagulation include:

1. Anoxia (complete lack of oxygen delivery to an organ)
2. Acidosis (increased acidity in the blood)
3. Tissue Trauma
4. Hypotension (low blood pressure)."

- Dr Adel Shenouda, MD, Dr Fred E. Hatch, MD, in "Influenza A Viral Infection Associated with Acute Renal Failure", The American Journal of Medicine, November 1976.

5. Interstitial Pneumonia

"Bacteria, viruses, and fungi can infect the Interstitium (a contiguous fluid-filled (interstitial fluid) space existing between a structural barrier), and cause interstitial pneumonia. A bacteria called Mycoplasma Pneumoniae is the most common cause." - in "Interstitial Lung Disease", WebMD, April 2020.

6. Thrombus

"A thrombus, colloquially called a blood clot, is the final product of the blood coagulation step in hemostasis. There are two components to a thrombus: aggregated platelets and red blood cells that form a plug, and a mesh of cross-linked fibrin protein. The substance making up a thrombus is sometimes called cruor. A thrombus is a healthy response to injury intended to prevent bleeding, but can be harmful in thrombosis, when clots obstruct blood flow through healthy blood vessels." - in "Wikipedia", 2020.

7. Cortisone Therapy

"One of the effects of glucocorticoids, especially if extra glucocorticoids are made by the body or taken as tablets, is to change the way the body's immune system works.

The body's immune system protects you from infection and helps to repair cuts, bruises and other injuries.

It is inflammation that causes the pain, swelling and stiffness in joints affected by rheumatoid arthritis.

When there is a lot of inflammation in the body, we would expect extra glucocorticoids to be made. These would help to cut down the inflammation." - in "Steroids in Rheumatoid Arthritis, (These are also known as corticosteroids or, more correctly, glucocorticoids)", National Rheumatoid Arthritis Society, 2020.

Worsening of Coronavirus Infection
May be Related to the Formation of Micrococoagules in Blood Vessels

"Doctors in São Paulo realized that; the effect of Covid-19 upon the lungs is similar to that of Thrombosis, they have adapted a new treatment with encouraging results.

Patients received doses of anticoagulants (drugs that thin the blood) that are used in cases of Thrombosis.

When a thrombus, or clot prevents normal blood circulation, tests indicate that this happens in the lungs of patients infected with the coronavirus.

Hospital doctors observed; that in the lungs of patients, small areas where blood cannot pass for effective breathing, blood and air must be found in the alveoli, these small bags located at the tip of the bronchi.

The team used an anticoagulant in the vein that also has an anti-inflammatory action, the signs of improvement of the patients came from 6 to 24 hours.

Most patients treated with anticoagulants have been experiencing regression of all symptoms without needing the most desired health equipment on the planet today, the respirator." - in "Doctors Adapt Thrombosis Treatment for Covid-19", Sbt-Tv, 6 April 2020.

Inflammatory Storm

"A sort of inflammatory storm caused by Covid-19 in several organs helps to explain deaths from infection by SARS-CoV-2 , and are in general linked to Severe Acute Respiratory Syndrome.

This can be translated as large areas of inflammation and edema in the lung, that is; the organ becomes swollen and begins to suffer water accumulation.

The fluid in the lung tissue hinders gas exchange and consequently, breathing. The lung is not the only affected organ, these proteins are also present in cells of the heart, kidneys and intestine.

> *"There is evidence of injury to the heart muscle, which, when inflamed (Myocarditis), has its function worsened, which consequently, can lead to Arrhythmias." - Dr Luciano Drager, Society of Cardiology, of São Paulo*

With the widespread inflammation in the affected organs, the metabolism increases, there are adrenaline discharges, and the heart beats faster, especially in individuals with previous problems.

At a certain point the exacerbated inflammatory response itself, in defence against the coronavirus, damages the tissues." - in "Folha de Sao Paulo", 4 April 2020.

"Reports of Myocarditis associated with COVID-19 confirms the Acute Cardiac Injury in almost a fifth of patients. A patient with history of Hypertension, reported: Vomiting, Diarrhoea, and 7 days afterwards, came to the emergency department with; Cough, Dyspnoea, and Fever." - D. Doyen, P. Moceri, D. Ducreux, J. Dellamonica, in "Myocarditis in a patient with COVID-19: a cause of raised troponin and ECG changes", The Lancet, 23 April 2020.

"To invade lung cells and other organs, SARS-CoV-2 breaks down cell barriers. The body to defend itself against the attack of the virus, unleashes a sort of "inflammatory storm". At the same time that a great inflammation reaction occurs, the organism starts a cleaning process of the damage done by the virus, and begins to "plug holes" from the formation of clots in a circular, feedback process.

The problem, is that coagulation can get out of control, and cause Thromboembolism, which is the clogging of thinner blood vessels, such as the capillaries that supply the pulmonary alveoli. In autopsies of people who died from Covid-19, blockages were found in the blood micro-circulation, especially in the lungs.

With compromised micro-circulation, the gas exchange that takes place in the alveoli - O2 enters the blood, which takes it to other areas of the body, and CO2 is removed from the bloodstream - is also impaired, and therefore, the person has blood oxygenation problems.

"What makes a patient need a respirator, is that the virus stimulates the blood to clot inside the pulmonary capillaries. There is widespread intravascular coagulation", Dr Elnara Negri, MD" - in "Folha de Sao Paulo", 9 April 2020.

Covid-19 Treatment with Anticoagulant

"Dr Elnara Negri, MD, Pulmonologist Professor of Pathology at the Faculty of Medicine, University of São Paulo, learned of findings from colleagues who had examined the bodies of patients who died from Covid-19, from the autopsies performed on cadavers, pathologists found the presence of small clots in the blood vessels, in different parts of the victims bodies.

This clotting reaction is associated with an exaggerated inflammatory response in the body, when the virus attacks the cells.

"It's an inflammatory storm, and this leads to the formation of small clots in the organ vessels.

With these micro-coagulants, blood circulation and oxygenation of essential organs is being interrupted, which can lead to death", Dr Negri, MD." - in "Pharmaceutical Panorama", 7 April 2020.

"Elevated D-dimer is predictor of severity and mortality in COVID-19 patients and heparin use during in hospital stay has been associated to decreased mortality. COVID-19 patient autopsies have revealed thrombi in the microvasculature, suggesting intravascular coagulation as a prominent feature of organ failure in these patients. Interestingly, in COVID-19, pulmonary compliance is preserved despite severe hypoxemia corroborating the hypothesis that perfusion mismatch may play a significant role in the development of respiratory failure." - Dr Elnara Marcia Negri, MD, et al., in "Heparin therapy improving hypoxia in COVID-19 patients - a case series", 22 April 2020.

"D-dimer levels are higher in patients with stable cardiovascular disease, in persons with previous myocardial infarction, and in patients with unstable angina or myocardial infarction. D-dimer levels are elevated in patients with peripheral artery disease and are correlated with clinical and angiographic severity. Higher levels are seen in patients with abdominal aneurysms." - Dr Jan Dr Jacques Michiels, MD, Dr Gualtiero Palareti, MD, Dr Philippe de Moerloose, MD, in "Fibrin D-Dimer Testing for Venous and Arterial Thrombotic Disease", Seminars in Vascular Medidine, Vol.5, No.4, 2005

"Peripheral Arterial Disease (PAD), is a manifestation of generalised Atherosclerosis, and is associated with Coronary Artery Disease (CAD) and Cerebrovascular Disease (CBVD).

The mortality rate of patients with claudication is approximately 2.5-times higher than that of patients without claudication.

Literature shows an annual overall major Cardiovascular (CV) event rate (comprising myocardial infarction [MI], Ischaemic Stroke and Vascular Death) of approximately 5-7%. This high risk of death is only partially explained by the coexistence of ischaemic heart disease.

Within 15 years after the initial diagnosis the all-cause morbidity and mortality rates increase up to 70%, and only 20-30% of these patients die of non-cardiovascular causes.

It is known that Diabetes and Hypertension can contribute to Cardiovascular mortality." - Marie-Claire Kleinegris, Hugo Cate, Arina Cate-Hoek, in "D-dimer as a marker for cardiovascular and arterial thrombotic events in patients with peripheral arterial disease", Thrombosis and Haemostasis, 20 June 2013.

"Considerable evidence indicates that the haemostatic system plays an important role in the pathogenesis of atherosclerotic vascular disease.

Recent pathological studies of postmortem arteries and samples obtained during reconstructive vascular surgery relate the progression of atherosclerosis to the extent of fibrin deposition and its degradation products in the arterial wall.

Patients with peripheral arterial occlusive disease are at increased risk of developing thrombotic events, in particular, myocardial infarctions, ischaemic strokes and vascular deaths.

It is generally accepted that thrombosis superimposed on a disrupted atherosclerotic plaque causes acute coronary syndromes, ischaemic stroke, and peripheral vascular occlusion. thrombosis accompanying atherosclerosis (atherothrombosis) is the most important mechanism by which arteries become occluded.

Our results demonstrate that the plasma concentration of D-dimer - a breakdown product of cross-linked fibrin - exceeded the upper limit of normal level in patients with peripheral arterial occlusive disease.

This implies that the intensity of the blood coagulation is sufficient for formation of stabilized fibrin which overlies atherosclerotic plaques." - Dr Andrey Komarov, MD, Department of Atherothrombosis, Cardiology Research Center, Russia, in "D-dimer and platelet aggregability are related to thrombotic events in patients with peripheral arterial occlusive disease", European Heart Journal, August 2002.

"The clinical spectrum of the disease is very wide, ranging from minor, unspecific symptoms, such as fever, dry cough and diarrhoea, sometimes combined with mild Pneumonia and mild Dyspnoea, to severe Pneumonia with dyspnoea, tachypnoea and disturbed gas exchange, leading in approximately 5% of infected patients to severe lung dysfunction, a need for ventilation, shock or multiple (extra

pulmonary) organ failure.

Disease severity also correlates with pro-inflammatory cytokines. These findings are consistent with the already demonstrated close connection between thrombosis and inflammation, two processes that mutually reinforce each other.

Moreover, it should be noted that approximately 50% of those patients who have died of COVID-19 in Italy had 3 or more comorbidities such as Atrial Fibrillation or Ischaemic Heart Disease.

The picture is further complicated by the observation that chronic kidney disease is among the most prevalent underlying diseases in hospitalised patients and that acute kidney injury is a common finding in deceased patients." - Dr Marco Marietta, MD, Dr Walter Ageno, MD, Dr Andrea Artoni, MD, et al., in "COVID-19 and haemostasis: a position paper from Italian Society on Thrombosis and Haemostasis (SISET)", Blood Transfus, 7 April 2020.

September 2012

Community Acquired Pneumonia

"In the UK, mortality in patients with CAP that is managed in the community is less than 1%. In patients admitted to hospital with CAP mortality is between 5.7 and 14%, and in those admitted to an intensive care unit mortality is over 30%. More than half (60%) of pneumonia deaths occur in people older than 84.

Hospital Acquired Pneumonia

Hospital-acquired pneumonia (HAP) is defined as pneumonia that occurs 48 hours or more after hospital admission.

HAP is estimated to increase hospital stays by 7–9 days and has a mortality of between 30 and 70%.

These figures include HAP that develops in patients in the intensive care unit who are intubated (have a tube inserted in their windpipe).

This is known as ventilator-associated pneumonia and is clinically distinct from HAP in non-intubated patients." - in NICE Clinical Guideline: Pneumonia scope, September 2012.

"Among patients with hospital-acquired infections, HAP is the leading cause of death and causes 22% of all hospital-acquired infections. Ventilator- associated pneumonia (VAP) is defined as pneumonia that occurs >48 hours after intubation. HAP and VAP are associated with a great degree of morbidity and mortality.

52% of patients with HAP develop serious complications such as Respiratory Failure, Pleural Effusions, Septic Shock, Renal Failure and Empyema. Mortality in non-ICU patients with HAP has been reported to be 26%.

In the ICU, the mortality rate of HAP approaches 36% which is similar to the mortality rate for patients with VAP."- in "Pulmonology Advisor", 2017.

"Hospital-Acquired Pneumonia (HAP) is one of the most frequent and most severe medical complications in patients which are hospitalized in intensive care units. It develops mainly in association with invasive airway management and mechanical ventilation.

HAP represents a major cause of mortality, morbidity and resources utilization in hospitalized patients, most notably in those with severe underlying conditions in ICU. HAP has the highest rates observed in the elderly, those receiving enteral feeding through a nasogastric tube, immunocompromised hosts, and surgical patients.

About one-third of HAP develop in ICU, with Ventilator Acquired Pneumonia (VAP) accounting for 90% of cases.

Ventilator Associated Pneumonia occurs in 9–40% of intubated patients and represents the most frequent ICU-acquired infection.

The objectives were to assess the frequency of hospital acquired pneumonia (HAP) in patients admitted to intensive care unit (ICU) and to determine the frequencies of different etiological organisms in these patients.

Microbiological analysis showed that Pseudomonas aeruginosa were 27 (30.6%), Acinetobacter spp. were 12 (13.6%), Candida albicans were 12 (13.6%), Klebsiellapneumoniae were 9 (10.2%), Streptococcus spp. were 9 (10.2%), Escherichia coli were 5 (5.6%), Stenotrophomonas spp. were 4(4.5%), Methicillin Resistant Staphylococcus Aureus (MRSA) were 4 (4.5%) others organisms 6 (6.8%). The frequency of HAP in Medical ICU of our hospital is 88 out of 346 (25.4%).

The mortality from Hospital-Acquired Pneumonia is 47.7%.

The commonest organism identified was Pseudomonas aeruginosa 30.6%, followed by Acinetobacter and candida albican 13.6% each." - in "Frequency of hospital acquired pneumonia and its microbiological etiology in medical intensive care unit", Pak. J. Med. Sci., Jul-Aug 2016.

Clinical Classification of Interstitial Lung Disease

"In an apparently immunocompetent host, interstitial lung disease (ILD) is a clinical term for a heterogenous group of lower respiratory tract disorders with many potential causes.

However, clinical and physiologic features common to all ILDs include exertional dyspnea, a restrictive pattern on pulmonary function testing, coexistent airflow obstruction, decreased diffusing capacity (Dlco), increased alveolar-arterial oxygen difference (Pao2-Pao2) at rest or during exertion, and absence of pulmonary infection or neoplasm. ILDs comprise several acute and chronic lung disorders with variable degrees of pulmonary fibrosis

Idiopathic Interstitial Pneumonias:

1. Idiopathic Pulmonary Fibrosis
2. Nonspecific Pulmonary Fibrosis
3. Respiratory Bronchiolitis–associated interstitial lung disease
4. Desquamative interstitial Pneumonia
5. Acute interstitial Pneumonia
6. Cryptogenic organizing Pneumonia
7. Lymphoid interstitial Pneumonia

Alveolar Filling Disorders

Chronic eosinophilic Pneumonia

The term Pneumonia itself, however, includes other causes of inflammation of the lower respiratory air spaces, particularly the alveoli, such as acute or chronic eosinophilic pneumonia, cryptogenic organizing pneumonia, and usual interstitial pneumonia." - in "Overview of Pneumonia", Goldman's Cecil Medicine, 2012.

Mortality Rate for Hospital-Acquired Pneumonia ranges from 38% to more than 70%

"Nosocomial Pneumonia is the 2nd most common hospital-acquired infection after urinary tract infection. Reported mortality rates range from 38% to >70%, and are particularly high in the subset of patients with ventilator-associated pneumonia (VAP). The selective pressure of antimicrobial use has resulted in a shift in the epidemiology of causative pathogens and increased the likelihood of multidrug-resistant organisms." - Katherine A. Laessig, US Food and Drug Administration (FDA), in "End Points in Hospital-Acquired Pneumonia and/or Ventilator-Associated Pneumonia Clinical Trials: Food and Drug Administration Perspective", Clinical Infectious Diseases, Vol. 51, Issue Supp. 1, 2010.

Ventilator-Associated Pneumonia

"Ventilator-Associated Pneumonia (VAP) continues to complicate the course of 8 to 28% of patients receiving mechanical ventilation (MV).

In contrast to infections of more frequently involved organs (e.g., urinary tract and skin), for which mortality is low, ranging from 1 to 4%, the mortality rate for VAP ranges from 24 to 50% and can reach 76% in some specific settings or when lung infection is caused by high-risk pathogens.

The predominant organisms responsible for infection are: Staphylococcus aureus, Pseudomonas aeruginosa, and Enterobacteriaceae, but etiologic agents widely differ according to the population of patients in an intensive care unit, duration of hospital stay, and prior antimicrobial therapy. Death rates associated with Pseudomonas pneumonia are particularly high, ranging from 70 to more than 80% in several studies (12, 64, 77–81).

According to one study, mortality associated with Pseudomonas or Acinetobacter pneumonia was 87% compared with 55% for pneumonias due to other organisms.

Similarly, Kollef and coworkers demonstrated that patients with VAP due to high-risk pathogens (Pseudomonas aeruginosa, Acinetobacter spp., and Stenotrophomonas maltophilia) had a significantly higher hospital mortality rate (65%) than patients with late-onset VAP due to other microbes (31%) or patients without late-onset pneumonia (37%). Concerning gram-positive pathogens, in a study comparing VAP due to methicillin-resistant Staphylococcus aureus (MRSA) or methicillin-sensitive S. aureus (MSSA), mortality was found to be directly attributable to pneumonia for 86% of the former cases versus 12% of the latter, with a relative risk of death equal to 20.7 for MRSA pneumonia.

Surgery: Postsurgical patients are at high risk for VAP, which accounts for nearly one-third of the pulmonary infiltrates in these ICU patients. In a 1981 report, the pneumonia rate during the postoperative period was 17%.

A history of smoking, longer preoperative stays, longer surgical procedures, and thoracic or upper abdominal surgery were also significant risk factors for postsurgical pneumonia.

Another study comparing adult ICU populations demonstrated that postoperative patients had consistently higher rates of nosocomial pneumonia than did medical ICU patients, with a risk ratio of 2.2.

Antimicrobial agents: The use of antibiotics in the hospital setting has been associated with an increased risk of nosocomial pneumonia and selection of resistant pathogens.

Endotracheal tube, reintubation, and tracheotomy: The presence of an endotracheal tube by itself circumvents host defences, causes local trauma and inflammation, and increases the probability of aspiration of nosocomial pathogens from the oropharynx around the cuff.

Respiratory equipment: Respiratory equipment itself may be a source of bacteria responsible for VAP.

Complications: The risk inherent in fiberoptic bronchoscopy appears slight, even for critically ill patients requiring mechanical ventilation, although the associated occurrence of cardiac arrhythmias, hypoxemia, or bronchospasm is not unusual.

Morbidity and Cost: The average excess cost of nosocomial pneumonia was estimated to be US$1,255 in 1982. In 1985, the average extra cost was US$2,863. More recently, the extra hospital charges attributed to nosocomial pneumonia occurring in trauma patients were evaluated to be US$40,000." - Jean Chastre, Jean-Yves Fagon in "Ventilator-associated Pneumonia", Am. J Respir. Crit. Care Med., 2002.

"The structure of lungs is optimized to provide a large respiratory surface area with a very thin tissue barrier for the rapid diffusion and equilibration of respiratory gases.

The airway surfaces are lined with epithelial cells.

At the level of the respiratory bronchioles, alveoli (the sites of gas exchange) begin to appear in the walls of the

airways, and the airways terminate in alveolar sacs.

The alveoli are thoroughly enveloped by a pulmonary capillary network that is lined with a single layer of endothelial cells covering a large surface area.

The alveolar–capillary membrane consists of the alveolar lining fluid, the alveolar epithelium, a network of connective tissue, and the pulmonary capillary endothelium.

The delicate structure of this portion of the lung makes it particularly susceptible to mechanical injury.

Damage by acute lung injury, is a syndrome of inflammation and increased permeability of the airspaces in the mature lung associated most often with sepsis syndrome, aspiration, primary pneumonia, or multiple trauma.

In severe cases, the resulting altered respiratory mechanics can develop rapidly into the characteristic hypoxemia and stiff lungs of the ARDS.

Both disorders are initiated by damage to the lung's epithelial and endothelial cell layers, which diminishes the blood–gas barrier and permits the influx of proteinaceous edema fluid and inflammatory cells (neutrophils, macrophages, monocytes, and lymphocytes) into the airways and alveoli." - in "Ventilator-Induced Lung Injury", 2006.

March 2017

"Acute Respiratory Distress Syndrome (ARDS) is a severe form of inflammatory lung injury characterized by increased vascular permeability in the lung. Community-acquired pneumonia (CAP) is the most common cause of ARDS."- Dr Raj Shah, MD, Dr Richard Wunderink, MD, in "Viral Pneumonia and Acute Respiratory Distress Syndrome", Clin. Chest Med., March 2017.

May 2019

"An association between increased Venous Thromboembolism (VTE) events and influenza A H1N1 (H1N1) was noted in the first 10 patients with severe Acute Respiratory Distress Syndrome (ARDS). An empirical systemic anticoagulation protocol (heparin intravenous infusion) was initiated when autopsy of patients with severe hypoxemia confirmed multiple primary pulmonary thrombi and emboli. The purpose of this study was to examine the relationship between H1N1 and Venous Thromboembolism events and to assess the efficacy of empirical systemic heparin anticoagulation in preventing Venous Thromboembolism and death in H1N1 severe Acute Respiratory Distress Syndrome (ARDS) patients. Critically ill patients with H1N1 Acute Respiratory Distress Syndrome (ARDS) have increased risk of Venous Thrombotic complications, particularly Pulmonary Thromboembolism. Empirical systemic heparin anticoagulation in this cohort of patients significantly reduced Venous Thromboembolism (VTE) incidence without increased hemorrhagic complications." - Dr Andrea Obi, MD, Dr Christopher Tignanelli, MD, Dr Benjamin Jacobs, MD, Dr Shipra Arya, MD, Dr Pauline Park, MD, Dr Thomas Wakefield, MD, Dr Peter Henke, MD, Dr Lena Napolitano, MD, in "Empirical systemic anticoagulation is associated with decreased venous thromboembolism in critically ill influenza A H1N1 Acute Respiratory Distress Syndrome patients", Journal of Vascular Surgery: Venous and Lymphatic Disorders", May 2019.

"When we examines in the articles of the Medical Union the researches of Mr. Tessier on Pneumonia:

> *"It is a gross error that to decrease the seriousness of Pneumonia in general; it is a bad reputation that one has done, much worse certainly than it deserves. Pneumonia has a natural tendency to heal."*

Biett (1) had for a whole year treated the Pneumonias which arrived in the rooms with emollient drinks and poultices, and it seems that his mortality was very little considerable; he also knows, he says, that even today François Magendie hardly uses any other treatment for Pulmonary Inflammation."

Professor Augustin Grisolle, after showing the inadequacy of these data, admits that he did not dare to carry out the experiment on a large scale himself.

He confined himself to treating using the expectant method, on 11 cases of Pneumonia, benign in appearance.

The Treatment Consisted of:

1. Rest;
2. Diet;
3. Couple use Chest Drinks;
4. Sometimes joined the administration a mild laxative, such as castor oil.

In comparison, he actively treated 13 subjects with equally mild Pneumonia. Careful analysis of these 2 sets of facts: **All ended in healing.**

Leads Grisolle to establish that ultimately, in the first series, the disease had a fairly long duration, due to the mildness of the general symptoms and local; the second, series shows greater speed in the disappearance of local and general symptoms: and in solving the inflammatory engorgement. (1) Pinel had already reported a striking example of the application that one could make of the expectant method to the treatment of Pneumonia (Dictionn. des sciences méd., t. XIV, p. 251).

From these facts, it seems to follow that Pneumonia, abandoned to itself, does not necessarily tend to a fatal end; far beyond, its natural course would seem to direct it, in general, towards healing.

The expectant method therefore has in its facts its raison d'être, its logic.

Important results on the subject which occupies us were obtained by the following authors: Mr. Vigla made, in 1852, to the Society of the hospitals, a report on a memory of Mr. Laboulbène, contains 5 observations of Acute Pneumonia treated with success by the regime.

And, in particular, the chemical study of the evacuations, compared to that of the blood at the time of the crises and at the various times of the disease, would, we have no doubt, of a nature to throw the greatest light on a question so debated.

Anyway, despite the ignorance or we are of the real role of these evacuations, we would not hesitate to respect them, and perhaps even in certain circumstances provoke them, conforming in this to the precepts of the elders observers, precepts whose inanity is far from being perfectly demonstrated to us.

> *"From the fact that all observers of crises have noticed that at a certain state of the disease, there is often exasperation of symptoms only because a crisis is preparing, it follows that one should not be excessively frightened of this exasperation, that we shouldn't throw away quickly, and without sufficient reasons from previous experience, into a system of active, disruptive and desperate medicine (H. Gouraud in "Thèse pour l'agrégationen médecine", Paris, 1835)."*

- Dr Jean Marie Charcot, MD in "De l'expectation en médecine", Thèse, 17 April 1857.

7 May 2020

Characteristics of SARS-CoV-2 patients dying in Italy

Report based on available data on 7 May 2020

Demographics: Mean age of patients dying for SARS-CoV-2 infection was 80 years (median 81, range 0-100, IQR 74 -87).

Pre-Existing Conditions: Mean number of diseases was 3.3 (median 3, SD 1.9). Before hospitalization, 24% of SARS-CoV-2 positive deceased patients followed ACE-inhibitor therapy and 17% angiotensin receptor blockers-ARBs therapy.

Most common Co-morbidities observed in SARS-CoV-2 Deceased Patients

Diseases	Number	%
Ischemic Heart Disease	745	28.4
Atrial Fibrillation	584	22.3
Heart Failure	427	16.3
Stroke	276	10.5
Hypertension	1788	68.2
Type 2-Diabetes	814	31.1
Dementia	415	15.8
COPD (Chronic Obstructive Pulmonary Disease)	435	16.6
Active Cancer in the past 5 years	419	16.0
Chronic Liver Disease	104	4.0
Chronic Renal Failure	533	20.3
Dialysis	48	1.8
Respiratory Failure	134	5.1
HIV Infection	6	0.2
Autoimmune Diseases	101	3.9
Obesity	288	11

Number of Co-morbidities	Number	%
0 Co-morbidities	101	3.9
1 Co-morbidity	393	15.0
2 Co-morbidities	558	21.3
3 Co-morbidities and over	1569	59.9

Diagnosis of Hospitalization

1. In 92.5% of hospitalizations, conditions (Pneumonia, Respiratory Failure), or symptoms (Fever, Dyspnoea, Cough) compatible with SARS-CoV-2 were mentioned.

2. In 184 cases (7.5% of cases) the diagnosis of hospitalization was not related to the infection.

3. In 20 cases the diagnosis of hospitalization concerned exclusively Neoplastic Pathologies (tumours).

4. In 74 cases Cardiovascular Pathologies:

    1. Acute Myocardial Infarction-AMI
    2. Heart Failure
    3. Stroke

5. In 24 cases Gastrointestinal Pathologies:

    1. Cholecystitis
    2. Perforation of the Intestine
    3. Intestinal Obstruction
    4. Cirrhosis

6. In 66 cases the patients had Other Pathologies

Acute conditions

1. Acute Respiratory Distress Syndrome (ARDS) 97.0%.
2. Acute Renal Failure (ARF) 22.6%.
3. Super-Infection (Sepsis) was observed in 12.4%.
4. Acute Cardiac Injury (ACI) in 10.8%.

Deaths Above the Age of 50 years

As of 7 May, 27,643 out of the 27,955 (98.9%) SARS-CoV-2 patients above the age of 50 died.

Deaths Under the Age of 50 years

As of 7 May, 312 out of the 27,955 (1.1%) SARS-CoV-2 patients under the age of 50 died." - in "SARS-CoV-2 Surveillance Group", Istituto Superiore di Sanità, 7 May 2020.

Geographic Distribution of Deceased Patients SARS-CoV-2

Region	No. of Deaths	%
Northern Italy	**25,862**	**92.4%**
Lombardia	14,611	52.3
Emilia Romagna	3,737	13.4
Piemonte	2,194	7.8
Veneto	1,596	5.7
Liguria	1,073	3.8
Toscana	845	3.0
Marche	629	2.3
Trento	438	1.6
Friuli Venezia Giulia	312	1.1
Bolzano	288	1.0
Valle d'Aosta	139	0.5
Southern Italy	**2,093**	**7.6%**
Lazio	451	1.6
Puglia	441	1.6
Campania	312	1.1
Abruzzo	309	1.1
Sicilia	257	0.9

Sardegna	126	0.5
Calabria	79	0.3
Umbria	71	0.3
Basilicata	24	0.1
Molise	23	0.1
	27955	100.00%

8 May 2020

The Covid-19 Report - Italy

"Number of Covid-19 associated deaths
28,274 of which: 91.6% where aged 60 to 90 years old" - in "The COVID-19 Task force", Department of Infectious Diseases, Istituto Superiore di Sanità, 8 May 2020.

The Covid-19 Report – Spain

22 March 2020

"The first profile of those infected by Covid-19 through a study of about 19,000 of the 24,872 confirmed cases.

Ages	Percentage of Deaths
0-9	0%
10-19	0%
20-29	1%
30-39	0%
40-49	1%
50-59	2%
60-69	8%
70-79	20%
80- +	67%

The 87% of the deceased are over 70 years old.

his percentage rises to 95% if we count the deceased aged 60 and over.

The lethality of those over 70 is similar to that of Italy, where 86% of the deceased are 70 years of age or older.

In China, those over 70 years old represent 50.8% of the deceased, while in South Korea they are 77% of the 108 deceased by Covid-19 so far.

The use of Intensive Care Units (ICU) beds are also concentrated in the elderly. 68% of patients who are hospitalized in these ICU's are over 60 years old." - in "Ministry of Health", Spain, 22 March 2020.

11 May 2020

"There are 26,744 reported deaths.

The age group where more deaths have been registered within the cases has been that of **those over 70 years of age, concentrating more than 80%.**

Distribution of Hospitalized, ICU
Deceased Cases by Age Group,
Consolidated data 9:00 p.m., 10 May 2020

Age	No. of Deaths	%
0-9	2	0%
10-19	5	0%
20-29	23	0,1%
30-39	61	0,3%
40-49	197	1,1%
50-59	605	3,2%
60-69	1,654	8,8%
70-79	4,529	24,2%
80-89	7,688	41,1%
90- +	3,958	21,1%
	18722	**100.00%**

Age

"Patients over 60 years old's represent 95.2% of total deaths." - Ministerio de Sanidad, 12 May 2020.

"Those who died in Nursing Homes with COVID-19 or similar symptoms stand at 17,730, the majority in; Madrid, Catalonia, Castilla y León, and Castilla-La Mancha. Thus deaths in Nursing Homes represent 66.3% of the total national deaths of 26,744. The numbers where officially notified by the Ministry of Health." - in "Radiografía del Coronavirus en Residencias de Ancianos", RTVE, 11 May 2020.

Comorbidity

"In 95% of patients who died had at least 1 previous illness." - Centro Nacional de Epidemiología, Ministry of Health, Spain, 12 May 2020.

"In a specific analysis on deaths, it is observed that deceased patients, compared to the non-deceased, are significantly older (median age 83 vs 58 years). Men are more represented, **more frequently have underlying diseases, Pneumonia and other Respiratory Complications,** and they have been hospitalized and admitted to the ICU more frequently. 87% of the patients who died are over 70 years old, 95% of them had some type of previous underlying disease (comorbidity), and 61% had Cardiovascular Disease." - in "Informe Nº 29. Situación de COVID-19 en España", Centro Nacional de Epidemiología, Ministerio de Sanidad, 7 May 2020.

Community Madrid

"The Community of Madrid accumulates 8,683 deaths. The ages of the deceased who have been reported range from 73 to 99 years." - in "El Mapa del Coronavirus en España: 26,744 muertos", RTVE, 11 May 2020.

Geographic Distribution of Deceased Patients SARS-CoV-2

Region	No. of Deaths	%
Northern Spain	**20,320**	**76%**
Aragón	825	
Asturias	299	
Cantabria	201	
Castilla y León	1,905	
Cataluña	5,555	
Galicia	593	
Madrid	8,683	
Navarra	490	
País Vasco	1,423	
La Rioja	346	
Central Spain Castilla la Mancha	**2,786**	**10.4%**
Ciudad Real	1,030	
Toledo	726	
Albacete	490	
Cuenca	299	
Guadalajara	241	
Southern Spain	**3,638**	**13.6%**
Andalucía	1322	
Baleares	209	
Canarias	149	
Ceuta	4	
C. Valenciana	1,330	
Extremadura	483	
Melilla	2	
Murcia	139	
Total	26744	100.00%

- in "Situacion en Espana", Actualización nº 102. Enfermedad por el coronavirus (COVID-19), Ministerio de Sanidad, 11 May 2020.

"The main sources of the epidemic in Spain continue to be Madrid with 8,683 deaths, Catalonia, with 5,555 deaths in hospital centres. Followed by Castilla-La Mancha, with 2,786." - in "El Mapa del Coronavirus en España: 26,744 muertos", RTVE, 11 May 2020.

> *"The evidence gets stronger.* ***Poor metabolic health driven by insulin resistance (the liver) is a major factor behind Covid -19 hospitalisation. Fatty liver is one of the earliest manifestations of poor diet and lifestyle, and this is being predominantly driven by diets high in refined carbohydrates and sugar."*** *- Dr Aseem Malhotra, MD, Cardiologist in "Express", 21 June 2020.*

Chapter 21

Air Pollution Factor

"In the analysis of effects on different types of respiratory disease, pneumonia was significantly associated with PM10.

Also association of PM10 and Asthma became significant. The effects of PM10 on respiratory disease mortality supported the previous findings that the effects of particulate matter exacerbated the inflammation in immunocompromised individuals. The mechanism is that particulate matter acts as an immunosuppressive agent and disrupts normal pulmonary antimicrobial defences. Sulphur Dioxide (SO2) was found to have the most significant effect on overall respiratory disease mortality.

These results suggest that **levels of SO2 have acute effects on respiratory disease mortality and pneumonia mortality. Extensive clinical, epidemiological, and toxicological studies have provided evidence of relationships between exposure to ambient air contaminants and human health. The short-term effects of air pollution have mainly been demonstrated by increases in the mortality and morbidity of respiratory diseases.** Thus, the effect of air pollution on deaths from respiratory diseases has aroused great concern among epidemiological researchers. **Strong evidence of an association between Nitrogen Dioxide (NO2) and daily respiratory disease mortality among men or people older than 65 years was found. There was an association between air pollutants and respiratory disease mortality in Wuhan, China. Both analyses consistently reveal the association between 3 air pollutants (NO2, SO2, PM10) and respiratory disease mortality. Our results confirm previous studies on the adverse effects of long-term exposure to air pollution.**" - in "The short-term effects of air pollutants on respiratory disease mortality in Wuhan, China", Scientific Reports, 13 January 2017.

Spain

Central Spain Factors

Castilla la Mancha

The total reported deaths in Castilla-La Mancha 2,786 of which 1,151 (41.3%) where in nursing homes.

Castilla La Mancha has a population of 2 million, concentrated in its bigger cities of Toledo, Albacete and Ciudad Real.

Ciudad Real

The majority of reported Covid-19 deaths where in this city 1,030. Puertollano, Ciudad Real is the largest Industrial Centre in the Castilla-La Mancha region.

1. Petrochemical Complex:
Petrochemicals in Puertollano (REPSOL)
Fertilisers (Fertiberia)
It was formerly a coal mining town but today only one open-cast mine remains.

2. Thermal Power Stations:
Thermal Power Station, Puertollano (Elcogas)
Thermal Power Station, Puertollano (E.ON)

Toledo

Toledo is the capital city of Castilla La Mancha, which reported the second largest number of deaths 726.
Thermal Power Station, Aceca (Iberdrola, Unión Fenosa)
Illescas Factory, Toledo participates in the construction of the Airbus A380

Brazil

"In Brazil between January and August 2018, 417,924 patients were hospitalized because of pneumonia. Pneumonia is an acute inflammatory disease that affects the lungs and can be caused by bacteria, ***fungi or by inhaling toxic products."*** *- in "Ministry of Health", 11 November 2019.*

"Streptococcus pneumoniae bacteria (known as pneumococcus), Mycoplasma pneumoniae, and the Haemophilus influenzae virus are the main causes of pneumonia symptoms. ***These bacteria that cause pneumonia are in the mouth without causing any problems.*** *If they somehow reach the lungs, pneumonia arises." - Dr Mauro Gomes, pulmonologist, in "Anahp", 12 June 2019.*

State of Ceará

"Data issued by the Ministry of Health and the State Department of Health. One of the silent but common disorders of the rainy season in the State of Ceará has caused more deaths year on year.

In 2019 from January to May, it listens to 2,758 people who died as a result of:

1. Influenza
2. Pneumonia
3. Asthma
4. Bronchiolitis
5. Chronic Diseases
6. Acute infections of the airways lower airways

In 2017 there were 4,035 deaths caused by diseases in the respiratory system from January to May. Between 2009 and 2017, the number of deaths caused by diseases of the respiratory system increased by more than 74% in Ceará, from 4,426 to 7,725 cases.

There is a clear predominance of which period of the year the deaths are concentrated the months from January to May, which include the entire rainy season.

The capital city of the State of Ceará, Fortaleza alone leads the number of deaths from respiratory diseases in all years between 2009 and 2019, with 17,335 records of deaths from complications in the airways." - "The greatest number of cases occurs, historically, from January to May", Diario do Nordeste, 3 July 2019.

On the 16 May 2020 in the State of Ceará a group of doctors files a complain to the local state government authorities, stating the the administration of the public hospital network was pressuring them to declare all deaths as Covid-19 related deaths.

Sao Paulo

"Survey carried out by the State Department of Health of Sao Paulo, shows that 14 individuals per hour are hospitalised with pneumonia hospitalises in the State of Sao Paulo. In 2012, 129,043 people were hospitalized for pneumonia. Pneumonia is a condition of infection in the lung that can be caused by **bacteria**, viruses, **helminths or even fungi**. " - on the "Government Portal", 23 July 2013.

Manaus, Brazil

The city of Manaus is surrounded by 10 Electric Power Plants, burning fuel to generate electricity, within the city there is a huge Oil Refinery called "REMAN", operated by Petrobrás, and refines 46,000 barrels of crude oil per day, all within the city and its river bank area. The refinery is self-sufficient in energy, with its own Thermoelectric Plant, that produces and distributes 5.8 Megawatts of Electricity.

Main Products: Liquid Petroleum Gas, Petrochemical Naphtha, Gasoline, Aviation Kerosene, Diesel oil, fuel oils, light oil for electric turbines, oil for power generation, asphalt.

"Fires and Fleet: According to George Fraga, forest engineer at the National Institute for Space Research (Inpe), fires and deforestation are among the most common causes of air pollution in the Amazon. The gases emitted from the burning of natural resources and fuels are responsible for about 15% of the pollutants present in the atmosphere."

The South of Amazonas is the champion in the emission of these gases, however, the metropolitan region of Manaus has gone through a "rebel" phase of high numbers and hot spots."

Impact is felt first by children: Air pollution is the cause of several respiratory diseases. According to the WHO, is the emission of the most common types of particulate material: black carbon or soot. Its origin is the incomplete burning of diesel and fires. They are the biggest cause of problems in the respiratory system.

Respiratory system problems are the most common in health facilities due to atmospheric pollution: According to pediatrician Márcio Polwihrt, the most common disease is inflammation of the respiratory tract.

Children up to 12 years old are the most likely to experience burning eyes, nose, throat, windpipe and sometimes cough.

"In these areas of the body there will be more tears or mucus and the tissues will turn red." - in "Manaus Air Pollution index is twice as high as that tolerated by WHO", A Crítica, 10 November 2017.

Free Economic Zone of Manaus: Since 1967 the creation of a m**assive Industrial Complex** with factories producing mainly; Televisions, Fridges, Motorcycles, and Chemicals, all waste is then dumped in the local waterways and rivers.

Sewage: In Manaus only **10% or less of the city has sewage**, 90% flows to the local waterways and rivers.

Water Samples: In the stagnated waters of the city of Manaus, the **putrid smell is overpowering.**

A sample of 100ml of water, taken in March 2015, showed 1.4 Million Faecal Coliform Bacteria.

Manaus is Among the Cities with the Worst Air Quality in the Country

"We don't see it, but air pollution is closer than we think. We are at the heart of the world. Manaus is the 7th largest Brazilian city.

Today has twice as many pollutants in the atmosphere, as is tolerable by the World Health Organization.

There are 20 micrograms of particles per cubic meter of air, when the ideal would be 2.5. And the problems go beyond harming health. The presence of excess pollutants in the atmosphere directly affects the production of rain.

The more smoke and gas particles in the air, the less precipitation. Manaus pollution, carried by the winds, has grown 200% in the last 5 years.

Even plants suffer from the effects of polluting aerosols. The trees end up doing inefficient photosynthesis, and they can't even absorb the carbon gas.

And if the base of any ecosystem is diseased, then everything else is damaged. Both burning, and deforestation add up to the most common causes, and are responsible for 15% of the pollutants present in the atmosphere. In Brazil, 50,000 people die each year due to diseases caused by poor air quality." - in "TV Em Tempo", 6 June 2019.

Guayaquil, Ecuador

"Complex inhalable particles have become one of the main causes to trigger health problems worldwide. **Harmful Air Pollution has become one of the leading causes of premature mortality.**

Among atmospheric pollutants, particulate matter (PM) is the most challenging in determining health impacts due to its size, mass concentration and complex chemical composition.

PM plays an important role in the biogeochemistry of

ecosystems, the hydrological cycle, cloud formation and the atmospheric circulation. PM2.5 and PM10, Aerosols with Aerodynamic diameters less than or equal to 2.5 μm and 10 μm, respectively, damage the human Respiratory and even Cardiovascular Systems.

While elevated levels of PM10 are associated with an increase in Emergency Care visits and Hospitalization, PM2.5 deposits in the Lung Alveoli and can cause deterioration of Cardiopulmonary health.

PM can originate from several anthropogenic and natural sources, such as road traffic (exhaust and non-exhaust emissions), Thermoelectric Power Plants, Cement and Paper Plants, Oil Refineries, Biomass Burning, or Wildfires, and Organic and Inorganic Particles formed by Chemical Processes involving Precursor Gases.

Dust resuspension and Construction activities can be important contributors.

As a result, the concentration and composition of PM at a specific location depend on many factors, such as the characteristics of local sources, regional background and meteorological conditions.

Composition of PM may include: organic and inorganic carbon, chemical elements and water-soluble ions. Metals, such as Ni and V are natural constituents of petroleum, and are found in small concentrations in petroleum-derived products.

They are often correlated with industrial activities due to oil combustion and ship emissions, and are tracers of very toxic Residual Oil Fly Ash (ROFA), responsible for acute changes in Cardiac Function and Excess Short-Term Mortality.

Fe and Zn also affect human health and are used in the manufacture of fuel tanks and can be transferred to fuels during transport and storage. Furthermore, Ce, Cr, Co, Cu, Pb, Li, Mn, Mo, Ni, Si, Ag, Ti, Sn, W, V, Zn and Zr are introduced in the refinement process or as additives to improve the fuel properties.

Another highly specific traffic-related element is Sb (brake pads).

This work demonstrates the problems facing a midsize city, such as the lack of stricter regulations and, thus compromised air quality.

This may imply serious Respiratory and Cardiovascular Health Effects." - Rasa Zalakeviciute, et al., in "Chemical Characterization of Urban PM10 in the Tropical Andes", Atmospheric Pollution Research, February 2020.

The city of Guayaquil is probably the largest city in Ecuador and it has the same population as Quito

The Gulf of Guayaquil, has the presence of Thermoelectric plants, a Gas Packer station "Tres Bocas", the Holcim Cement company, and the Maritime Port of Guayaquil. And in its vicinity there is there is also "La Libertad" Oil Refinery.

"Sulfur Dioxide (SO2), when converted to Acid Rain, was shown to affect Cellular Metabolic Processes of the leaves of species diversity, such as trees and shrubs, attributing damages such as Chlorosis and Necrosis or cell death in the plant leaves, as well as acidification of the soil.

Sulfur levels were determined as a precursor of SO2, deposited in the Port of Guayaquil, by comparing areas where 19 passive samplers were placed, during the dry season 2016 and rainy 2017.

Sulphur depositions from land use demonstrate that they are accumulating in the mangrove canopy, in the sediment at low tide, and in the water at high tide, which influences the acidification processes of water bodies.

The same occurs in the urban area adjacent to the study area.

The trade winds present on the coasts of Ecuador during the months of August to September reach speeds of up to 8m/s, unlike November and December which are calmer

with speeds of 2m/s, which influences the distribution of the deposition and its load in the city of Guayaquil." - Olga Quevedo M. Sc, in "Spatial distribution of sulfur in the atmosphere of the interior estuary of the Gulf of Guayaquil from passive samplers (Fenn and Poth, 2004) Guayaquil, Ecuador", Rev. Acta Nova, vol.8, no.3, Cochabamba, March 2018.

The city of Guayaquil is next to the River Guayas, on the opposite side of the River there is a city called Milagro. With an Annual Average Contamination according to WHO is: 32 ug/m3 of PM2,5 and 66 ug/m3 of PM10.

USA

New York City

"Pneumonia and Influenza" are the 3rd leading cause of death in New York City since 1998. And, since 2012 pneumonia and influenza have been the only infectious diseases listed among the 10 leading causes of death in NYC. Most pneumonia and influenza deaths in NYC list pneumonia as the underlying cause of death, not influenza.

We therefore analyzed death certificate data for pneumonia in NYC during 1999–2015.

For example, in NYC during 1999–2015, pneumonia was listed as the under-lying cause of death in 99.3% of all pneumonia and influenza deaths, whereas influenza was listed as the underlying cause of death in only 0.7%." - Evette Cordoba, et al, in "Deaths From Pneumonia New York City, 1999–2015", Open Forum Infectious Diseases, 15 January 2018.

The Inflated Coronavirus Death Counts

"They are putting COVID on a lot of death certificates because people who are going to their hospital with any kind of respiratory distress, respiratory problems, pneumonia, the flu — the flu-like symptoms lead into the COVID-19" - Joseph Antioco of Schafer Funeral Home, N. Y. City, in "Project Veritas", 2 May 2020.

"The disease has proven most deadly for people with underlying health conditions, so it stands to reason that "pure, solely coronavirus deaths" would be the minority — perhaps even just 3.2% of the total recorded deaths, as San Diego County Supervisor Jim Desmond suggested." - Tyler O'Neil, in "Just How Inflated Are Coronavirus Death Counts, Exactly", PJ Media, 15 May 2020.

"Emergency Room (ER) doctors now, my friends and I talked to, say you know, it's interesting when I'm writing up my death Report, I'm being pressured to add COVID-19, why is that? Why are we being pressured to add COVID-19?" - Dr Dan Erickson, MD, 22 April 2020.

Guidelines For Cases Of Deaths During COVID-19

The Decree No. 64,880 issued by the Government of the State of São Paulo, and by resolution from the State Health Secretariat. **Autopsies will not be performed** due to natural death during the Pandemic period: Decree 64,880 and Res. SS-32 of 20 March 2020.

The decree delegates to the Health and Public Security secretariats of the State of São Paulo the adoption of

necessary measures so that the activities of handling bodies and necropsies, in the context of the Covid-19 pandemic, do not constitute a threat to health teams and the population, in addition to **giving carte blanche for decision making by health secretaries.**

Since the doctor will not perform a complete autopsy, if he is obliged to issue the death certificate, he must declare the probable cause of death instead.

Thus according to the resolution, **deaths due to Heart Attack, Stroke, Aneurysm, etc., will be classified as undetermined cause, or Covid-19.**

Piauí State

The the State of Piauí, in northeast Brazil, Doctors working in the Emergency Departments of Hospitals informed that they; are being coerced into declaring all deaths Covid-19 related.

> *"**Sickness may be caused through a deficiency of atmospheric air breathed into the system, or by breathing air that is polluted.** The primary cause of disease, however, is obstructive material in the system arising from too much, or unsuitable food, or from excesses of various kinds, overwork, bad habits, alcoholic or syphilitic poisoning, etc., which exhausts the Vital, or life principle." - Dr W. H. Webb, MD in "Standard Guide to Non-poisonous Herbal Medicine", 1916*

Wuhan, China

The city of Wuhan is an **heavy Industrial city**. Since 1890 the **Steel Industry** has been the backbone of Wuhan's industry. Is is **home** to the Chinese **Automobile Industry**, it has **5 Car Factories**.

Northern Italy

Lombardy is one of the richest regions in the Europe, Lombardy remains, in fact, the **main Industrial area of the country of Italy**, almost 40% of the total firms of the region are based in Milan and its province, and the main sectors are: **Mechanical, Electronics, Metallurgy,** Textiles, **Chemicals and Petrochemicals, Pharmaceuticals**, food, publishing, footwear, and furniture.

Sweden

"The economy of Sweden is a developed export-oriented economy aided by timber, hydropower, and iron ore. These constitute the resource base of an economy oriented toward foreign trade. The main industries include: **Motor Vehicles**, Telecommunications, **Pharmaceuticals**, Industrial Machines, Precision Equipment, **Chemical Goods**, Home Goods and Appliances, Forestry, **Iron**, and **Steel**." - in Wikipedia, 2020.

Chapter 22

Pneumococcal Influenza Pneumonia

"**Synonyms:** Fibrinous, croupous or lobar pneumonia, pleuropneumonia, pneumonitis, lung feyer.

Definition: An acute, specific, self-limited infection caused by the pneumococcus, characterized by fibrinous inflammation of the lung, toxemia, pneumococcemia, and solution of the feyer by crisis.

Frequency: Pneumonia constitutes 6.5% of all internal diseases, 4% of all diseases, 6.6% of all medical deaths, and 8% of all deaths.

Bacteriology: 1. The pnemnococcus or Diplococcus pneumoniae as recognized by Frankel (1886), and Weichselbaum (1886) first demonstrated its frequency and importance. It is a lanceolate, encapsulated diplococcus; it is easily seen in coyer slips, it readily stains by the Gram method, and presents many cultural variations. Its atrium, in pneumonia is the respiratory tract, although it may enter the blood by other avenues in sepsis (q.v.). From the lung it may spread diffusely, chiefly through the blood vessels. It is found in dust, saliva, and in 30% of healthy noses and throats, though usually with attenuated virulence.

Experimental inoculation has produced pericarditis, endocarditis and empyema. In lobar pneumonia or apart from this acute bacteriemia the pneumococcus has been found in the blood, joints, brain, bone-marrow, etc.; in otitis media, endocarditis, peritonitis, cholangitis and endometritis; in the urine and feces; in the nasal sinuses; and it may pass from the mother to the fetus. It may be a terminal septic infection.

Until recently it was thought that typhoid and pneumonia were local infections and that bacteriemia was a serious complication; the typhoid bacillus is found in the blood in 100% of early typhoids and the pneumococcus in from 90% to 100% of pneumonics (v.i.). It is assumed that a pneumotoxin exists producing the toxemia; when an antitoxin develops, the crisis occurs, but the factors of resistance to, and recovery from, pneumonia are not known.

Immunity does not result from one attack; recurrence is likely in 23%; 10, even 28 recurrences are known.

The pneumococcus is the sole cause of typical pneumonia, but other microorganisms are sometimes found, as the pneumobacillus (Friedlander), and the typhoid, colon, diphtheria, proteus, influenza, plague, and pyogenic organisms.

Indirect Causes:

a) Age - Pneumonia may develop even in the newborn. Predisposition to infection is great up to the 6th year, then much less until the 15th year, when its frequency increases with each decade. Over half the cases of pneumonia occur between the 20th and 40th years, and over 80% between the 10th and 15th years.

b) Sex - 80% of cases are males. The relation to trauma is in doubt.

c) Cold - 3/4 of all cases of pneumonia occur in cold months (February to April) when the weather varies, the temperature is low, the moisture is great and the winds are high. Dust disseminates the dried sputum. Pneumonia is half again as frequent in the cities as in the country. In the winter of 1903-4, when 4,000 died of pneumonia in Chicago, practitioners in towns not 100 miles distant did not see a case.

d) Individual predisposition is a more important factor than in any other infection. Susceptibility is increased by debility, overwork and alcoholism." - Dr Arthur R. Edwards, MD in "A treatise on the principles and practice of medicine", 1916.

Influenza, Pneumococcal and Herpes Zoster Infections

"An increase in the ageing population has a significant impact on health care resources due to the number of comorbidities, severity of illness and health system utilization by seniors.

Multiple underlying medical conditions, are significant risk factors for increased susceptibility to infections, including pneumococcal, influenza and herpes zoster infections.

Adults 65 years and older account for over 90% of deaths attributed to pneumonia and influenza each year.

1. Influenza: Influenza viruses consist of a group of RNA viruses. Two types of influenza virus, influenza A and B, are primarily responsible for annual epidemic respiratory infections ("flu"). There are currently 2 influenza A subtypes, H3N2 and H1N1, classified by their hemagglutinin (H) and neuraminidase (N) antigens. In 2009, a strain of subtype H1N1, called the novel influenza A(pH1N1) virus, emerged in Mexico and was responsible for the "swine flu" outbreaks. Antigenic shifts such as this are responsible for some of the pandemic outbreaks in history. Influenza A is associated with greater morbidity and mortality than influenza B.

2. Pneumococcal infections: Streptococcus pneumoniae (pneumococcus) is the primary cause of pneumococcal pneumonia, bacteremia, meningitis, otitis media and sinusitis. Accounts for high rates of morbidity, mortality and hospitalization among the elderly population. In 2007, there were nearly 5,000 deaths due to Pneumonia reported in Canadian adults 65 years and older.

3. **Herpes zoster:** Herpes zoster, or shingles, is an infection caused by reactivation of the latent varicella-zoster virus (VZV), which is the same virus that causes chickenpox. VZV is a double-stranded DNA virus. Reactivation can

occur, is common in older adults. Herpes zoster and its complications cause a more frequent and severe illness among the elderly population. The major complication of herpes zoster is postherpetic neuralgia, which occurs in approximately 50% of cases and causes severe neuropathic pain persisting for months to years after resolution of the rash." - Lang Kau, BSc; Cheryl A. Sadowski, BSc(Pharm), PharmD; Christine Hughes, BScPharm, PharmD "Vaccinations in Older Adults: Focus on Pneumococcal, Influenza and Herpes Zoster Infections", Canadian Pharmacists Journal, May-June 2011.
4.

> *"The victims would be fine one minute and the next incapacitated, fever-racked, and delirious. Temperatures rose to 104-106 degrees, skin turned blue, purple, or deep brown from lack of oxygen. Massive pneumonia attacked the lungs, filling them with fluid; blood gushed from the nose. Death was quick, savage, and terrifying." - James F. Armstrong, RN, BSN, CCRN, in "Philadelphia, Nurses, and the Spanish Influenza Pandemic of 1918", Naval History and Heritage Command, 7 April 2015.*

Pneumococcal Influenza

"Due to the immense flood of works that have caused the last pandemic and the subsequent post-epidemics of influenza, the area of influenza has already been treated so thoroughly that it would be unnecessary to write the following lines, if not one since spring 1910.

A febrile illness that was spreading over a larger area would have caused very considerable diagnostic difficulties, not least because it sometimes developed under the formation of atypical abdominal typhus, sometimes very persistent bronchitis, atypical, protracted, or very quickly (so-called one-day) ongoing pneumonia or a simple, highly febrile, very contagious angina catarrhalis. At the same time, there was an unusually high accumulation of pneumonia.

Before I go on to the actual subject, I would like to briefly discuss the symptoms of influenza vera (1889-1890), as they were recorded by Leichtenstern and many others, since I will have to come back to this later when we discuss our cases.

The influenza begins almost exceptionally with frost, often even with chills and high fever; only the lightest, rudimentary cases often start without frost and resemble a simple Coryza (inflammation of the mucous membranes), head neuralgia, cold, or muscle rheumatism.

In rare exceptions, the onset is associated with convulsions, fainting and delirium.

The whole thing rarely sets in with acute gastroenteritis, but there seem to be local differences.

The duration of the fever is usually only 1 to 3 days, the convalescence is mostly smooth, but also often very lengthy; Inexplicable flaccidity, fatigue, neuralgia, constipation, insomnia, loss of appetite and violent sweating dominate the picture.

Relapses are common, mostly associated with pneumonia or other complications.

The fever usually sets in suddenly and quickly reaches 40°; a slow increase is rare, but has been described more often in mild cases. After 1 to 3 days there is usually a rapid fever, while the other symptoms tend to persist; however, the fever can persist for several days, even weeks, as a high continua (39 to 40°) and then quickly or gradually decrease to the norm.

More common is the remitting, self-intermittent type, which is almost pathognomic for influenza.

As the other symptoms of influenza continue, the temperature drops to the norm for one or more days, only to rise again under frost with increasing subjective complaints (40°) and to show either only a spike or a continua lasting several days, then repeats the game just described one or more times.

The curve is often like a regular intermittent quotidiana, tertiana or quartana etc.

However, the fever curve may resemble a typhoid due to

the prolonged continua (2 to 3 weeks), but with the exception of the acute temperature rise.

Respiratory system

Only briefly mentioned; nasopharyngeal catarrh (possibly with involvement of the sinuses), laryngitis, tracheitis, bronchitis, bronchiolitis, influenza pneumonia. Epistaxis is strikingly common, often almost insatiable.

In the case of tracheitis, the tremendously strong, occasionally nascent cough (sheep cough) should be mentioned without rattling on the lungs. Bronchitis is sometimes diffuse, sometimes confined to a lung lobe, often only hinted at, so that there is a gross disproportion between the insignificance of the physical manifestations and the severe dyspnea (shortness of breath, air hunger); often no expectoration.

Most often, the sputum shows a foamy, slimy, purulent texture, sometimes ruby to purely bloody (like an infarct sputum), sometimes purely three-layered-purulent, as side effects that are believed to be acute developing bronchiectasis, which, after weeks and months of rattling without damping, has given way to normal lung conditions.

The most common complication of Influenza is Pneumonia, be it lobular (most common), be it lobar, be it catarrhal, be it from influenza bacilli or streptococci, be it croupy, be it pneumococcal, or a colourful mix of these forms.

During the great pandemic, according to the majority of the investigators, the influenza bacillus appeared almost in leg culture in the sputum and in the nasal mucus; Wassermann almost always found influenza bacilli in leg culture in the lung foci.

There also seems to be a local difference here, since some authors emphasize the predominance of pneumococci, others the predominance of streptococci in the pneumonic herds; however, in these cases other authors claim that it is only a mixed infection.

In any case, the lobular pneumonia typical of influenza as

catarrhal bronchopneumonia appears to be mostly caused by streptococci, more rarely by Pneumococcus lanceolatus, whereby it would not differ from bronchopneumonia in measles, whooping cough, scarlet fever, etc.

It is emphasized everywhere that at the time of an influenza epidemic there is a striking increase in pneumonia, and that it is extremely atypical, pernicious, often without frost, only a relative damping with rattles, but no bronchial breathing, often without rubiginal sputum.

There is usually a very significant tachycardia with a dicrotic pulse. In some cases, acute onset of pulmonary oedema has been observed, due to the enormous hyperaemia of the lungs, which is often confirmed in the cafeteria.

Hepatization often does not occur at all or only very slowly, or there is hepatization with damping, bronchial breathing, without rattling noises, for weeks without a solution being found; then, however, a regression to the norm tends to take place very quickly.

These very long-lasting influenza pneumonias very easily raise suspicions of tuberculosis, especially if there is a long-lasting ringing rattle (bronchiectasis) in some places.

It is not uncommon for one-day pneumonias to be observed with extremely rapid restitution. Relapses are quite common.

Nervous system

Very often violent, long-lasting neuralgia, headache, especially in the depth of the orbit. Muscular neuralgia most violent type, paralysis similar to diphtheria.

Haemorrhagic acute encephalitis with high fever and paralysis, purulent meningitis and meningism.

Of course, the delirium potatorum (delirium tremens) is also observed very often.

Gastrointestinal Tract

Above all, the absolute loss of appetite, combined with Foetor ex ore, a sweet taste and constipation is striking.

The tongue is usually red, the palate and throat are often noticeably red, and the tonsils are red and swollen.

Typhoid form: beginning with frost, immediately high fever. Herpes labialis, headache, lower back pain and body aches, hyperhidrosis universalis (increased sweating), otherwise no findings. This form was particularly common in some places. The severe hyperaemia of the intestinal mucosa, which often leads to ulceration, can occasionally lead to acute haemorrhagic gastroenteritis. Weichselbaum described 2 cases of haemorrhagic enteritis in which he found Diplococcus lanceolatus in the intestine. The spleen is usually undetectably enlarged, but quite significant splenic intumescence (swollen) has been observed.

Heart

When the respiratory abstract is affected, there is usually considerable tachycardia with Dicrotia and irregularity. However, more often than in any other acute infectious disease, we find bradycardia in influenza, sometimes absolute (46 to 60 pulses), sometimes relative (80 to 120 pulses for 39 to 41). Attacks of heart failure (syncope, sudden death from paralysis of the heart) have been observed in healthy adults. Endocarditis verrucosa, pericarditis, vascular thrombosis was soon detected as a result of a mixed infection with streptococci or pneumococci, sometimes as a result of the influenza bacillus itself.

Blood

Anaemia is quite common due to erythrocyte decay. A strong tendency to hemorrhages of various kinds has been emphasized quite often; Bleeding from the nose, gums, pharynx, larynx, intestines, kidneys, menorrhages and

metrorrhages. Nephritis occurred in about 2%; Transient glycosuria has occasionally been described. Urine almost never shows the diazo reaction, but almost always urobilin, although according to some authors it is less common.

Skin

In addition to the very common labial herpes, a scarlet fever-like rash, especially on the face and trunk, is less often described on the extremities; occasionally also urticaria.

Ear

Otitis media, often caused by Diplococcus lanceolatns.

Eyes

Conjunctivitis very common, occasional herpes corneae and keratitis marginalis.

That would be, in a nutshell, the picture of the influenza of the great pandemic 1889-1890 and of the post-epidemics, as has been laid down by Leichtenstern in critical evaluation of the enormous literature about that pandemic. In 1892, Pfeiffer discovered Bacillus, which was named after him, as the causative agent of this disease, and because he was so constant in all cases of influenza, almost all researchers recognized it as a pathogen during the post-epidemics.

So the sentence arose

No influenza without influenza bacillus, a sentence that is still recognized by many authors today, wrongly, it seems to us. Because even in the post-epidemics, the influenza bacillus is no longer found as consistently as in the pandemic, and yet there was no doubt about the diagnosis of influenza, since the clinical picture corresponded exactly to that of the pandemic, only with insignificant deviations,

which are probably due to the genius epidemicus could be explained. However, the term influenza nostras was invented for these cases, which should be as fundamentally different from influenza vera as cholera asiatica from cholera nostras.

However, the contagiousness of this influenza nostras was not as great as that of the influenza vera during the pandemic, nor was the course of the epidemics so explosive, the epidemic remained confined to smaller areas; but the very same changes in the occurrence of influenza vera were noticed in the post-epidemics; everywhere it is emphasized that the morbidity in the post-epidemics decreased significantly from year to year, that the mortality and the malignancy increased, whereas again the spread of the disease did not show the rapidity as in 1889.

Clinically, the differentiation between influenza vera and nostras was already weak (there is no doubt about the bacteriological difference), but in the aftermath, doubts as to whether such a sharp separation was permitted had to take more and more space because in the years that followed, reports of influenza epidemics without such constant bacillus findings increased; we find all transitions from reports of epidemics with predominantly positive influenza bacilli to epidemics with exceptionally positive results, even with the complete absence of Pfeiffer's bacilli, and yet, according to the clinical picture, there was no clinical diagnosis of influenza to doubt (1) although epidemiological doubts were probably permissible.

Clement (2) found z. B. in the influenza epidemic in Freiburg i/B. 1900 the Influenza Bacillus (I.-B.) only in 12.6% of cases.

He tried to explain this fact by assuming that the less virulent I.-B. were overgrown by other bacteria.

He concludes:

"The diagnosis of influenza in individual cases is therefore not based on the proof of I.-B. Addictive."

Likewise, Wassermann (3) pointed out the difficulty of proving the I.-B. in the influenza epidemic that ran from January to March 1900; he relates this to the extremely rapid disappearance of the I.-B. from the sputum.

Ebstein (4) also emphasizes the impossibility of diagnosing only from the evidence of I.-B. to make dependent, since not all cases with I.-B. are to be described as influenza.

In a comparison of the interepidemic period 1902 to 1904 with the epidemic 1907 to 1908 in Boston, Lord6 found that among 168 cases of the first period 64% were mixed infections of influenza bacilli, pneumococcus, micrococcus catarrhal. and showed pyogenic cocci. Mixed infections were also present.

In 11 = 55% of 20 cases of the last epidemic. In the remaining 9 epidemic cases, 3 were only caused by I.-B., 2 by pneumococci, 1 by Mikrococcus catarrhalis, 3 by Staphylococcus. Therefore, Lord advocates keeping the term "influenza" for the symptom complex, regardless of the bacillus finding. I ignore the further information in the literature, which can be found at Leichtenstern (6) and Jochmann (7).

While it was already doubtful whether the influenza bacillus was the sole causative agent of the complex of symptoms that we were accustomed to refer to as influenza, the reports of a certain ubiquity of the I.-B., its occurrence often as an agent, often as a saprophyte Diseases that showed absolutely no resemblance to influenza, however, urge caution in the strict distinction between influenza vera and nostras.

1. Curschmann, Münchener med. Wochenschrift. 1909. No. 8.

2. Clemens, Ibid. 1900. No. 27.

3. Wassermann, Deutsche med. Klinik. 1900. No. 28.

4. Ebstein, Münchener med. Wochenschrift, 1903. No. 11 u. 12.

5. Lord, Lancet. 1909.

6. Leichtenstern, Nothnagels Handbuch. Vol. IV.

7. Jochmann, influenza. Ergebnisse der allgem. Pathologie u. pathol. Anatomie des Menschen und der Tiere. 1909 year XIII.

From the beginning, Pfeiffer and Kruse pointed out that in the sputum influenza sick Phthisists could still find Pfeiffer's bacilli months after all clinical signs of influenza had disappeared. Later, these findings were also collected several times by other parties and now a very zealous search for influenza bacilli in other diseases began.

These apparently non-pathogenic germs were often referred to as pseudo-influenza bacilli, but younger researchers, especially Jochmann (1), have made the reason for the existence of this Bacillus very questionable. Jehle (2) found 19 respiratory abstractions in 48 cases of scarlet fever, 18 times in 23 measles cases, 9 times in 9 varicella, 24 times in 24 pertussis and 9 times in diphtheria.

Washbourn and Eyre (3) found the I.-B. in 11 of those who died from bronchopneumonia without clinical suspicion of influenza.

Jochmann (4) found influenza bacilli 3 times in lobular pneumonic herds in diphtheria, without the clinical findings being different from those caused by streptococci and pneumococci. In the tonsillar covering of diphtheria patients, the I.-B. 4 times next to Di.-B. found without recognizable change in the primary clinical picture.

The I.-B. often found in measles, where it appears to play the role of a saprophyte. In scarlet fever, the I.-B. only rarely on the tonsils, whereas the same has been found almost regularly in whooping cough; here this Bacillus should form the triggering moment, which view has been confirmed many times (5).

Lord (6) found the I.-B. 60 times among 100 people coughing at the polyclinic. in sputum, often months after the cough has long since disappeared; he assumed the existence of Chronic Influenza. Wohlwill (7) found twice the I.-B. in 2 measles sections. in the lungs; with 73 phthis sections 16 times.

1. Jochmann, Deutsches Archiv f. klin. Medizin. 1906. Vol. LXXXIV.
2. Jehle, Zeitschrift f. Seilkunde. 1901. p. 190.
3. Washbourn u. Eyre, Brit. med. Journ. Dec. 1903.
4 Jochmann, a. a. 0. 1906.
5. Siehe Jochmann, Influenza. Ergebnisse der allgem. Pathologie usw. 1909. XIII. Jahrg.
6. Lord, Boston med. and surgic. Journ. 18 Dec. 1902.
7. Wohlwill, Münchener med. Wochenschrift. 1908. Nr. 7.

After we have seen that the finding of influenza bacilli is no longer constant in cases mentioned by various authors as influenza vera, but that the I.-B., z. B. in whooping cough, it is found to be inconsistently more constant that he is also found in the most diverse affections, whether as a saprophyte (organisms) or as a causative agent of any disease which is absolutely no longer to be compared with the influenza vera, so we are well entitled, with Jochmann, Curschmann and many others, to assume that this had been the case before the discovery of I.-B.

The picture of influenza known to doctors represents a complex of symptoms that is not only caused by the I.-B. is caused that the contested application of the term influenza to conditions in which the I.-B. is not found, rightly exists.

As was often emphasized in the description of influenza, a mixed infection with pneumococci was strikingly mentioned, which could often be bred from the herd in pure culture. In 1909 Curschmann (1) described a disease which he referred to as pneumococcal influenza; a cluster of 77 influenza cases observed from autumn 1907 to spring 1908, in which the influenza bacillus was always absent in the 49 cases examined, whereas in 46 cases the Pneumococcus lanceolatus was found so predominantly that it had to be addressed as a pathogen.

Rose (2) also reports on a hospital epidemic, in which almost half of all inmates and staff fell ill with symptoms that could well correspond to influenza.

In the sputum, pus, etc., in all cases only the Frankenko-Weichselbaum Diplococcus, besides much more occasionally

the Friedländer Bacillus and the Micrococcus katarrhalis.

In view of these facts, the local department (senior physician Dr Rumpel) has been diagnosed with influenza for years without a positive I.-B. finding as soon as the clinical picture seemed to justify this diagnosis.

1. Curschmann, Münchener med. Wochenschrift. 1909. Nr. S.
2. Rose. Ibid. 1909. No. 44.

For 8 years, Dr. Rumpel had all the cases that he diagnosed as influenza examined bacteriologically and the Pfeiffers Bacillus was never found, but streptococci, staphylococci or pneumococci were always found, mostly all at the same time, the Pneumococcus lanceolatus almost always outnumbering so many that it had to be addressed as the pathogen.

Since the spring of 1910, we have been observing a large number of cases of febrile illness, mostly in episodes of febrile illness, which were clearer in their entirety, but also in individual cases, as I emphasized at the beginning, and which presented the picture of influenza as a pneumococcal disease.

It is, of course, very difficult and hardly possible to tackle all cases of angina in which pneumococci have been detected in the throat (1) as well as, as I would like to emphasize, the unusually high number of atypical Pneumonias (33% of all Pneumonias) as belonging to the picture of this disease form to address.

Pneumococcus was detected everywhere, but the overall impression was not always that of an influenza.

After eliminating these dubious cases, I have a significant number of cases that I myself have observed, in which it seems to me that the diagnosis of influenza is justified, and which in their entirety result in almost all the variations and complications as observed with influenza vera and have been described.

Above all, the great contagiousness was striking.

1. Bd. XII. der Jahrbücher der Hamburger Staatskrankenansialten haben Reiche u. Schomerus eine Arbeit: "The pharynx caused by the Diplococcus lanceolatus. Larynx diseases and remarks about the Erysipelas cutis pneumococcicum", published, which contain very remarkable observations. In confirmation of other work: Wandel, Uber Pneumokokkenlokalisationen (Deutsches Archiv für klin. Medizin, 1903, Bd. LXXVIII), they were able to demonstrate pneumococcus as a causative agent in the most varied forms of angina, from the mild, erythematous form to the most severe apostematous; also as the causative agent of the lightest Laryngitis and Tracheitid (infection of the trachea, breathing tube or windpipe) to the heaviest pseudomembranous; also in cases of laryngeal erysipelas and facial rose.

Many complications, such as:

1. Pneumonia
2. Pleurisy
3. Pericarditis
4. Heart Failure
5. Otitis
6. Haemorrhage

They have also experienced Nephritis, and some of these medical histories show clinical behaviour that is very similar to what we want to discuss below.

Particularly striking among the cases of angina was the strong infectivity, which led to the occurrence of 2 home epidemics.

Also cold, shivering, very violent headache, severe fatigue, limb pain were complained, so that I would like to consider these cases as belonging to the picture of our pneumococcal influenza, the more, since the rapid course fits our cases.

For details see original, as well as change.

A large number of infections took place in the Medical departments among the sick as well as among the doctors

and nurses, such that on some days 4 to 5 patients fell ill with: shivering, fatigue, low back and headache, with throat problems and sudden fever up to 39°; Likewise, almost every few days one of the nurses complained of the symptoms just described, and the doctors were also attacked more often.

It was immediately striking how often the men suffered from severe nosebleeds and how many patients had often extensive herpes labialis. Most of the time this disease was very quick with proper treatment and bed rest; after 1 to 2 days the temperature was normal and there was only a tendency to sweat and weakness.

However, there were also more serious cases of home infection and, as far as patients are concerned, these are included among the cases I used in this work.

A patient who became ill with mild symptoms, but only spared herself a little and resumed full service after 3 days, immediately relapsed, which led to very serious heart complications and a fever that went on for weeks.

In all of these cases the typical neck finding was to be ascertained, i.e.: tongue whitish, papillae particularly red at the tip and protruding, the soft palate was sharply reddened on the hard palate, with swollen and prominent vitreous-looking follicular swelling, up to the size of the pin head; the palate arches were dark red, dry, the tonsils and the posterior pharynx as well, but mostly there was no swelling of the tonsils, which only occurred in the relatively rare cases of angina follicularis.

In all of these cases the Pneumococcus lanceolatus was always present in large quantities, of course together with significantly fewer colonies of hemolytic streptococci and also staphylococci.

This throat finding was subsequently referred to as "typical influenza neck" and is characterized by the fact that slight reddening and swelling of the follicles can be determined even after weeks and months.

I have personally observed this finding for almost a year now; every time I get sick again with shivering, profuse sweating, general fatigue and temperature increase (38.5°)

for 1 to 2 days, there is also a feeling of dryness in the throat, and the inspection reveals an exacerbation of the throat. Franke (1) describes a very similar neck finding in 1901 and considers it typical of influenza. It also highlights the persistence of the affection.

1. Franke, Deutsches Archiv f. klin. Medizin. 1901. Bd. LXX. Zeitschr. f. Hygiene. LXXI.

In all cases we have termed influenza, this neck finding was the common link; it still existed and allowed the diagnosis if the patient, who had encountered a fever in the apartment the previous evening from the doctor, was admitted here without a fever, with the indication that he was sick with sweating and anorexia, and was generally ill.

Noteworthy is the fact that complaints of sore throat have not been complained about as often as expected, even more about an indefinite, uncomfortable feeling of fullness, etc.

From these very numerous mild, ephemeral cases, which were released after a few days, to the most severe, there are all possible transitional forms, and often a mild attack after a few febrile days led to very severe relapses with many complications.

I want to try to show that the epidemic does indeed correspond to the picture given at the outset by describing the material, which I have divided into the lightest, lightest, most complicated, typhoid, associated with influenza pneumonia and complicated with polyarthritis corresponds to the influenza vera.

The mildest cases, which were still feverishly received, almost always indicated that they had been suffering from cough, shivering, general weariness, sweating, headache, back pain and joint pain a few (1 to 4) days ago, along with runny nose and throat problems.

The majority complained of stubborn stool behaviour, so that daily purgants were necessary; complaints of diarrhoea were less frequent. Quite often, appetite and insomnia were reported.

Here the majority showed a high fever, up to 40°, a

slightly accelerated, but often slightly dicrotic, easily suppressable pulse.

In addition to the typical neck finding with pneumococci described above, possibly also a rhinitis and bronchitis of a minor degree, there was usually no pathological organ finding that could somehow explain the high fever and the large general prostration, from which the majority suffered.

The number of leukocytes fluctuated between 10,000 and 15,000.

The high fever, apparently independent of any therapy, dropped critically to normal during the same day under heavy sweat (cf. curve 1, prot. No. 8877), or else the fever lasted 2 to 3 days. With the exception of light spikes (up to 37.2) on the 3rd and 5th fever-free days, the temperature used to stay below 37°.

In a large number of these cases, bradycardia then occurred, which passed after a few days.

After about 4 to 6 days, the patients asked to be released because they felt completely comfortable again.

Unfortunately, however, not all cases went so smoothly. Long-lasting stitches in the chest remained remarkably often, particularly often L.U.V.

In a number of these cases of "pleurodynia" a slight pleural rub, which often disappears after a few days, could be observed, and I believe that it is quite possible that a number the strikingly frequent exudative pleuritic episodes during this period, which gave no history or clinical evidence of pneumonia, but which, like a case still under treatment, had been shivering a few days earlier, with stitches on the chest, with a dry cough without sputum; I believe that these cases, which we initially regarded as possibly tuberculous pleuritis, are only another stage of this pleurisy sicca is a complication of influenza.

In any case, there was no evidence of tuberculosis in the majority of the cases.

The case I just mentioned now got a high fever and stitches on the same chest side again after shivering for 6 weeks and the exudate had disappeared; next to it the typical neck finding.

There was only a slight rubbing at the pain site, which had not existed until then, and after the fever had dropped over 3 days, it disappeared without new Exudate forming.

The exudate often formed remarkably fast, but occasionally only back in the course of weeks.

During the high fever, the urine often showed a clouding of protein when boiling, which, however, tended to fade with the fever. Rapidly transient glycosuria was observed 5 times.

In a number of cases the temperature rose again on the day after the fever, or a few days later; passed the somatic complaints continued or even increased without any actual complication.

A few times, after a fever-free interval of 1 to 3 weeks, there were real recurrences with high fever and flare-ups Neck complaints. Often very serious people used to do this.

Complications: angina follicularis, polyarthritis, etc.

One could object that the presence of the Pneumococcus in the blood of these cases is of no importance, since there is a temporary bacteremia in a large number of pneumonia; that the detection of Pneumococci in the patient's throat is also irrelevant for the angina, since the pneumococci could come from the lungs with the expectoration.

On the other hand, it should be objected that in much easier cases, which, apart from fever and the throat finding, showed no pathological organ findings, but especially no cough or expectoration, we regularly found the lanceolatus in the throat, and then the throat finding of these cases is correct, as well as that general clinical picture of the case is so strikingly consistent with this case that there is no doubt as to the identity of the form of the disease.

So, I believe that in this case we are also dealing with a typical influenza neck and that this is where the disease started; Then there was the complication of atypical pneumonia and, in the course of this, bacteremia, proof that the pneumococci did not play the role of random parasites.

The fact that we are dealing with virulent pathogenic

germs in these cases is borne out by the numerous house infections, in which we found almost without exception, in addition to the typical neck findings, pneumococci in enormous numbers alongside streptocysts and staphylococci.

Since the detection of pneumococci has been successful for each individual group so regularly that there is no doubt as to their etiological importance, since there are also transitions between the individual groups that lead directly from one group to another.

I believe I am entitled to assume that we are dealing with different manifestations of one and the same disease; which is caused by the presence of pneumococci, and whose pneumonic complications are to be assessed quite differently from common pneumonia.

I have shown that this pneumococcal disease corresponds clinically to the picture, both in the individual case and in relation to the overall picture, that Leichtenstern designed Influenza Vera.

And so we fully agree with the opinion of those authors who see influenza, as was known to old doctors, a complex of symptoms that can be caused by various pathogens.

In our epidemic, we are dealing with Pneumococcal Influenza, which is characterized in particular by the fact that the slightly typhoid forms predominate, cases in which the doctor, who wishes to have the term influenza reserved only for cases with Pfeiffer's bacilli, is at a loss stands and finally referred to her with cold, gastric fever, etc.

As an appendix, **I would like to mention one observation that further enhances the correspondence between Influenza infection and Pneumococcal infection, namely the ability of the latter to cause very violent dysenteric conditions, just like with influenza vera.**

I have observed 2 cases with severe Haemorrhagic Colitis, with massive pneumococci in the stool, which occurred 10 to 20 times a day with severe Tenesmus and pain, with a lot of bloody mucus. One case finally died, and the intestine from Flexura coli dextra showed a very granulated surface due to the fact that a myriad of small,

confluent ulcers surrounded small mucosal islands." - Dr C. Leede, MD, From the 2nd medicine, Department of the Hamburg-Eppendorf hospital Senior Physician Dr. Dude, MD, Resident Dr. C. Leede, MD in "Pneumokokken-Influenza", "Medical Microbiology and Immunology", Vol.71, Iss.1, 1912.

Note: The complete paper "Pneumokokken-Influenza", is 33 pages long, and includes all case reports, and graphics. Here, is transcribed only the beginning and end sections of the report.

Chlamydophila Pneumoniae

"In 1965, the first isolate of Chlamydia pneumoniae was discovered and it wasn't until the early 1980s that it was scientifically identified as a distinct Chlamydial species and in 1999 it was reclassified as Chlamydophila pneumoniae (C. pneumoniae)." - Tiffany L. Stallings, in "Journal of Infection", 2008.

"Chlamydophila Pneumoniae is reported to account for a relatively large number of cases (6–20%) of Community-Acquired Pneumonia (CAP).

The clinical course may vary from mild, self-limiting illnesses to severe forms of pneumonia, particularly in elderly patients, and those with coexisting cardiopulmonary diseases. **This agent participates in co-infection involving other bacterial agents in approximately 30% of adult cases of CAP.**

C. pneumoniae is an obligate, intracellular bacterium associated with a wide variety of acute and chronic diseases.

C. pneumoniae infection is characterized by persistence and immunopathological damage to host target tissues, including the lung.

A substantial proportion of lower respiratory tract infections, including pneumonia and exacerbations of

chronic bronchitis, have been associated with this pathogen. C. pneumoniae is also involved in both acute and chronic asthma, and some data link this agent to new-onset asthma in adults." - F. Blasi, P. Tarsia, S. Aliberti in "Chlamydophila Pneumoniae", Institute of Respiratory Diseases, University of Milan, IRCCS Fondazione Ospedale Maggiore, Milan, Italy, Clin. Microbiol. Infect., 2009.

Pulmonary Fibrosis: Role of Chlamydophila Pneumoniae Infection

"Idiopathic pulmonary fibrosis (IPF) is a chronic progressive interstitial lung disease, resulting in severe morbidity and death due to progressive respiratory failure.

The natural history is invariably one of gradual and progressive deterioration.

This syndrome is characterized by acute progression of dyspnoea over 1 month or less, accompanied by new, diffuse opacities on CXR, worsening hypoxaemia, and the rapid development of respiratory failure.

The atypical bacteria Chlamydophila (previously Chlamydia) pneumoniae was classified as a new Chlamydial species by Grayston et al., 1989.

C. pneumoniae is an important cause of both lower and upper respiratory tract infections, including pneumonia, bronchitis, pharyngitis and sinusitis.

A prospective study on community-acquired C. pneumoniae pneumonia in Japan (Miyashita, 2002) indicated that pneumonia with C. pneumoniae as a single aetiologic agent is mild. However, C. pneumoniae can cause severe pneumonia in patients with underlying diseases." - in "Acute exacerbation of idiopathic pulmonary fibrosis: Role of Chlamydophila pneumoniae infection", Respirology 2007.

Chapter 23

The Shedding Light on the Covid-19 Panic

The Opinion of Experts who Contradict the Hysterical Official Medical Trade Narrative on the Covid-19 outbreak

"A virus has never been proven to exist that causes disease, so if it doesn't exist it certainly cannot kill anyone." - Dr Andrew R. Kaufman, MD, Medical University of South Carolina, Doctor of Medicine, Massachusetts Institute of Technology, BS in Biology. Qualified as expert witness in local, state, and federal courts, in interview on "Coronavirus (COVID-19)", YouTube, 26 March 2020.

What Are Corona viruses?

"These viruses co-exist with humans and animals around the globe. The viruses are the cause of very common, minor diseases of the respiratory tract. Very often, infections remain subclinical without symptoms. Severe courses occur almost exclusively in elderly patients with other underlying illnesses, in particular of lung and heart.

Spreading Fear Element

Now, however, a new member is on stage spreading fear around the world. Why? The new COVID-19 originated in China and spread rapidly. It appeared to be accompanied by an unexpectedly high number of deaths. Alarming reports followed from Northern Italy that concurred with the Chinese experience. It must, however, be pointed out that the large majority of other outbreaks in other parts of the

world appeared to display lower apparent mortality rates and such high numbers of 4, 5 or 6% were not reached. For example in South Korea the apparent mortality rate was 1%.

Why "APPARENT" Mortality Rate?

When patients concurrently have other illnesses, an infectious agent must not be held solely responsible for a lethal outcome. This happens for Covid-19, but such a conclusion is false, and gives rise to the danger that other important factors are overlooked.

Different mortality rates may well be due to different local situations. For example; what does Northern Italy have in common with China Horrific air pollution: The highest in the world! Northern Italy is the China of Europe.

The lungs of inhabitants there have been chronically injured over decades and for this simple reason the situation may not be comparable to elsewhere.

The Pressing Questions Are:

1. Does the virus generally cause more serious illness also in young people and kill patients who have no concurring illness?

The answer is clearly: No! 99,5 % have no or only mild symptoms Here, we already see that it is false and dangerous. "Infection" is not identical with "disease". Keep in mind that every day, 2,200 over 65-year old depart from us, here in Germany.

Keep in mind that many of these carry common Corona viruses. And these die every day. The only difference is that we do not talk about "Corona-deaths". Because we know that these viruses are normally not the major cause of death.

2. What is Happening?

We are afraid, that 1 million infections with the new virus will lead to 30 deaths a day over the next 100 days.

But we do not realize that 20, 30 or 100 patients positive for normal Corona viruses are already dying every day.

To avoid that Covid-19 enters the scene instead of the other Corona viruses, extreme measures are installed.

These measures are grotesque, absurd and very dangerous. Our elderly citizens have every right to make efforts not to belong to the 2,200 that daily embark on their last journey.

Social contacts and social events, theatre and music, travel and holiday recreation, sports and hobbies, etc., all help to prolong their stay on earth. The life expectancy of millions is being shortened. The horrifying impact on world economy threatens the existence of countless people.

The consequences on medical care are profound. All this will impact profoundly on our whole society. I can only say: All these measures are leading to self-destruction and collective suicide because of nothing but a ghost." - Dr Sucharit Bhakdi, MD, Microbiology specialist, one of the most cited research scientists in Germany. He has been Professor at the Johannes Gutenberg University, Mainz, Head of the Institute for Medical Microbiology and Hygiene, in "Corona virus COVID-19- hype and hysteria? Demystification of the nightmare!", 19 March 2020.

Excessive Fear

"When the hydration in the lungs is very marked the bronchioles are not constricted, although the alveoli are collapsed and the patient has pulmonary collapse or atelectasis (resulting in reduced or absent gas exchange).

When the hydration undergoes the cyclical change of dehydration bronchitis and Broncho-Pneumonia are apt to result, and in these inflammatory conditions the bronchioles may undergo a greater degree of constriction than occurs in asthma.

The primary cause is the local precipitation of hydrated protein particles, and the absence of red blood corpuscles requiring oxygenation, as a sequence.

There are no hard-and-fast lines of demarcation between

atelectasis, asthma, and bronchitis, and no special type of dyspnoea accompanies them.

Fear causes dehydration of the protein particles; it does not stimulate the suprarenal glands to hypersecretion. Excessive fear, which is the same as shock, causes hydration." - Dr J.E.R. McDonagh, FRCS, in "The Pathogenesis and Treatment of Asthma", British Medical Journal, 16 November 1929.

The King is Naked

"I would like to tell you something about the Corona virus epidemic. That we are supposed to suffer from now.

To begin with, I thought this commotion was about to fade away.

But it has increased so much, and we have to start to check this.

I worked as a doctor with my health department, I had a team, along with the flu disease surveillance system.

And every year I've observed how many people became sick in an area with a population of 150,000.

Every new year, world-wide, we have new types of viruses. We have these different new viruses every year.

There are about a 100 different types of viruses in constant flux.

Until up to now, we didn't really care, which of the viruses caused this flu, or disease, or whatever you wish to call it.

But there are investigations over several years in Glasgow.

There, they tried to use the available tests. This means that they have not analysed 100 types of viruses, but only the ones they have the tools for analysis.

And they saw about 8 or 10 different viruses.

And Corona virus have always been part of them. From 2005 to 2013 in Glasgow they checked any viruses that where present in respiratory lung disease.

These indicate that the Corona virus was always present among the mixture. The Corona virus in acute respiratory diseases is normally from 7% to 15%, are corona viruses.

Hence it is natural that a large part of the viruses are corona viruses. In Wuhan, is a big city, with a population of 11 million, large hospitals, large intensive care units, there are people always on respirators, people with pneumonia, hundreds of them.

They tested less than 50 patients, and looked at their viruses they had, and examined the RNA for the virus in the lab, and found a new species of viruses.

This is what caught their attention. When a virus scientist finds something like this, he puts it in a global database (virological.org). This database is available to scientists all over the world, for example in Berlin they checked and compared this new entry information, and tried to make an analysis tool, a test to measure this new corona virus.

Then on the 16 January 2020, Prof. Dr. Christian Drosten presented the protocol to the World Health Organization, and it was recognized very quickly. Usually, as a test is considered a product of medical, it must be validated, and examined carefully.

What does this new test say? And what does it measure? The aforementioned test is an internal examination developed by the Charité-Clinic. And because there was no test that was validated and the great panic arose, it was decided to just use this test everywhere. And then Professor Dorsten presented the test, of course, the virologist cannot tell if the virus is dangerous or not.

He can only say: “This is different” or “We have a test for this”.

But is the virus dangerous, Professor Dorsten? How is he supposed to know? He will need more epidemiological data based on observations of how sick people are. How quickly can they recover?

Are there less victims than before? For this reason it is necessary to look at the data of previous years to compare them. To look at the mortality rates to see how many people died of the virus.

So while searching for a specific virus, for example the Corona virus, you can examine the whole population.

What you find is that probably about 8% or 10% of the

population will have the type of virus that prevails in their disease.

But in the event of testing in health institutions, completing the tests there, to determine who is sick, then of course you would find a lot more positive cases.

And if you examine hospitals and take samples there, then you will find even more people infected with Coronavirus.

That is, depending on the population that was examined, whether residents as a whole, sick patients in a waiting room, people in a clinic, or when you examine the severity of their illness in intensive care and they are about to die you are expected to find coronavirus at 7% to 15% of every time you do a test.

However, if they die from the Corona virus, or other viruses, corona viruses also exists.

So when you look at the death rates in Italy, you want to know where the tests have been taken.

Where and how were the few available tests been used?

If they where used in a hospital on the terminally ill, or serious ill patients, then it is obvious that the data from the death rate from corona virus will increase. Just because it looks like it, because of the specific group that was examined.

What is counted?

The death rate from a specific disease refers to the percentage of deaths among people infected with the disease. The results indicate systemic errors (bias) in data collection or measurements.

And what is related to acute seasonal respiratory lung disease, commonly known as influenza (flu), there is a death rate of 0.1%, which already is the maximum.

That means that: 1 in 1,000 people infected with the flu, dies every winter. So, now we will have to see whether this number increased because of the corona viruses.

The assumption for Germany is that it will have an increase of 20,000 to 30,000 deaths without the flu.

This is called excess mortality. So we know that the Corona viruses always represents 5% to 14% of all types of viruses that cause flu (influenza).

Suppose, in previous years, we tested the Corona virus for all severely ill patients in the hospital (which of course didn't happen), It was expected that we would find 2,000 to 3,000 people who die of flu (influenza) annually, that they also had the Corona virus.

And we are still far away from these numbers. It is apparent that the Virologists seem to have created something very sensational here. And with their creation they really impressed the Chinese government as well.

The Chinese government made something big out of it (they inflated it).

Suddenly, this was very important politically, and all this was so significant that it lead to international consequences, politicians had to deal with, had to take a stand. Then the virologists came into play again.

The governments asked their own virologists and they confirmed that this virus is a thing to worry about, and proposed to develop tests to help measure the virus, like in China. Something was woven around this.

A network of information and opinions has been developed in certain expert groups. And the politicians turned to these expert groups, who initially started all this.

And they really absorbed this network, moved within it. This lead to politicians who now are just resting on these arguments, while using these arguments to evaluate who has to be helped, to determine safety measures or what has to be permitted.

All these decisions have just been derived from these arguments. Which means that now it's going to be very hard for critics to say, "Stop, there is nothing going on." All this reminds me of a fairy tale about a king without clothes on.

Only a small child was able to say: “Hey, he's naked!”

For the rest of the people in the square, surround the government and seeking advice from it, because they cannot

know themselves, they all played and participated and joined this hype. And like this, politicians are being courted, led by many scientists.

Scientists who want to become politically important because they need financial support for their institutions.

Other scientists ride the wave and also want their part: “We can help too!”, “We created an app!”, “We have a program for this!”

So many people say: "We want help too!", because they see an opportunity to earn money and fame. What we miss now is a rational way to look at things.

We must ask questions like:
"How did you discover that the virus was dangerous?"
"How was it before?"
"Didn't we suffer from the same thing last year?"
"Is it really something new?"
This is missing.

The king is naked.” - Dr Wolfgang Wodarg, MD, As Chair of the Parliamentary Assembly of the Council of Europe Health Committee Wodarg co-signed a proposed resolution on 18 December 2009, which was discussed in January 2010 in an emergency debate. He has called for an inquiry into alleged undue influence exerted by Pharmaceutical Companies on the World Health Organization’s global H1N1 flu campaign, in “How Dr. Wolfgang Wodarg sees the current Corona pandemic”, 13 March 2020.

“The Chinese government have attempted to convince its people that Xi Jinping General Secretary of the Communist Party of China has somehow single-handedly stayed this huge struggle in the right direction. However, in a rare shift, the people of China specifically the people of Wuhan have demonstrated something completely unexpected they ain't buying it.

Videos have surfaced on the twitter account “新闻大吐槽 @TuCaoFakeNews”, that show Wuhan residents shouting:

"Everything his Fake!", at the Vice Premier of the People's Republic of China Sun Chunlan, as she toured the sectioned off community at the hub of the outbreak last week on the 5 March 2020. In the videos that quickly surfaced online, residents shouted in both the Wuhan dialect, and in Mandarin: **"Fake, Fake, Fake!", "Everything Is Fake!", "They are taking advantage of the people to put on a show!"** - in "TomoNews US", 10 March 2020.

> *"In Italy, 1 in 10 people diagnosed die, according to the findings of the Science publication, that is statistically 1 of every 1,000 people infected. Each individual case is tragic, but often, similar to the flu season, it affects people who are at the end of their lives. We should better integrate the scientific facts into the political decisions." - Dr Pietro Vernazza, MD, Infectious Diseases Specialist, Cantonal Hospital St. Gallen, Switzerland, Professor of Health Policy, in "St. Galler Tagblatt", 22 March 2020.*

"The problem of SARS-CoV-2 is probably overestimated, as 2.6 Million people die of respiratory infections each. It should be noted that systematic studies of other coronaviruses (but not yet for SARS-CoV-2) have found that the percentage of asymptomatic carriers is equal to or even higher than the percentage of symptomatic patients." - Dr Yanis Roussel, MD et. al., in "SARS-CoV-2: fear versus data", International Journal of Antimicrobial Agents", 19 March 2020.

> *"This virus influences our lives in a completely excessive way. This is disproportionate to the danger posed by the virus. And the astronomical economic damage now being caused is not commensurate with the danger posed by the virus. All those we have examined so far had cancer, a chronic lung disease, were heavy smokers or severely obese, suffered from diabetes or had a*

cardiovascular disease. The virus was the last straw that broke the camel's back, Covid-19 is a fatal disease only in exceptional cases, but in most cases it is a predominantly harmless viral infection." - Dr Klaus Püschel, MD, forensic pathologist, director of the Institute of Forensic Medicine, University Medical Center Hamburg-Eppendorf, in "Der streit ums richtige Mas", Hamburger Morgenpost, 3 April 2020.

"I have patients with severe throat with coughs.

I tell them we wont do the test (Coronavirus), because I believe it doesn't makes any sense, you see that this test is very unreliable. It is a PCA-based test, where false positives are programmed in.

Half of [the positive tests] could be wrong.

PCA tests often show false positives. You can ask professor Gigerenzer in Berlin about this problem area.

The tests are very sensitive. If you have only one molecule of something, the test can show positive. That doesn't mean the patient is sick, or that he has the coronavirus; it doesn't get isolated, but one relies wholly on these tests.

But the spreading panic is in large parts founded on news from Italy.

I have seen Italian doctors online, where I have compelling suspicions something isn't right with what they say.

I am a clinician and I don't see a new disease on the horizon. If you took away the test, life would go on as before, there wouldn't be anything to see." - Dr Claus Köhnlein, MD, German Internist based in Kiel, co-author of the book "Virus Mania", in "der Fehlende Part", RT Deutsch, 20 March 2020.

"Results are for the identification of SARS-CoV-2RNA. The SARS-CoV-2RNA is generally detectable in respiratory specimens during the acute phase of infection.

Positive results are indicative of the presence of SARS-

CoV-2 RNA; clinical correlation with patient history and other diagnostic information is necessary to determine patient infection status. Positive results do not rule out bacterial infection or co-infection with other viruses.

The agent detected may not be the definite cause of disease. Negative results do not preclude SARS-CoV-2infection and should not be used as the sole basis for patient management decisions.

Negative results must be combined with clinical observations, patient history, and epidemiological information." - in "COVID-19 RT-PCR Test (Laboratory Corporation of America) - EUA Summary", FDA, 21 March 2020.

"This study describes the prevalence of SARS-CoV-2 co-infection with noncoronavirus respiratory pathogens in a sample of symptomatic patients undergoing PCR testing in March 2020. 1,217 specimens tested for SARS-CoV-2 and other respiratory pathogens, from 1,206 unique patients; 116 of the 1,217 specimens (9.5%) were positive for SARS-CoV-2 and 318 (26.1%) were positive for 1 or more non–SARS-CoV-2 pathogens.

Results suggest higher rates of co-infection between SARS-CoV-2 and other respiratory pathogens than previously reported, with no significant difference in rates of SARS-CoV-2 infection in patients with and without other pathogens.

Routine testing for non–SARS-CoV-2 respiratory pathogens during the COVID-19 pandemic is unlikely to provide clinical benefit." - Dr David Kim, MD, Dr James Quinn, MD, Dr Benjamin Pinsky, MD, Dr Nigam Shah, MBBS, Dr Ian Brown, MD, in "Rates of Co-infection Between SARS-CoV-2 and Other Respiratory Pathogens", JAMA, 15 April 2020.

"Atherosclerosis remains the most significant threat to the health of individuals living in the United States and Europe.

Myocardial infarctions, strokes, peripheral vascular disease and premature deaths constitute an enormous burden on the healthcare systems of these regions every year.

That infection may play a role in atherosclerosis was first suggested over one hundred years ago with the finding that acute infection with Bacillus typhosus resulted in fatty sclerotic changes in the arterial wall (Gilbert and Lion, 1889; Nieto, 1998).

Interest in the role of infection in atherosclerosis was renewed with the observation that patients with coronary artery disease were more likely than matched controls to have an elevated antibody titer to Chlamydia Pneumoniae." - Dr Michael Dunne, MD in "Infectious Agents and Cardiovascular Disease", 2004.

"Chlamydia Pneumoniae: is a species of Chlamydia, an obligate intracellular bacterium that infects humans and is a major cause of pneumonia. C. pneumoniae is a common cause of pneumonia around the world; it is typically acquired by otherwise-healthy people and is a form of community-acquired pneumonia.

Its treatment and diagnosis are different from historically recognized causes, such as Streptococcus Pneumoniae. Because it does not gram stain well, and because C. pneumoniae bacteria is very different from the many other bacteria causing pneumonia (in the earlier days, it was even thought to be a virus), the pneumonia caused by C. pneumoniae is categorized as an "atypical pneumonia"." - in "Wikipedia", 9 May 2020.

"Researchers performed real-time reverse transcriptase-polymerase chain reaction for COVID-19 and other respiratory pathogens from 1,206 symptomatic patients from multiple sites in California. Some sites tested the specimens for COVID-19 as well as:

1. Influenza A and B
2. Respiratory Syncytial virus (RSV)
3. Non–COVID-19 coronaviruses
4. Adenovirus
5. Parainfluenza 1 through 4
6. Human Metapneumovirus
7. Rhinovirus/Enterovirus
8. Chlamydia Pneumoniae
9. Mycoplasma Pneumoniae

Of the 116 specimens that tested positive for COVID-19, 24 (20.7%) were positive for at least one other pathogen, versus 294 of the 1,101 specimens (26.7%) negative for the novel coronavirus.

The most common co-infections included rhinovirus/enterovirus (6.9%), RSV (5.2%), and non–COVID-19 coronaviruses (4.3%).

None of the differences in rates of non–COVID-19 pathogens between specimens positive and negative for the novel coronavirus was statistically significant ($P < .05$). Of 318 samples positive for at least 1 pathogen that was not SARS-CoV-2 (COVID-19), 24 (7.5%) were also positive for the novel coronavirus. Of 899 samples, 92 (10.2%) were positive for SARS-CoV-2." - Mary Van Beusekom, in "Co-infection rate higher than thought", Center for Infectious Disease Research and Policy, University of Minnesota, 16 April 2020.

"What few people know: A PCR test (virus detection) costs around CHF 200 (£165). In St. Gallen, Switzerland, alone, we already spend more than CHF 1 Million (£800,000) per month on questionable benefits. Do we want to continue to pay with our health insurance premiums? **In summary: Anyone who has symptoms of a respiratory disease stays at home. The same applies to flu.** Testing does not bring any additional benefit." - Prof. Pietro Vernazza, MD is Chief Physician of infectiology at the St. Gallen Cantonal Hospital, in "Corona: Test, test and no end", 12 April 2020.

"The 2009 swine flu epidemic, the UK government predicted that as many as 65,000 might die.

In the end, fewer than 500 died.

Predictably, such daily accounting triggered fear and led politicians to make hasty, ill-advised decisions, such as stockpiling medication, without examining the evidence.

All eyes were focused on the new, unknown virus, and not on protecting people from more lethal threats, such as seasonal influenza, which in 2009 killed orders of magnitude more people than swine flu. It still does, as would be clear if the media bombarded us with hourly updates of the flu-related death toll. Similarly, in the United States alone, hospital-acquired infections kill some 99,000 patients annually. Yet, these unlucky people get next to no attention.

Why are we more scared of what is less likely to kill us? When swine flu spread, many governments followed the World Health Organization's advice and stockpiled "Tamiflu", a medication that was marketed to protect against the severe consequences of flu.

Yet, **many expert advisers to the WHO had financial ties to Drug Manufacturers, and there is still no evidence that "Tamiflu" is effective.**

The USA wasted over $1 Billion, and the UK over £400,000 on this medication." - Dr Gerd Gigerenzer, MD, professor of psychology and Director of the Harding Center for Risk Literacy at the Max Planck Institute for Human Development in Berlin, in "Why What Does Not Kill Us Makes Us Panic", Project Syndicate, 12 March 2020.

> *"So I cannot answer my nagging doubts, there does not seem to be anything special about this particular epidemic of influenza-like illness. There are, however, two consequences of this situation that bother me. The first is the lack of institutional credibility as perceived by my friends. The second is that once the limelight has moved on, will there be a serious and concentrated international effort to understand the causes and origins of influenza-like illnesses and the life cycle of its agents? Past form*

tells me not, and we will go back to pushing influenza as a universal plague under the roof of the hot house of commercial interest." - Dr Tom Jefferson, MD, epidemiologist, author and editor of the Cochrane Collaboration's acute respiratory infections group, in "Covid 19—many questions, no clear answers", British Medical Journal, 2 March 2020.

"We are on the eve of 25 April and we must be united against dictatorships and united in truth, we do not make this the hall of lies.

Not in the 26 February, but on 9 of March, the science, the science here evoked, said that the virus was little more than an influenza.

On that science is the one which has inspired this government.

I have said, it has been said, it is documented, it has been said.

Don't lie! Now tell the truth don't make this the classroom of the lie, at least here (Italian Parliament) we speak of the principles of Giambattista Vico, "Verum Ipsum Factum".

You have heard, and it has been given to you the numbers, I too will give you the numbers, not data, not pagan.

Don't say that here are also 25,000 deaths, its not true! Don't use the dead for rhetoric terrorism.

Data from the Istituto Superiore di Sanità (Italian National Institute of Health) says 96.3% died from other pathologies.

These are exactly the data.

The numbers says this, it is the truth.

That 60% have died from other pathologies, said by the Istituto Superiore di Sanità. If you don't know, study.

We are united in liberation against hypocrisy and lies, against forgery, against false numbers.

We need to give the real numbers:

Region	%
Lombardia	56%
Emilia-Romagna	14%
Piamonte	8%
Veneto	5%

(This represents the 83% of deaths within the neighbouring zones in the north of Italy).

We cannot imagine, to apply the same norms in a great unitary zone, so desperate by the epidemic, now here at least lets state the truth.

Lets measure like in Germany, let us be united in the liberation against hypocrisy, against lies, and against falsifications, against the false numbers, that are given to terrorize the Italians.

The 25,000 dead, said Professor Bassetti, died from Heart Attack, from Cancer, and other causes.

Let's not use them to humiliate Italy.

Don't use them to give citizens false news.

Given them the numbers check them!

I say there have not been in Italy 25,000 deaths from Coronavirus.

That not true!

It's a way to terrorize the Italian people and to impose a dictatorship of consent, it is ridiculous." - Vittorio Umberto Antonio Maria Sgarbi, Member of the Italian Parliament, Mayor of Sutri, in Chamber of Deputies, Parliament of Italy, 25 April 2020.

The Financial Troubles of Italy

2019

"Brussels has asked the Italian government to explain its lack of progress in reducing debt. Italy's populist government is accused of exposing the bloc to financial problems by ignoring budget discipline rules.

The EU on Wednesday issued a double warning to Rome about the precarious state of Italian public finances.

Italy only won EU approval for its 2019 budget after reducing its deficit to levels that were deemed to be acceptable. However, Rome went on to roll back austerity-inspired reforms and far-right deputy premier Matteo Salvini is now promising big tax cuts." - in "EU wants answers from Italy over debt", DW, 29 May 2019.

> *"Of particular concern for Brussels is Italy's mountain of debt that is expected to balloon to a huge 136.8% of GDP." - in DW, 20 November 2019.*

"Italy's government approved a 400 Million euro loan to Alitalia to carry the airline through May as it searches for a plan to save the money-losing company. The government had provided a 900 million euro lifeline to Alitalia in 2017, but the flagship airline continues to burn through cash." - 3 of December 1019.

> *"Italy approves 900 million euro rescue for Bank Popolare di Bari. The Bank was said to be in need of up to 1 Billion euros." - 15 December 2019.*

2 Warnings in one Day

Brussels is releasing assessments of fiscal compliance across the Eurozone next Wednesday when it could open an excessive debt procedure against Italy.

Why is Italy still the sick man of Europe?

"Since the financial crisis, Italy has struggled to kick-start its growth, and is lagging behind its European neighbours.

But the causes of the country's malaise date back decades, and hope for change is meagre.

Over the last decade, Italy has often been pinpointed as the "sick man in Europe", a vulnerable economy that is a risk to the European Union's financial stability.

The country's government recently cut its growth forecast for the year from 1% to 0.2%. Italy's public debt is the EU's highest, and with the meagre growth forecasted for this year, it is expected to rise. Italy is also currently the only EU member state in a recession. According to Carlo Alberto Carnevale-Maffe, Professor at Bocconi University School of Management in Milan, the situation is actually worse than the government estimates."- in DW, 29 March 2019.

A lack of fiscal discipline, the delay of fiscal and structural reforms, or even the reversal of past reforms may reignite pressures on more vulnerable sovereigns," the ECB warned in a report called Financial Stability Review.

Italy is the 3rd largest eurozone economy, it has the lowest growth of any euro currency bloc member, and is second to Greece in national debt.

Challenging debt

Italy's government debt to GDP ratio is the 4th-largest in the world, and the biggest in the EU, coming in at more than Euro €2.3 Trillion (US $2.6 Trillion).

18 May 2020

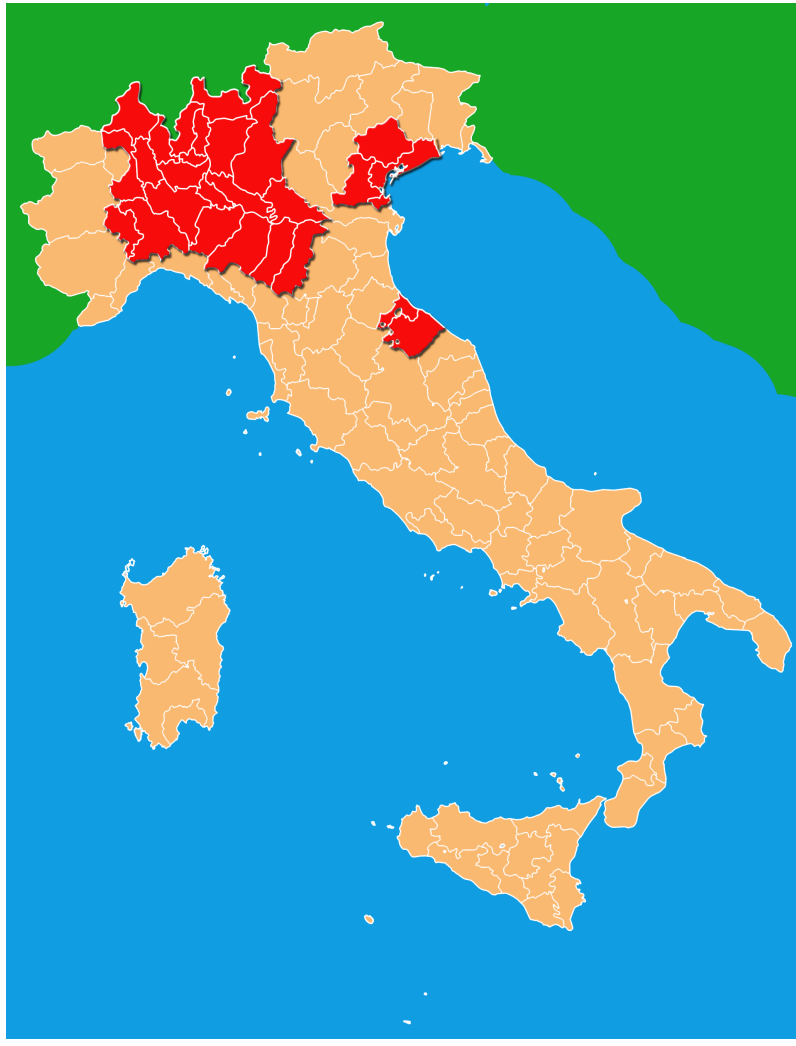
Macron, Merkel agree €500 Billion virus recovery plan for Europe

"France and Germany proposed Monday a €500 Billion Euro fund to finance the recovery of the European Union's

economy from the devastation wrought by the coronavirus crisis. The €500 billion euros will flow to the "worst-hit sectors and regions." - in AFP, 18 May 2020.

*"Northern European countries who have come out against a Franco-German proposal for €500 Billion Euros in coronavirus grants from the European Union budget do not realize that the EU will fall without Italy, Foreign Minister Luigi Di Maio said. "In the EU there are still countries stuck to their perches, but they must understand that Europe cannot do without Italy. Because if the trunk of a tree breaks, the branches also fall. Our only interest is to defend the Italian people. In these negotiations we must get as much money as possible to help Italian businesses, households and workers. United to get more resources. Italy will stand up for itself". **Under the scheme, Italy would be set to receive up to €100 Billion Euros in grants.**" - in ANSA, 19 May 2020.*

*"The money would then be issued as grants, rather than low-cost loans, that would see the entire bloc shoulder the burden of rebuild. Leaked French papers say the "**repayment could start after 3 years, spread over 40 years and be completed by 2060**". - in "Express", 20 May 2020.*



In red the areas quarantined on 8 March 2020

COVID-19 "pandemic" lockdown in Italy

"On 9 March 2020, the government of Italy imposed a national quarantine, restricting the movement of the population except for necessity, work, and health circumstances.

Additional lockdown restrictions mandated the temporary closure of non-essential shops and businesses.

This followed an earlier restriction announced on the previous day which affected 16 million people that affected the whole region of Lombardy and 14 largely-neighbouring provinces in Emilia-Romagna, Veneto, Piedmont and Marche, and prior to that a smaller-scale lockdown of 11 municipalities in the province of Lodi that had begun in late February.

The lockdown measures, were described as the largest suppression of constitutional rights in the history of the republic." - in "Wikipedia", 5 May 2020.

Increases in Mortality are Seen Each Winter

"Within the first 7 weeks of 2018, some 93,990 people died in England and Wales. An additional person died every 7 minutes during the first 49 days of 2018, compared with previous 5 years. On 2 January, after "an unprecedented step by NHS officials," thousands of non-urgent operations were cancelled, a clear sign of a system struggling to cope. Many hospitals were already at or beyond their safe working levels, "with high numbers of frail patients stuck on wards for want of social care," and a rise in influenza cases had begun." - Danny Dorling, in "Rise in mortality in England and Wales in first seven weeks of 2018", British Medical Journal, 14 March 2018

"Seasonal increases in mortality are seen each winter in England and Wales.

Further peaks of mortality occur in some winters, most commonly due to factors such as cold snaps and increased circulation of respiratory viruses, in particular influenza." - Richard G Pebody, Acting Head, Respiratory Diseases Department, Public Health England, in "Rapid responses", Excess mortality during the 2017/8 winter – the role of flu?, 16 March 2018.

Is the Flu less Dangerous than Covid-19?

"Let's look at the death rates; No it's not!

They are similar in prevalence and in death rate. Covid-19 it's similar to the flu if you study the numbers in 2017 and 2018, we had 50 to 60 million with the flu, and we had a similar death rate.

We always have between 37,000 and 60,000 deaths in the United States every single year: no pandemic talk, no shelter-in-place no shutting down at businesses, no sending doctors home." - Dr Dan Erickson, MD, 22 April 2020.

Country	Flu-Influenza Season	Flu-Influenza Deaths	Covid-19 Deaths (6)
Italy	2016-2017 (1)	**24981**	**32330**
United Kingdom	2017-2018 (2)	**26408**	**35,785**
	First 7 weeks in 2018 England & Wales (8)	**93,990**	
	2014-2015 (10) Excess winter deaths	**44,000**	
	Exceptionally Cold Winter 2009-2010 (10) Excess winter deaths	**26,000**	
	1999-2000 (11) Influenza Season	**21,497**	
	Winter Deaths (7)	**25000**	
	Very High Levels of Flu 1999-2000 (10) Excess winter deaths	**48,000**	
	1950-1951 (10) Excess winter deaths	**62,000**	
	1965-1966 (10) Excess winter deaths	**62,000**	
USA	2017–2018 (3)	**79400**	**92712**
France	2018-2019 (4)	**15000**	**28135**
Spain	2018-2019 (5)	**15000**	**27888**
Portugal	2018 Pneumonia (12) 2018 Respiratory (12) 2017 Respiratory (12)	**5,764** **13,305** **12,819**	**1,263**
Germany	2017-2018 (9)	**25000**	**8144**

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3. "Archived Estimated Influenza Illnesses, Medical visits, Hospitalizations, and Deaths in the United States — 2017–2018 influenza season", Centers for Disease Control and Prevention, National Center for Immunization and Respiratory Diseases, CDC, 22 November 2019.

4. "Institut Pasteur", 12 April 2020.

5. "Diario 16", 11 February 2020.

6. As of 20 May 2020 in "Coronavirus COVID-19 Global Cases Map developed by the Johns Hopkins Center for Systems Science and Engineering".

7. "Elderly person dies every SEVEN minutes due to fuel poverty scandal", Express, 12 November 2014.

8. "Rise in mortality in England and Wales in first seven weeks of 2018", British Medical Journal, 14 March 2018

9. "Report on the Epidemiology of Influenza in Germany 2018/2019", Robert Koch Institute, 30 September 2019.

10. "Highest number of excess winter deaths since 1999/2000", Office for National Statistics, 25 November 2015

11. NHS public health functions agreement 2016-17, Service specification No.13, Seasonal influenza immunisation programme (2016-17 programme), April 2016.

12. "Pneumonia foi a terceira causa de morte em Portugal em 2018", Expresso, 21 February 2020.

We Took The Samples To The Laboratory

"I am a science expert, I know what am saying. We took samples from goats, we took samples from sheep, we took samples from Pawpaw fruits, we even took samples of can engine oil. And we took samples form other different things too. And we took the samples to the laboratory.

Without their knowing. We even named the samples.

For example the oil sample we gave it the name Jabil Hamza, 30 years old Male, the result came back negative.

From the sample of Jackfruit we named it Sarah Samuel, 45 years old, Female, the results came back inconclusive.

The samples of Pawpaw fruit we named it Elizabeth Ane, 26 years old, Female, the Pawpaw fruit results came back positive for Coronavirus, that means that the liquid from the Pawpaw fruit is positive.

We send samples from a bird called Kware, the results came back positive. We sent samples of a rabbit, the results came back inconclusive. We sent samples from a goat, the results came back positive.

We sent the samples from a sheep, it came back negative. And so on and so on, so now when you see this you know that you have to place all Pawpaw fruit into isolation and also the sheep have to be placed in isolation.

Now even the Pawpaw fruit samples are positive, they have coronavirus, so WHO should really do something big about these things.

The samples from the Pawpaw fruit where not taken from the skin, they where taken with skilled precision from the pristine interior of the fruit." - Dr John Pombe Magufuli, President of Tanzania, since 2015. Majoring in Chemistry, 1988. Two Doctorates in Chemistry, 1994 and 2009, in "Presidential Address", 3 May 2020.

Prof. Dr. Sucharit Bhakdi, MD

"Prof. Dr. Sucharit Bhakdi, MD, a Specialist in Microbiology and Infection Epidemiology.

Academic Career

Prof. Bhakdi graduated in medicine in 1970 at the University of Bonn, Germany. After completion of internships in Bonn, Bremen and Dortmund, he was recipient of several scholarships, e.g. at the Max-Planck-Institute for Immunobiology, Freiburg, through the Alexander von Humboldt Stiftung and the Danish Medical Research Council. Between 1977 and 1990 he received his training as a basic and clinical microbiologist at the Institute of Medical Microbiology, University of Giessen. Since 1982 he was Professor of Medical Microbiology in Giessen.

In 1990 Prof. Bhakdi joined the faculty of Medicine of the Johannes Gutenberg-Unversity Mainz as chair of the Institute of Medical Microbiology and Hygiene. In the field of microbiology/immunology, Prof. Bhakdi has contributed more than 250 original articles and 10 major reviews.

His research focuses on studies on the role of complement, pore forming toxins and the immunopathogenesis of atherosclerosis. He functions as reviewer for the Germany Research Council (DFG), the National Science Foundation (USA), the Canadian Science Foundation, the Israeli Science Foundation and many scientific journals. Prof. Bhakdi was awarded numerous prestigious awards, among them the W.H. Hauss Award (2005) of the German Atherosclerosis Society and the Gotthard-Schettler-Award (1999).

Scientific Work

In 1978, Dr Bhakdi, MD discovered the first protein that attack and damage cells by sinking them into the cell membrane, resulting in the formation of a pore.

It was the long-sought enforcer molecule of the complement system, which is formed as a result of a chain reaction of the immune system on the surface of foreign cells. With the subsequent discovery that bacteria can also produce pore-forming proteins, a new field of research was opened.

Today it is known that the vast majority of disease-causing bacteria produce pore formers that damage host cells. In 1984 Dr Bhakdi, MD received the invitation to study the concept of membrane damage to cells by pore formers by the Royal Society in London.

The study of this topic was henceforth a focus of his research activities.

The study of complement led Dr Bhakdi to the field of Atherosclerosis. In 1989, he discovered that this component of our immune system is puzzlingly activated in the walls of vessels where the low-density lipoprotein (LDL, the "bad" cholesterol content) is deposited.

The cause of this could be clarified and the subsequent work led Dr Bhakdi to a new concept of explanation - the Mainz hypothesis - on the development of the widespread disease Atherosclerosis. He made important contributions to malaria, and dengue research." - in Wikipedia, 9 May 2020.

Prof. Dr. Sucharit Bhakdi, MD

Open Letter to Angela Merkel

Dear Chancellor,

As Emeritus of the Johannes Gutenberg University in Mainz and longtime director of the Institute for Medical Microbiology, I feel obliged to critically question the far-reaching restrictions on public life that we are currently taking on ourselves in order to reduce the spread of the COVID19 virus.

The reason for my concern lies above all in the truly unforeseeable socio-economic consequences of the drastic

containment measures which are currently being applied in large parts of Europe and which are also already being practised on a large scale in Germany.

My wish is to discuss critically the advantages and disadvantages of restricting public life and the resulting long-term effects.

To this end, I am confronted with 5 questions which have not been answered sufficiently so far, but which are indispensable for a balanced analysis. Without restricting public life across the board and sow the seeds for an even more intensive polarization of society than is already taking place.

1. Statistics

In Infectiology – founded by Robert Koch himself – a traditional distinction is made between infection and disease. An illness requires a clinical manifestation.

Therefore, only patients with symptoms such as fever or cough should be included in the statistics as new cases.

In other words, a new infection – as measured by the COVID19 Test – does not necessarily mean that we are dealing with a newly ill patient who needs a hospital bed.

However, **it is currently assumed that 5% of all infected people become seriously ill** and require ventilation.

Projections based on this estimate suggest that the healthcare system could be overburdened.

My question: Did the projections make a distinction between symptom free infected people and actual, sick patients – i.e. people who develop symptoms?

2. Dangerousness

A number of coronaviruses have been circulating for a long time – l**argely unnoticed by the media.**

If it should turn out that the COVID19 virus should not be ascribed a significantly higher risk potential than the already circulating corona viruses, all countermeasures

would obviously become unnecessary.

The internationally recognized "International Journal of Antimicrobial Agents" will soon publish a paper that addresses exactly this question.

Preliminary results of the study can already be seen today and lead to the conclusion that the new virus is NOT different from traditional corona viruses in terms of dangerousness. The authors express this in the title of their paper "SARSCoV2: Fear versus Data", March 2020.

My question: How does the current workload of intensive care units with patients with diagnosed COVID19 compare to other coronavirus infections, and to what extent will this data be taken into account in further decision making by the federal government?

In addition: Has the above study been taken into account in the planning so far? Here too, of course, "diagnosed" means that the virus plays a decisive role in the patient's state of illness, and not that previous illnesses play a greater role.

3. Dissemination

According to a report in the "Süddeutsche Zeitung", not even the much cited Robert Koch Institute knows exactly how much is tested for COVID19.

It is a fact, however, that **a rapid increase in the number of cases has recently been observed in Germany as the volume of tests increases.**

It is therefore reasonable to suspect that the virus has already spread unnoticed in the healthy population.

This would have two consequences: firstly, it would mean that the official death rate – on 26 March 2020, for example, there were 206 deaths from around 37,300 infections, or 0.55% – is too high; and secondly, it would mean that it would hardly be possible to prevent the virus from spreading in the healthy population.

My question: Has there already been a random sample of the healthy general population to validate the real spread of the virus, or is this planned in the near future?

4. Mortality

The fear of a rise in the death rate in Germany (currently 0.55%) is currently the subject of particularly intense media attention. Many people are worried that it could shoot up like in Italy (10%) and Spain (7%) if action is not taken in time.

The mistake is being made worldwide to report virus related deaths as soon as it is established that the virus was present at the time of death – **regardless of other factors.**

This violates a basic principle of infectiology: only when it is certain that an agent has played a significant role in the disease or the death, a diagnosis may be made.

The Association of the Scientific Medical Societies of Germany expressly writes in its guidelines:

"In addition to the cause of death, a causal chain must be stated, with the corresponding underlying disease in third place on the death certificate. In possible, four-part causal chains should be specified."

At present there is no official information on whether, at least in retrospect, more critical analyses of medical records have been undertaken to determine how many deaths were actually caused by the virus.

My question: Has Germany simply followed this trend of a COVID19 general suspicion?

And; is it intended to continue this categorisation uncritically as in other countries?

How, then, is a distinction to be made between genuine corona related deaths and accidental virus presence at the time of death?

5. Comparability

The appalling situation in Italy is repeatedly used as a reference scenario. However, the true role of the virus in that country is completely unclear for many reasons – not only because points 3 and 4 above also apply here, but also because exceptional external factors exist which make these regions particularly vulnerable.

One of these factors is the increased air pollution in the north of Italy. According to WHO estimates, this situation, even without the virus, led to over 8,000 additional deaths per year in 2006 in the 13 largest cities in Italy alone.

The situation has not changed significantly since then.

Finally, it has also been shown that air pollution greatly increases the risk of viral lung diseases in very young and elderly people. Moreover, 27.4% of the particularly vulnerable population in this country live with young people, and in Spain as many as 33.5%.

In Germany, the figure is only 7%.

In addition, according to Prof. Dr Reinhard Busse, head of the Department of Management in Health Care at the TU Berlin, Germany is significantly better equipped than Italy in terms of intensive care units – by a factor of about 2.5.

My question: What efforts are being made to make the population aware of these elementary differences, and to make people understand that scenarios like those in Italy or Spain are not realistic here?" - Prof. Em. Dr. Sucharit Bhakdi, MD, 26 March 2020.

> *"Reinhard Busse, Head of the Department of Management in Health Care at the TU Berlin and Co-Director of the European Observatory on Health Systems and Policies, emphasized that the Italian situation "would by no means be overwhelming us". This is still very easy to handle with the current structures. Germany over 27,000 intensive care beds." - in "According to experts, COVID-19 overloads German hospitals", Deutsches Ärzteblatt, 12 March 2020.*

Determining the Cause of Death

"The cause of death is illness, injury or poisoning that caused death directly. In addition to the cause of death, a causal chain must be specified, with the corresponding basic illness in third place on the death certificate.

The causal chain is z. For example: Arteriosclerosis, Coronary Artery Sclerosis, Myocardial Infarction, Occasionally, four-part causal chains must also be specified." - in "S1 guideline 054-001, rules for carrying out the medical morgue", Rules for performing medical Inquest, Guidelines of the German Society for Forensic Medicine, 2017.

Health Effects of PM

"**What is Particulate Matter? What is PM2.5?**

Particulate Matter (PM) is a term used to describe the mixture of solid particles and liquid droplets in the air. PM2.5 is also known as fine particulate matter (2.5 micrometres is one 400th of a millimetre).

Health Effects of PM

Inhalation of particulate pollution can have adverse health impacts, and there is understood to be no safe threshold below which no adverse effects would be anticipated. **The biggest impact of particulate air pollution on public health is understood to be from long-term exposure to PM2.5, which increases the age-specific mortality risk, particularly from cardiovascular causes.**

Exposure to high concentrations of PM (e.g. during short-term pollution episodes) **can also exacerbate lung and heart conditions, significantly affecting quality of life, and increase deaths and hospital admissions.**

The elderly, and those with predisposed respiratory and cardiovascular disease, are known to be more susceptible to the health impacts from air pollution." - in "Public Health: Sources and Effects of PM2.5", DEFRA, 2020.

*"**Recognition that air pollution might impact on cardiovascular disease, the commonest cause of death in the UK, came as a surprise to most when first identified.** Cardiovascular disease is very common and, as exposure to air pollution, both in the long and short term, contributes to initiation and exacerbation of disease, it is likely that even modest reductions in exposure will result in significant health gain." - Professor Jon Ayres, Chairman of the Committee on the Medical Effects of Air Pollutants*

"**PO2:** Partial pressure of oxygen.

PM10, PM2.5, PM1.0: The concentrations (expressed in μg/m3) of particles of generally less than 10 μm, 2.5 μm and 1.0 μm in the ambient air. On a typical day in London, for example, PM10 = 20 μg/m3. The terms PM10, PM2.5 etc. are sometimes used to describe particles of less than 10 μm, 2.5 μm etc. diameter, but this is not strictly correct: the terms refer to concentrations of particles not to the particles themselves.

Nitrogen dioxide (NO2): A gas produced during combustion by the oxidation of atmospheric nitrogen.

The principal conclusions of the report are that:

1. **Clear associations have been reported between both daily and long-term average concentrations of air pollutants and effects on the cardiovascular system, reflected by a variety of outcome measures including risk of death and of hospital admissions.**

2. It is not possible to be certain which components of the ambient pollution mixture are responsible for these effects but it is likely that fine particles play an important part.

In terms of the strength and statistical significance of the associations referred to (1., 2.), the evidence linking daily cardiovascular deaths with concentrations of particles (measured as PM10 or as Black Smoke), Nitrogen Dioxide (NO2), Sulphur Dioxide (SO2), Ozone (O3) and Carbon Monoxide (CO) are similar." - in "Cardiovascular Disease and Air Pollution A report by the Committee on the Medical Effects of Air Pollutants", February 2006.

Air Pollution Country Fact Sheet

"The health effects of air pollution can also be quantified and expressed as premature deaths.

Premature deaths are deaths that occur before a person reaches an expected age. This expected age is typically the age of standard life expectancy for a country and gender.

Premature deaths are considered to be preventable if their cause can be eliminated.

The table below shows the: Premature Deaths Attributable to PM2.5 and Nitrogen Dioxide (NO2) exposure in the United Kingdom and in Italy in 2016.

United Kingdom - 2016

Premature Deaths Nitrogen Dioxide (NO2)	Premature Deaths PM2.5
11,800	31,800

Italy - 2016

Premature Deaths Nitrogen Dioxide (NO2)	Premature Deaths PM2.5
14,600	58,600

- in "Air pollution country fact sheet", European Environment Information, Agency of the European Union, 27 April 2020.

Size, Shape & Solubility Matter

"The size of the particle is the main determinant of where in the respiratory tract the particle will come to rest when inhaled.

Larger particles are generally filtered in the nose and throat via cilia and mucus, but particulate matter smaller than about 10 micrometers, can settle in the bronchi and lungs and cause health problems.

The 10-micrometer size does not represent a strict boundary between respirable and non-respirable particles but has been agreed upon for monitoring of airborne particulate matter by most regulatory agencies.

Because of their small size, particles on the order of 10 micrometers or less (coarse particulate matter, PM10) can penetrate the deepest part of the lungs such as the bronchioles or alveoli; when asthmatics are exposed to these conditions it can trigger bronchoconstriction.

Similarly, so called fine particulate matter (PM2.5), tends to penetrate into the gas exchange regions of the lung (alveolus), and very small particles (ultrafine particulate matter, PM0.1) may pass through the lungs to affect other organs.

Penetration of particles is not wholly dependent on their size; shape and chemical composition also play a part.

To avoid this complication, simple nomenclature is used to indicate the different degrees of relative penetration of a PM particle into the cardiovascular system.

Inhalable particles penetrate no further than the bronchi as they are filtered out by the cilia.

Thoracic particles can penetrate right into terminal bronchioles whereas PM0.1, which can penetrate to alveoli, the gas exchange area, and hence the circulatory system are termed respirable particles.

In analogy, the inhalable dust fraction is the fraction of dust entering the nose and mouth which may be deposited anywhere in the respiratory tract.

The thoracic fraction is the fraction that enters the thorax and is deposited within the lung's airways. The respirable fraction is what is deposited in the gas exchange regions (alveoli).

Health problems

The effects of inhaling particulate matter that have been widely studied in humans and animals include asthma, lung cancer, respiratory diseases, cardiovascular disease, premature delivery, birth defects, low birth weight, and premature death. The World Health Organization (WHO) estimated in 2005:

> ***"Fine particulate air pollution (PM2.5), causes about 3% of mortality from cardiopulmonary disease, about 5% of mortality from cancer of the trachea, bronchus, and lung, and about 1% of mortality from acute respiratory infections in children under 5 years, worldwide**."*

A 2011 study concluded that **traffic exhaust is the single most serious preventable cause of heart attack in the general public,** the cause of 7.4% of all attacks.

The largest US study on acute health effects of coarse particle pollution between 2.5 and 10 micrometers in diameter, was published 2008 and found an association with hospital admissions for cardiovascular diseases but no evidence of an association with the number of hospital admissions for respiratory diseases." - in "Wikipedia", 9 May 2020.

Drug Induced Pulmonary Injury

"As a result of the increasing use of Drugs the clinician is more and more frequently confronted with drug-induced diseases that may lead to organ failure or even death. Many foreign compounds can be metabolized to potentially toxic arylating, alkylating, or free radical intermediates.

These concepts of metabolic activation were originally developed in the field of chemical carcinogenesis.

Because the enzymatic pathways responsible for the metabolic activation of carcinogens are the same mono-oxygenases that metabolize **most Drugs it soon became apparent that drug induced tissue lesions may be mediated by similar mechanisms.**

Thus it has been demonstrated in experimental models that the hepatic and renal damage produced by Drugs such as Acetaminophen, Phenacetin, Isoniazid, Iproniazid, Furosemide, and possibly Cephaloridine are related to their metabolic activation to toxic intermediates." - Bernhard H. Lauterburg, Charles V. Smith, and Jerry R. Mitchell, in **"Molecular Mechanisms Involved in Drug-Induced Pulmonary Injuries"**, Seminar in Respiratory Medicine, October 1980.

Pulmonary Drug Toxicity

"Pulmonary Drug Toxicity is increasingly being diagnosed as a cause of Acute and Chronic Lung Disease.

Numerous agents including cytotoxic and noncytotoxic Drugs have the potential to cause pulmonary toxicity.

The Clinical and Radiologic Manifestations of these Drugs generally reflect the underlying histopathologic processes and include:

1. Diffuse Alveolar Damage
2. Nonspecific Interstitial Pneumonia
3. Bronchiolitis Obliterans Organizing Pneumonia

4. Eosinophilic Pneumonia
5. Obliterative Bronchiolitis
6. Pulmonary Hemorrhage
7. Edema
8. Hypertension, or Veno-Occlusive Disease

Diffuse Alveolar Damage is a common manifestation of Pulmonary Drug Toxicity and is frequently caused by Cytotoxic Drugs, especially Cyclophosphamide, Bleomycin, and Carmustine." - Santiago E. Rossi, et. al., in "Pulmonary Drug Toxicity: Radiologic and Pathologic Manifestations", Radio Graphics, 1 September 2000.

Drug Induced Interstitial Lung Disease

"The most common form of Drug-induced Lung Toxicity is drug-induced interstitial lung disease (DILD).

More than 380 medications are known to cause drug-induced respiratory diseases.

Drugs have been associated with pulmonary complications of various types, including interstitial inflammation and fibrosis, bronchospasm, pulmonary edema, and pleural effusions.

Drug-induced interstitial lung disease can be caused by chemotherapeutic agents, antibiotics, antiarrhythmic drugs, and immunosuppressive agents.

The lungs are a target for a variety of possible toxic substances because of their large contact surface.

They can also act as a metabolism site for certain substances.

Drug-induced lung injury may involve the airways, lung parenchyma, mediastinum, pleura, pulmonary vasculature, and/or the neuromuscular system. Now there are over 450 drugs recognizing as being implicated in interstitial lung disease.

Aspirin is the most common anti-inflammatory drug associated with Adverse Drug Reactions (ADR).

An ARDS-type syndrome has been described with salicylate toxicity.

Nonsteroidal anti-inflammatory drugs (NSAIDs) may cause acute pulmonary hypersensitivity reactions resulting in bilateral interstitial infiltration and eosinophilic pneumonia.

Because **many patients with DILD are treated with immunosuppressive medications and are at some modest increased risk for the development of infections**." - Martin Schwaiblmair, et al., in **"Drug Induced Interstitial Lung Disease"**, Open Respiratory Medicine Journal, 27 July 2012.

> *"**More than 600 drugs are known to cause Pulmonary Toxicity**, and illicit drugs are well-known to result in pulmonary toxicities." - Dr Klaus-Dieter Lessnau, MD in"Drug-Induced Pulmonary Toxicity", MedScape", 9 April 2019.*

"**Drug-induced pulmonary disease is not a single disorder**, but rather a common clinical problem in which a patient without previous pulmonary disease develops respiratory symptoms, chest x-ray changes, deterioration of pulmonary function, histologic changes, or several of these findings in association with drug therapy.

Over 150 drugs or categories of drugs have been reported to cause pulmonary disease; many drugs are thought to provoke a hypersensitivity response.

Some drugs (eg, nitrofurantoin) can cause different injury patterns in different patients.

Depending on the drug, drug-induced syndromes can cause: Interstitial Fibrosis, Organizing Pneumonia, Asthma, Noncardiogenic Pulmonary Edema, Pleural Effusions, Pulmonary Eosinophilia, Pulmonary Hemorrhage, or Veno-occlusive Disease." - Dr Joyce Lee, MD, MAS, University of Colorado Denver, in "Drug-Induced Pulmonary Disease", Merck MSD Manuals, September 2019.

Drug Induced Pulmonary Disease

"Drug-induced pulmonary disease is lung disease brought on by a bad reaction to a medicine.
Pulmonary means related to the lungs.

Causes

Many types of Lung Injury can result from Medicines.
It is usually impossible to predict who will **develop Lung Disease from a Medicine.**

Types of Lung Problems or Diseases that may be Caused by Medicines:

1. Allergic reactions:
a) Asthma
b) Hypersensitivity Pneumonitis
c) Eosinophilic Pneumonia

2. Bleeding into the lung air sacs, called alveoli (alveolar hemorrhage)

3. Swelling and inflamed tissue in the main passages that carry air to the lungs (bronchitis)

4. Damage to lung tissue (interstitial fibrosis)

5. Drugs that cause the immune system to mistakenly attack and destroy healthy body tissue, such as drug-induced lupus erythematosus

6. Granulomatous lung disease: a type of inflammation in the lungs

7. Inflammation of the lung air sacs (pneumonitis or infiltration)

8. Lung vasculitis (inflammation of lung blood vessels)

9. Lymph node swelling

10. Swelling and irritation (inflammation) of the chest area between the lungs (mediastinitis)

11. Abnormal buildup of fluid in the lungs (pulmonary edema)

12. Buildup of fluid between the layers of tissue that line the lungs and chest cavity (pleural effusion)

13. Many medicines and substances are known to cause lung disease.

These include:

I. Antibiotics, such as:

a) Nitrofurantoin
b) Sulfa Drugs

II. Heart Medicines, such as: Amiodarone

III. Chemotherapy Drugs such as:

a) Bleomycin
b) Cyclophosphamide
c) Methotrexate

- in "U.S. National Library of Medicine ", 18 May 2020.

Catching The Covid-19 Virus

"The vast majority of patients who end up with Coronavirus are either asymptomatic or mildly ill.

The most important thing I can share with people is that: Getting coronavirus overwhelmingly people recover, or didn't know they had it.

Flattening the Curve

The phrase flattening the curve was intended to protect the healthcare system. Make sure it wasn't overwhelmed.

Not only is that not happened, it didn't even happen in New York.

So it certainly **didn't happen anywhere across the country,** and in fact hospitals have tremendous excess capacity. The hospital's I work at, we were having a 50% census, for about 6 weeks, we're just now kind of coming back to 60% - 70% census.

The nurses have been furloughed, about 50% of our ER Technicians, which are our assistants in ER, have been laid off because the census is so low.

I was very surprised to hear that they were laying off 50% today, I mean this is 22 May **does that mean, they don't think that the volume is ever going to pick up again.**

This was very alarming to me. I have nurses that do contract work, so **I spoke with a friend last week, and she said that her contracts for June and July were cancelled. She's got absolutely no work for June and July.**

Hydroxychloroquine

I think the majority physicians, **there are a lot of professional constraints on physicians, that make them worried for their own careers, and their own future if they do deviate from any kind of leadership suggestions.**

And I have been a doctor for 20 years, and **something very alarming happened a month and a half ago, myself along with every other doctor in the state received a letter**

from the California State Medical Board, essentially threatening us, if we were to prescribe a drug, for example like Hydroxychloroquine.

And I can assure you that **nothing like this has ever happened in my career, where the Medical Board sent letters to everybody essentially threatening us with unprofessional conduct if we were to deviate it from our peers**, really in this regard, and I found that very upsetting, and I believe it's actions like that are why physicians don't speak out. **I ended up using Hydroxychloroquine,** 2 times actually on Covid positive patients, and I checked in with them. **Both of them got better within 12 hours, which I found remarkable there.** I don't believe it's a coincidence.

The Lockdown

I have no doubt I've no doubt that more people will die due to the lockdown, than to coronavirus.

No doubt I don't think it's debatable.

The numbers of: Depression, Suicide, alcoholism, Heart Failure that's gotten worse, Diabetic Exacerbations that have gotten worse, the Strokes that are missed, the Heart Attacks that are missed.

I've had patients who've had to have Worsening Amputations due to delayed care, there's no doubt if you stood in my shoes and you read the letters from all the hundreds of physicians that I've received I would like to share them with you I could read them you will find them on our website (adoctoraday.com), the story, after story of harm to patients due to the lockdown." - Dr Simone Gold, MD, Board-Certified Emergency Physician and also a Lawyer, in "What Is the Medical Impact of the Lockdown?", PragerU, 30 May 2020.

"The way in which we code deaths in our country is very generous in the sense that all the people who die in hospitals with the coronavirus are deemed to be dying of the coronavirus.

On re-evaluation by the National Institute of Health, **only 12% of death certificates have shown a direct causality from coronavirus**, while 88% of patients who have died have at least one pre-morbidity - many had 2 or 3." - Prof Walter Ricciardi, scientific adviser to Italy's minister of health, in "Why have so many coronavirus patients died in Italy?", The Telegraph, 23 March 2020

BLM Protests

Across the world Black Lives Mater protests from the end of May to the 7 of June 2020, had shown that protesters where not falling dead sick from the COVID-19 virus.

WHO Advice Says Asymptomatic COVID-19 Patients "very rarely" Spread Virus

"From the data we have, it still seems to be rare that an asymptomatic person actually transmits onward to a secondary individual, It's very rare." - Dr. Maria Van Kerkhove, Head of WHO's Emerging Diseases and Zoonosis Unit, in "News Briefing", United Nations agency's Geneva headquarters, 8 June 2020.

Chapter 24

A Hole is a Hole

To “define “leaky patches” versus “pores”. The leaky patch model, contends that membrane permeability defects arise through local phospholipid disorder because of reorientation of lipid around inserted, apolar protein domains.

The pore concept advanced by Mayer, and ourselves proposes that one apolar surface of inserted protein anchors the polypeptide chains firmly to the membrane, while a polar surface forces open a hydrophilic passage.

Hence, pores must be lined at least in part by protein; note that the pore concept has never contended that the pores must inevitably be represented by circularized protein structures.

Nelsestuen demonstrated:

1. The stability of C5b-9 functional lesions in the absence of fragmentation, fusion or aggregation of the lipid vesicles.
2. Full release of trapped vesicular contents by one complex per vesicle (fulfilling the “one-hit, one-hole” prediction).

The investigators concluded that "the terms pore, channel, cut or incision, but not leaky patch, would appear to be appropriate descriptive terms for this lesion”. The concept of membrane damage by Pore-Forming Proteins has been extended to cover several families of bacterial cytolysins, toxic products of fungi, amoebae, higher parasites and cytotoxic T tymphocytes.” - Prof. Sucharit Bhakdi, MD, Institute of Medical Microbiology, University of Mainz; Jorgen Tranum-Jensen, Professor of Anatomy, University of Copenhagen, 1991.

"Pore-Forming proteins (also known as Pore-Forming Toxins) are usually produced by bacteria, and include a number of protein exotoxins but may also be produced by other organisms such as earthworms, who produce lysenin. They are frequently cytotoxic (toxic to cells), as they create unregulated pores in the membrane of targeted cells." - in "Wikipedia", 9 May 2020.

"The following example, is given: to allow the reader, to easily visualize and comprehend; the metabolic mechanism, of when, an increased number of any type of a pathogenic germ, is allowed to grow (beyond normal levels) in the body system, and its consequence, in producing ill health symptoms. The following example, will serve to lustrate, the casual action of bacteria." - Rui Alexandre Gabirro, Emunctologist

Bacterial Toxigenesis

Toxigenesis, or the ability to produce toxins, is an underlying mechanism by which many bacterial pathogens produce symptoms of ill health.

At a chemical level, there are 2 main types of bacterial toxins:

1. Lipopolysaccharides (LPS); is an endotoxin derived from the outer membrane (cell wall) of Gram-negative bacteria (microbial LPS is consistently absorbed through the intestinal epithelia), and proteins, which are released from bacterial cells.
2. Cell-Associated Toxins, are referred to as; Endotoxins, and the Extracellular Diffusible Toxins are referred to as Exotoxins.

Exotoxin and Enterotoxin

An exotoxin is a toxin secreted by bacteria. An exotoxin can cause damage to the host by destroying cells or disrupting normal cellular metabolism. There are several classes of toxins, which are (in essence), the metabolic waste (excrement) from bacteria natural metabolism.

1. Enterotoxin, is a type of exotoxin that can be found in the intestinal track. The presence of endotoxins in the blood is called endotoxemia, which can lead to septic shock.

2. Neurotoxin; is a Exotoxin that affects nerve cells.

3. Leukocidin; is a type of cytotoxin created by some types of bacteria (Staphylococcus), a type of pore-forming toxin.

4. Hemolysins or haemolysins; are lipids and proteins that cause lysis of red blood cells by disrupting the cell membrane. Many bacteria produce hemolysins, it is now believed that fungi also produce hemolysins. Many hemolysins are pore-forming toxins. Hemolysins can be secreted by many different kinds of bacteria such as Staphylococcus aureus, Escherichia coli and others. Bacterium Staphylococcus aureus is a specific example of pore-forming hemolysin production. Staphylococcus aureus, when present in great numbers in the body system, may lead to several conditions such as Pneumonia and Sepsis.

Exotoxin from Staphylococcus Aureus cause toxic shock syndrome, which can produce symptoms ranging from nausea, fever and sore throat, to collapse of the central nervous and circulatory systems.

Enterotoxins have 3 different basis of activity.

1. Enterotoxin; like Diphtheria toxin, can cause the destruction of the host cell to which it binds. The binding of

the toxin causes the formation of a hole, or pore, in the host cell membrane.

2. Enterotoxin; Superantigen toxin. Superantigen exotoxins, have a greater effects upon the immune system, particularly with respect to the T-cells (all toxins affect the immune system).

3. Enterotoxin; A-B toxin. An A-B toxin consists of 2 or more toxin subunits that work together as a team to exert their destructive effect. Typically, the A subunit binds to the host cell wall and forms a channel through the membrane. The channel allows the B subunit to get into the cell. An example of an A-B toxin is the enterotoxin that is produced by Vibrio cholerae (cholera toxin).

Pathogenic Micro-Organisms and Man

"Bacteria fall into 3 classes:

1. The cocci, which may be subdivided into;

a) Double cell types (such as the pneumonia species)
b) Chain forms (streptococci)
c) Cluster-forming species (staphylococci)

2. The rod-shaped bacilli (bacillus means rod- shaped).

3. Type the spiral-shaped spirochaetes.

When the pathogenic forms invade the body they may cause damage by the destruction of cells or by their accumulation, as in diphtheria.

It is however, far more usual for the harmful effects to be due to the metabolic wastes or toxins that they produce. Some of these toxins are among the most potent poisons known; as little as 0.0001 millilitres of botulin toxin can cause the death of a guinea-pig.

In some cases, such as tetanus and gangrene, the bacteria feed on living cells and dead wound tissues but the powerful toxins they produce cause death by diffusing into uninfected in nature, bacteria compete with many other micro-organisms and some of these produce substances which destroy the bacteria.

Well-known examples are the fungal extracts penicillin and streptomycin, which are used as antibiotics to combat infectious bacteria in the body." - P. T. Marshall, G. M. Hughes, in "Physiology of Mammals and Other Vertebrates", 1980.

Exotoxins

"The waste products excreted by the bacterial cell (called exotoxins) may act as toxins or poisons to cells of the host. I he bacterial cells may also interfere with vital chemical reactions of the host cells by affecting the formations of enzymes essential to these reactions, or they may compete for the supply of nutrients essential for the health of the host cell.

Some of the exotoxins secreted by bacterial cells are very specific in the way in which they act and also in the type of tissue affected.

The microorganism that is the infective agent in the rapidly fatal disease called botulism secretes an exotoxin which causes paralysis of the respiratory muscles.

Exotoxin from the organism that causes tetanus brings about spasms of the voluntary or skeletal muscles.

This toxin has a great affinity for the tissues of the brain and spinal cord." - in "A Textbook for Dental Assistants", 1975.

Toxic Shock Syndrome

"Staphylococcus Aureus produces a wide variety of exoproteins that contribute to its ability to colonize and cause disease in mammalian hosts.

Nearly all strains secrete a group of enzymes and

cytotoxins which includes 4 hemolysins (alpha, beta, gamma, delta), nucleases, proteases, lipases, hyaluronidase, and collagenase.

Some strains produce one or more additional exoproteins, which include Toxic Shock Syndrome Toxin-1 (TSST-1), the staphylococcal enterotoxins (SEA, SEB, SECn, SED, SEE, SEG, SEH, and SEI), the exfoliative toxins (ETA and ETB), and leukocidin.

Each of these toxins is known to have potent effects on cells of the immune system.

The question then arises of which Staphylococcal Enterotoxins, also known as Pyrogenic Toxin Superantigens (PTSAgs) effects are required for Toxic Shock Syndrome (TSS) induction.

Furthermore, PTSAgs are typically secreted in the postexponential phase of growth, being made in the greatest amounts when the bacterial cells are present in the highest concentration.

It is reasonable to speculate, then, that the PTSAgs are important in the early events that lead to establishment of an infection site in a new host, which would most successfully occur after transmission of bacteria that were present at high cell densities.

Finally, new PTSAgs arise, or are recognized every few years, creating the possibility for newly emergent diseases. In the past, Staphylococcus Aureus strains have cycled in roughly 10-year periods, as exemplified by the 80/81 S. aureus strains isolated from hospital populations in the 1950s and by the 52/52A strains isolated in the 1960s.

Clearly, Toxic Shock Syndrome Toxin-1, TSST-1-positive strains emerged in the 1970s as significant pathogenic strains of S. aureus." - in "Exotoxins of Staphylococcus aureus", Clinical Microbiology Reviews, January 2000.

Exotoxins Are Required for the Pathogenesis of Staphylococcus Aureus Pneumonia

"Staphylococcus aureus is an important bacterial pathogen causing pneumonia in both adult and pediatric populations.

In recent reports, workers have described the growing incidence of severe S. aureus pneumonia in otherwise healthy individuals, often caused by multi-drug-resistant strains. In addition, S. aureus remains one of the most common causes of ventilator-associated pneumonia, contributing to significant morbidity and mortality.

S. aureus exotoxins may play a pivotal role in lung parenchymal injury. It is readily appreciated that insults to the alveolar epithelium contribute to impaired gas exchange.

Furthermore, there are detrimental systemic effects of pulmonary inflammation, as patients with acute lung injury are susceptible to multiple-organ dysfunction and increased mortality. Multiple studies have highlighted the association of the Panton-Valentine leukocidin (PVL) with S. aureus strains isolated from patients with severe necrotizing pneumonia. Like alpha-toxin and other hemolysins, PVL is a poreforming toxin whose expression is regulated by accessory gene regulator.

Considering the data presented here, it is plausible to speculate that S. aureus alpha-toxin and PVL may both have the ability to induce pulmonary inflammation, resulting in systemic manifestations of disease and concomitant mortality." - Juliane Bubeck Wardenburg, Ravi J. Patel, Olaf Schneewind, in "Surface Proteins and Exotoxins Are Required for the Pathogenesis of Staphylococcus aureus Pneumonia", Infection and Immunity, February 2007.

Caries: The Metabolic Waste of Oral Bacteria

The Carious Process in Enamel

"The earliest clinically visible evidence of enamel caries is the white spot lesion. This lesion is arrested and sometimes it may appear brown due to exogenous stains absorbed by this porous region.

The oldest or most active part of the lesion is centrally where the lesion is deepest.

The conical shape represents increasing stages of lesion progression beginning with dissolution. **This emphasizes that the lesion is driven by, and reflects, the specific environmental conditions in the overlying biofilm.**

One important feature of the histological picture is that the early enamel lesion is a subsurface demineralization beneath a relatively intact surface zone.

If the early enamel lesion progresses, the intact surface breaks down, forming a physical defect in the surface (cavitation). Fissures and pits are obvious stagnation areas where plaque can form and mature.

The Carious Process in Dentine

Histologically, the carious process may be in dentine before an enamel cavity forms.

On an occlusal surface the lesion widens as it approaches the enamel–dentine junction, guided by prism direction.

Eventually a cavity forms and now the hole is filled with plaque and the biofilm sits directly on the exposed dentine.

At this stage demineralization spreads laterally along the enamel -dentine junction, undermining the enamel." - in "Pickard's Manual of Operative Dentistry", 2003.

"Carious dentin consists of 2 layers: the outer layer, consisting of highly infected and demineralized dentin, and the inner layer, which may not be infected, but shows a degree of demineralization. ***This is due to the action of the acids produced by the metabolic activity of the bacteria located in the outer layer."*** *- Ole Fejerskov, Edwina Kidd in "Dental Caries: The Disease and Its Clinical Management", 2008.*

"Healthy Gastro-Intestinal microbiota can reduce the likelihood of invasion by pathogenic bacteria *(Barnes 1979, Fuller 1977)." - in "Gastrointestinal Microbiology", Vol.1, 2012.*

Chapter 25

Treatment of Influenza

"Epidemics of Influenza are characterized by sudden onset, large number of cases, and short duration. ***In any place they sometimes run no longer than 2 weeks;*** *they rarely continue for longer than 2 months. Some mild and unusual cases make their appearance toward the end." - in "Circular Memorandum, Surgeon General's Office, for Camp and Division Surgeons", 24 September 1918.*

"To treat the Flu Osteopathicaly is to inhibit mechanically, by relaxing the muscles along the spine, gently but persistently, with deep pressure over its entire length, preferably with the palms of the hands, with special inhibition in the suboccipital fossa, the area of the 4th, 8th, 10th, and 11th dorsal inclusive. When there is edema of the lungs the muscles employed in respiration should receive special attention.
As Hydrotherapy, Dietetica and Hygiene are public property, an Osteopath need have no compuncture in keeping the eliminated organs well flushed and limiting his patient to a liquid diet during the run of the temperature, by the easiest means possible; as such is his right and prerogative.
I am convinced that hundreds of cases observed that straight Osteopathy if given at the outset, would have arrested the progress of the disease at a very early stage and left the patient strong without sequelae." *- Dr J. S. Allison, DO, in "My Impression of the Flu," Journal of Osteopathy, July 1919.*

"Physicians of all schools were permitted to send patients to the Flu Hospital so that they might be treated by the methods of any of the different schools. The Osteopathic hospital opened on 16 November 1918, and closed one month later on 16 December, having served the immediate need. A total of 36 patients were cared for during this time: 19 having pneumonia and 17 influenza.

The patient ages ranged from 2 months to 78 years.

All patients made a complete recovery,** except one child whose treatment did not begin right away. That child arrived at the hospital 8 days alter becoming sick, losing precious healing time according to Dr Ashlock. The child died at the hospital." - Dr H.T. Ashlock, DO, "Kirksville's Influenza Hospital," **Journal of Osteopathy, January 1919.

Influenza and Its Osteopathic Management

"The word influenza was first used by the Italians in 1743 to denote some influence.

The rather definite explanation for this peculiarity is given — that if the disease is caused by a germ, epidemics occur when immunity is lowered and resistance becomes feeble in individuals.

A report from 2,445 Osteopaths who treated 110,122 cases of Influenza had only 257 deaths.

A further illuminating feature of these reports revealed the fact that few persons contracted influenza who, just preceding and at the time of the epidemic, had been having more or less regular osteopathic manipulative treatment." - Dr Edward A. Ward, DO in "Journal of American Osteopathic Association", September 1937.

For the complete Treatment Plan of Influenza, see:

"Emunctology: Principles and Foundations of the Emunctory System".

Germs

"Most people we know today, died from complications from Pneumonia, from Bacterial Pneumonia." *- Dr Peter Piot, MD in "Are We Ready for the Next Pandemic?", 29 June 2018.*

What is a Germ?

"Germ is a lay-term for some sort of microorganism. That is to say, an organism of microscopic size (bacteria, fungi, and protozoa). Germ is also a word that's often used with respect to pathogenic, or disease causing, microorganisms." - in "study.com/academy/lesson/germs-vs-viruses.html", 2020.

Bacteria are not usually harmful

"Bacteria are living organisms. They reproduce by splitting in half, and some can double their numbers every 20 minutes. That's why, although they are small, bacteria can have a big impact on our health. Humans have trillions of bacteria in and on our bodies, and most of them keep us healthy by supporting bodily functions like digestion. However, about 1% of bacteria can cause illness." - Kelly Burch in "The difference between bacteria and viruses", Insider, 12 March 2020.

These include:

1. Staphylococcus Aureus, which can cause upper respiratory infections:

"Is a type of germ that most people carry. Most of the time, staph does not cause any harm; however, sometimes staph causes infections.

In healthcare settings, these staph infections can be serious or fatal, including:

a) Bacteremia, or Sepsis when bacteria spread to the bloodstream.

b) Pneumonia, which most often affects people with underlying lung disease including those on mechanical ventilators.

c) Endocarditis (infection of the heart valves), which can lead to heart failure or stroke.

d) Osteomyelitis (bone infection), which can be caused by staph bacteria travelling in the bloodstream or put there by direct contact such as following trauma (puncture wound of foot or intravenous (IV) drug abuse).

Staph infections are caused by several different types of staph germs, including:

I. Methicillin-Resistant Staphylococcus Aureus (MRSA): Is a type of staph bacteria that is resistant to certain antibiotics called beta-lactams. These antibiotics include methicillin and other more common antibiotics such as oxacillin, penicillin, and amoxicillin. Most MRSA infections are skin infections that often appear as a bump, a boil, or area that is red, tender and swollen, and is sometimes confused with a spider bite. More severe or potentially life-threatening MRSA infections occur most frequently among patients in healthcare settings.

II. Methicillin-Susceptible Staphylococcus Aureus (MSSA):

> *"During February 2004 - September 2006, familial clusters and sporadic cases of Staphylococcus Aureus skin and soft tissue infections were observed in a suburban area near Milan in northern Italy. The PVL-positive MSSA strain resembles typical community-acquired methicillin-resistant S. aureus in its ability to cause prolonged community and hospital outbreaks of skin infections." - in "Methicillin-Susceptible Staphylococcus aureus in Skin and Soft Tissue Infections, Northern Italy", Emerging Infectious Diseases, February 2009.*

"MRSA was almost exclusively a health care-associated pathogen, and S. aureus infections in the community were nearly always MSSA. We found that MSSA patients were more likely to have bacteremia, endocarditis, or sepsis, to be transplant patients, to be adults, and to be in an intensive care unit than MRSA patients. MSSA patients were also less likely than MRSA patients to have an SSTI or to be treated in the emergency department and released. MSSA and MRSA patients had a similar likelihood of having an invasive infection. MRSA infections were not more likely than MSSA infections to occur among patients with a number of chronic diseases." - in "Methicillin-Susceptible Staphylococcus aureus as a Predominantly Healthcare-Associated Pathogen: A Possible Reversal of Roles", PLoS One, 13 April 2011.

"Nearly 120,000 Staphylococcus aureus bloodstream infections and 20,000 associated deaths occurred in the United States in 2017. After years of progress, the rate of decline of MRSA bloodstream infections has slowed, whereas bloodstream infections caused by methicillin-susceptible S. aureus are increasing slightly in the community (3.9% annually, 2012–2017)." - in "Vital Signs: Epidemiology and Recent Trends in Methicillin-Resistant and in Methicillin-Susceptible Staphylococcus aureus Bloodstream Infections: United States", Morbidity and Mortality Weekly Report, Centers for Disease Control and Prevention, 8 March 2019.

III. Vancomycin-Intermediate Staphylococcus Aureus (VISA);

IV. Vancomycin-Resistant Staphylococcus Aureus (VRSA):

"Vancomycin-Intermediate Staphylococcus Aureus (VISA), and Vancomycin-Resistant Staphylococcus Aureus (VRSA) are specific types of Antimicrobial-Resistant Bacteria. Persons who develop this type of staph infection may have underlying health conditions (such as diabetes and kidney disease), tubes going into their bodies (such as catheters), previous infections with methicillin-resistant Staphylococcus Aureus (MRSA), and recent exposure to vancomycin and other antimicrobial agents." - in "Healthcare-Associated Infections , VISA/VRSA in Healthcare Settings", Centers for Disease Control and Prevention, 24 November 2010." - in "Staphylococcus aureus in Healthcare Settings", Centers for Disease Control and Prevention, National Center for Emerging and Zoonotic Infectious Diseases, 17 January 2011.

2. Klebsiella Pneumonia (which can cause pneumonia): "Klebsiella pneumoniae is a gram-negative, encapsulated, non-motile bacterium that is found in the environment and has been associated with pneumonia in the alcoholic and diabetic patient population. In 1882, Carl Friedlander first described Klebsiella pneumoniae as an encapsulated bacillus after isolating the bacterium from the lungs of those who had died from pneumonia. The bacterium typically colonizes human mucosal surfaces of the oropharynx and gastrointestinal tract. Once the bacterium enters the body, it can display high degrees of virulence and antibiotic resistance. Today, Klebsiella pneumoniae pneumonia is considered the most common cause of hospital-acquired pneumonia in the United States and the organism accounts for 3% to 8% of all nosocomial bacterial infections." - John V. Ashurst, Adam Dawson, in "Klebsiella Pneumonia", 22 November 2019.

3. Streptococcus Pneumoniae (which can cause pneumonia): "Are lancet-shaped, gram-positive, facultative anaerobic bacteria with over 90 known serotypes. Most Streptococcus Pneumoniae serotypes can cause disease, but

only a minority of serotypes produce the majority of pneumococcal infections. Pneumococci are common inhabitants of the respiratory tract and may be isolated from the nasopharynx of 5–90% of healthy persons, depending on the population and setting. Researchers do not clearly understand the relationship of carriage to the development of natural immunity." - in "Pneumococcal Disease", National Center for Immunization and Respiratory Diseases, Division of Bacterial Diseases, 6 September 2017.

4. Escherichia Coli: "Are bacteria found in the environment, foods, and intestines of people and animals. E. coli are a large and diverse group of bacteria. Although most strains of E. coli are harmless, others can make you sick. Some kinds of E. coli can cause diarrhoea, while others cause urinary tract infections, respiratory illness and pneumonia, and other illnesses." - in "Centers for Disease Control and Prevention", 26 February 2020.

5. Salmonella (can cause food poisoning): "The Centers for Disease Control and Prevention estimates Salmonella bacteria cause about 1.35 million infections, 26,500 hospitalizations, and 420 deaths in the United States every year. Food is the source for most of these illnesses. Most people who get ill from Salmonella have diarrhoea, fever, and stomach cramps. Symptoms usually begin 6 hours to 6 days after infection and last 4 to 7 days. Most people recover without specific treatment and should not take antibiotics. Some people's illness may be so severe that they need to be hospitalized. Other types of Salmonella: Salmonella Typhi and Salmonella Paratyphi; cause typhoid fever and paratyphoid fever." - in "Centers for Disease Control and Prevention", 25 March 2020.

"Typhoid fever and paratyphoid fever are life-threatening illnesses caused by Salmonella serotype Typhi and Salmonella serotype Paratyphi, respectively.

Most people in the United States with typhoid fever or paratyphoid fever become infected while traveling abroad, most often to countries where these diseases are common.

Worldwide, typhoid fever affects an estimated 11 to 21 million people and paratyphoid fever affects an estimated 5 million people each year.

In the United States each year, about 350 people are diagnosed with typhoid fever and 90 people are diagnosed with paratyphoid fever each year.

These cases do not include people who do not seek medical care, who are not tested for either disease, or whose disease is not reported to CDC. CDC estimates typhoid fever affects 5,700 people in the United States each year." - in "Centers for Disease Control and Prevention", 22 August 2018.

Typhoid Fever, Paratyphoid Fever, and Food Poisoning

"Typhoid fever, paratyphoid fever, and food poisoning are primarily cyclical infections from within.

Certain micro-organisms in the excreta gain the ascendancy through the influence of climate and become pathogenic. They then cause epidemics.

Outside factors may increase their pathogenicity, hasten on epidemics, and render them more severe.

I am confident that the evils resulting can be reduced to the minimum only by training potential victims in the fundamental ways of living, and never by focusing attention upon sewage, water and milk supply, carriers, etc.

I say this because the incidence of infection, to begin with, will be determined by whether the large intestines of the populace contain pathogenic microorganisms or not." - Dr J. E. R. McDonagh, MD, in "British Medical Journal", 14 October 1933.

The Prevention of Influenza Based on the Germ Theory

"Catarrh and influenza are two distinct diseases which familiarly come under the generic title of colds, and sometimes distinguished as an ordinary cold or a feverish cold; but they are so dependent the one on the other that we cannot rightly understand the one without considering the other.

Catarrh, or simple cold, is merely mechanical congestion of the mucous membrane of the nasal and pharyngeal passages, caused by exposure to alternating temperatures, and producing no fever or constitutional disturbance.

Influenza is a disease due to a specific germ which, when absorbed into the blood, causes febrile disturbance accompanied by vicarious pains and other constitutional symptoms.

An ordinary catarrh is brought about by the action of varying temperatures on the nasal passages.

A sudden change from breathing the atmosphere of a warm room to the cold air outside will produce congestion of the mucous membranes.

Nature relieves this congestion by secretion, or the membranes may be brought to their normal condition by the aid of drugs, and here a simple catarrh ends.

But this congested surface forms a favourable nidus for the influenza germ. The healthy mucous membrane is able to resist and destroy the numbers of germs we inhale at every breath, but the unhealthy membrane has lost this power. The influenza germ fixes itself to the congested surface, and by irritation keeps up the congestion, and finally becomes absorbed into the blood.

Now, the passage of the germ into the blood gives rise to rigors or chills, and I believe from the number of cases I have attended, the period of incubation to be from 24 to 48 hours, these being the extreme limits.

Loss of appetite and pain in the eyes and over the frontal region are the first symptoms complained of Epistaxis I regard as rather a symptom of catarrh.

Here I may note that influenza is generally preceded by catarrh, but not always.

The invariable course of the pains complained of in the present epidemic has struck me very forcibly.

The pain is first felt over the eyes, then at the back of the head and neck, then in the lumbar region, and, passing down the course of the sciatics, finally disappears at the toes.

The temperature on the 3rd day (probably the first day the patient takes to bed) rises in ordinary cases to 38 C., and in more severe cases to 40 C.

And this is one of the most distinguishing symptoms of the present disease.

A condition of extreme prostration supervenes.

A feeling of utter helplessness comes over the patient, so that he can hardly raise his hand from the bed.

This condition, as a rule, will only last for a day, and may almost be obviated by an early administration of strychnine and stimulants.

In the course of a few days health will be restored.

The present epidemic seems to me to differ from others which we have every year only in the exacerbation of its symptoms and the virulence of its nature, the actual attack lasting but a few days, but producing an effect on the body out of all proportion to the length of its existence; the rapid loss of flesh being very marked.

As to the treatment, preventive and curative, I believe enough has not been said about the former.

Believing influenza to be due to a germ, and generally preceded by catarrh, I assume preventive medicine should aim at destruction of the germ and relief of the congestion.

I believe for the former there is nothing to surpass eucalyptus, and I am surprised that more has not been said about inhaling eucalyptus oil during the present epidemic. I believe it is absolutely preventive, and my experience and observation of it are not confined to the present epidemic.

Eucalyptus destroys the germs, and added to ammonia, which stimulates the local circulation forms the **best inhalant for the prevention of the disease I yet know of.**

It may be used as a spray, or as a perfume to be used 2 or 3 times a day, inhaled by means of a handkerchief." - Dr W. Stephenson Richmond, MD, in "The Prevention of Influenza Based on the Germ Theory, and Notes on the Present Epidemic", The Lancet, 18 January 1890.

"There was not even an understanding what the etiology, what the causes of influenza, it was thought to be Pfeiffer's bacillus which is a bacteria." - Dr Peter Piot, MD in "Are We Ready for the Next Pandemic?", 29 June 2018.

Latest Details Concerning the Germs of Influenza

"Dr R. Pfeiffer overseer of the scientific division of the Institute for Infectious Diseases at Berlin, has the credit of discovering, isolating, describing, and inoculating the germs that are the cause of influenza.

The following results are based upon his thorough investigation of 31 cases of influenza, in 6 of which autopsies were made.

1. In all cases there was in the characteristic, purulent, bronchial secretion a definite kind of bacillus. These rods were shown in uncomplicated cases of influenza, in an absolutely pure culture, and for the most part in large numbers. Very frequently they lay in the protoplasma of the pus-cells. Where the patient has been subject to other bronchial troubles, one finds in the sputum, in addition to the influenza bacilli, other micro-organisms.

The bacilli can enter from the bronchi into the peri-bronchial tissue, even to the surface of the pleura, where in purulent coats in 2 autopsies they were found in pure culture.

2. These rods were found only in influenza. Numerous control-experiments showed their absence in common bronchial catarrh, pneumonia, and phthisis.

3. The condition of the bacilli varied with equal force in the course of the disease; first with the exhaustion of the purulent bronchial secretion the bacilli also disappeared.

4. Two years ago, at the first appearance of the influenza, I saw and photographed the same bacilli in large numbers in preparations of sputum from influenza patients.

5. The influenza bacilli appear as small rods, of about the thickness of septicaemia bacilli in mice, but one-half their length; frequently 3 or 4 bacilli are found arranged one after the other like in a chain: it is difficult to stain them with the basic aniline dyes; one obtains better preparations with Ziel's solution and with the hot methyline blue of Loffler. In this way one sees almost regularly that the end-poles of the bacilli stain more intensively, so that forms arise which might be very easily mistaken for diplococci or streptococci.

The bacilli are not stained by Gram's colouring matter; and in hanging drops they are immovable.

6. These bacilli call be obtained in pure cultures; in 1.5% sugar-a-gar the colonies appear the smallest. The continued culture in this nutrient medium is difficult, and I have not been able to go beyond the 2nd generation.

7. Many experiments for transmission to apes, rabbits, guinea-pigs, rats, pigeons, and mice were made. Positive results could be obtained only in apes and rabbits. The other species of animals were refractory to the influenza.

8. These results justify the conclusion that the above described bacilli aye the cause of influenza.

9. Infection comes very probably from the germs of the disease in the sputum.

Dr Kitasato has succeeded in cultivating the bacilli of influenza to the 5th generation upon glycerine-agar." - Dr Arthur MacDonald, MD, George Town Medical School, Washington, DC in "Science", Vol. XIX, No.471, 1892.

The Clinical Picture of the Influenzal Epidemic of Respiratory Disease

"No matter by what name the disease is called it was to all intents a new disease for most practicing physicians.

To handle the pandemic we had to be in the attitude of mind which Henry Adams describes: "open, free from bias, ignorant of facts, but docile."

Yet even after 5 months steady experience, I hesitate in the attempt to paint a clinical picture of a disease which in December and January is so different from what was apparently the same disease in October and November.

It is necessary to consider the disease from the point of view of its various phases and to allow each phase its own place in the composite picture.

The first phase was the highly virulent type of late September and early October which gradually waned through November.

In December a second wave, much milder in intensity, appeared with a clinical picture different from that of the first wave.

The disease then is essentially an infectious and contagious disease of the whole respiratory system from nasal orifice to lung alveoli, with a special predisposition to the production of capillary bronchitis and lobular pneumonia.

The incubation period usually is from 24-48 hours, occasionally longer. The onset is acute with prostration, fever without definite chill; cough or the symptoms of pharyngitis, rhinitis, and conjunctivitis.

The course is uncertain, varying from 2-12 days or longer, depending almost entirely on the presence and extent of bronchial and pulmonary involvement.

The complications are few, empyema, lung abscess and otitis media being the most common. The sequelae are multiple, and might be encountered in almost any part of the body. Post-febrile prostration may be considered the most constant after-effect.

This definition of the disease presupposes the impossibility of separating during the pandemic various types of respiratory disease which might not be influenza.

The second wave (December) was comparatively mild and in many instances was limited to slight involvement of the nasal mucosa.

In October the throat usually showed slight injection of the anterior pharyngeal pillars; in January and February an edematous, very injected throat was common.

Yet justification for the inclusion of all types is easily found in the many instances of multiple family infection.

An attempt to group the cases of pneumonia into various anatomic types seems untenable from the facts obtained by continuous observation of the same patient.

It was no uncommon occurrence to find the 2-day fever followed by a day or two of apyrexia, then a return of fever with a small patch of rales somewhere in the lungs.

This small patch of rales might easily, within a few days, extend until the chest was like a checkerboard; it might disappear entirely to be replaced by another patch elsewhere, or it might turn into a frank lobar pneumonia or even lung abscess.

And altho the severity of the clinical picture was apt to run parallel with the extent of the pulmonary involvement, it was not at all unusual to have an acute hemorrhagic pulmonary edema end the life of the patient with only a few rales at a base.

If any grouping is possible, it must be accomplished from the whole clinical picture rather than from the extent of lung involvement.

At the beginning of the epidemic we unfortunately met the most virulent type of disease.

Patients ill only 24-48 hours were overwhelmed by a toxemia, the intensity of which was appalling; and all such patients died.

Cardiac dilatation, always the scarecrow to frighten us in regular pneumonias, appeared in this disease rarely, except at the end of an extreme toxemia.

We are pessimistic of the value of drugs.

The comparatively low mortality of hospital personnel and private patients must be due in part to definite ability to place these patients in bed and keep them there.

Referring back again to the definition of the disease as a general infection of the respiratory tract, every patient who during the pandemic suffers from respiratory infection, is potentially an influenza pneumonia, and **must be treated as such before the pneumonia develops.**

Every such patient should immediately take to his bed, keep warm in a well ventilated room, individual prophylaxis instituted, and the bed-pan habit insisted on.

Then plenty of water and as much substantial food as the patient will take are given; the bowels kept open by mild cathartics and the patient kept in bed 48-72 hours after the temperature becomes normal." - Dr Solomon Strouse, MD in "Proceedings of the Institute of Medicine of Chicago", 1919.

Chapter 26

Toxic Load

"Bouchard has determined a unit of poison which he calls a toxic unit and defines as the amount of poison required to kill one kilogram of living matter. The urotoxic is the quantity of urinary alkaloids capable of killing a rabbit weighing a kilogram. The urotoxic coefficient in man is .465. In other words, for each kilogram of body weight enough poison is excreted in 24 hours to kill 465 gm. of living matter; or, in 2 days and 4 hours a man excretes enough poison to kill himself. These facts are of the utmost importance to the psychiatrist. Heredity may in time be as much divorced from insanity by the toxins as it has been separated from phthisis by the bacillus of Koch." *- Dr L. Vernon Briggs, MD, Physician to the Mental Department Boston Dispensary, in "The Boston Medical and Surgical Journal", 5 January 1905.*

"In conclusion, I think we are safe in assuming that a great many of the so-called chronic diseases of which the etiology and pathogenesis are still unknown will at some future date be classed under some special form of autointoxication." *- Dr Max Emmert, MD in "The Dietetics and Therapeutics of Autointoxication", Iowa Medical Journal, 15 July 1910*

"Prof. Dr Van Noorden of Frankfurt a. M., in his monograph on "Diseases of Metabolism and Nutrition", says: "Within recent years the idea has become firmly established in the minds of physicians that a variety of morbid phenomena are due to ***Autointoxication, are, in other words, attributable to certain poisonous metabolic products. This view, it is true, is not new, for it was familiar to the physicians of past generations, and was part of the teachings of the medical folk lore of long ago.*** *It was not, however, until Bouchard and his pupils published their investigations on the subject of Autointoxication that this theory attained the dignity of a scientific doctrine. At first we German physicians were by no means inclined to accept the theory of autointoxication that was being so enthusiastically proclaimed.* ***Of late years, however, our attitude has become more friendly to the doctrine; this change of front is due to the fact that a number of toxic products of metabolism have actually been isolated, and their mode of origin in the organism and their pathologic effect determined to the satisfaction of the former critics of the doctrine.*** *We do not, of course, know all that we should properly know about the poisonous metabolic products that we incriminate in so many morbid states; but in a large group of important symptom-complexes we are fortunately in possession of a number of facts that suffice to ground the doctrine of Autointoxication on a solid chemical basis."*

Dr Kirk later says: "I have made the foregoing quotation from an eminent exponent of German scientific conservatism to ***emphasize the fact that the doctrine of Autointoxication as a factor in disease causation, and as a prodromal state of bacterial invasion, rests upon an accepted scientific foundation."*** *- Dr Greenbaum, MD, DDS in "The Practice of Dentistry", 1912.*

"The Physical Roots of Disease are: Toxic Accumulation, and Vitamin and Mineral Deficiency." *- Dr Ulric Williams, MD, "Hospitals and Hooey or Health?", 1941.*

"Tampons and Menstruation-Associated Toxic Shock Syndrome. As tampon absorbency increases, the risk for the development of TSS also increases." *- in "Exotoxins of Staphylococcus aureus", Clinical Microbiology Reviews, January 2000.*

Paralysis Agitans

"Case 49: A man, aged 56 was a typical example of Paralysis agitans.

His mother died of cancer, aged 77, one brother died in a lunatic asylum, aged 62 (admitted when aged 26), one brother died of cancer of the colon, aged 58, one brother of phthisis, aged 41, and a sister of convulsions in infancy.

Early canities and Arcus senilis were family characteristics. The patient was a medical man, and was of the opinion that his trouble began when he was about 20 years of age.

A typical example of familial chronic intestinal intoxication.

The patient was dieted, subjected to Colonic Lavage, took iodine and thyroid substance internally, and the faecal vaccine, with the result that the general condition improved considerably.

The interest of this case lies in the strong family history of chronic intestinal intoxication, and this points strongly to the Paralysis agitans as being merely a manifestation of this fundamental condition." - Dr James Eustace Radclyffe McDonagh, FRCS, Hunterian Professor at the Royal College of Surgeons, in "The Nature of Disease", Part III, Section I, 1931.

"Over the past decade, drug usage in our industrialized society has increased dramatically, especially in the pediatric population.

The agents elaborated upon in this chapter are the primary drugs utilized in pediatric GI disorders.

Cimetidine

Adverse Effects: An excessive amount of cimetidine was reported by Thompson and Lilly to produce Infant Cerebral Toxicity, as manifested by Impaired Consciousness and Decreased Spontaneous Movements. Aranda et al., noted a mild Neurologic and Developmental Delay at 16 months in a premature newborn given cimetidine at 25 weeks of gestation.

Other signs of Central Nervous System, toxicity attributed to cimetidine use in children include:

Confusion, Hallucinations, Hysteria, Drowsiness, and Seizures.

Aluminium Antacids

Adverse Effects: The clinical manifestations of aluminium intoxication are well established and correlated with tissue body burden.

In adult patients undergoing dialysis, administration of aluminium antacids to bind phosphate produced an accumulation of this metal in brain grey matter and a disease called Dialysis Encephalopathy Syndrome (DBS).

Similarly, the use of aluminium hydroxide gel in infants and children with renal hypoplasia or chronic glomerulonephritis undergoing dialysis resulted in Dialysis Encephalopathy Syndrome.

The neurological signs and symptoms in infants included ataxia, loss of motor abilities, myoclonus, seizures, dementia, and bulbar dysfunction, as well as a progressive slowing in the electroencephalogram.

The phenomenon of **Dialysis Encephalopathy Syndrome in dialysis pediatric patients intoxicated with aluminium has been reported by several investigators.**" - Professor

Sam Kacew, Department of Pharmacology University of Ottawa, Canada in "Drug Toxicity and Metabolism in Pediatrics", 1990.

Idiocracy

James Flynn is a hero to many for his work on genes and IQ.

Flynn first noticed the tendency of IQ scores to increase over time.

But data obtained by Edward Dutton, shows that:

> *"Since the late 1990s, a negative Flynn effect was reported in 9 studies, comprising 7 European countries (France, Germany, England, Denmark Finland, Estonia). This has amounted to an average IQ loss of 2.44 points per decade (see Dutton, Van der Linden, & Lynn, 2016)." - Edward Dutton, in "The Negative Flynn Effect", Intelligence, Vol. 59, 2016.*

The records from the Scandinavian armies which young recruits have been doing the same IQ tests for generations, are an irreplaceable tool for measuring the evolution of intelligence

> ***"Studies on recruits in Scandinavian countries show that the intellectual quotient (IQ) increased until the mid-1990s, and since then, has been declining year after year.*** *Every time we are becoming more stupid, this is already happening, and it will not stop. We should think about doing something, if we do nothing, civilization (although it is based on the intelligence), will go in the opposite direction, and everything points to what is already happening." - Edward Dutton, in "Demain, Tous Crétins", Arte France, 2017.*

Chemical Modified the DNA

"We gave a mother a pyjama treated with Tris (2,3-dibromopropyl, phosphate) to put it on her daughter, after we collected the urine the next morning, and her urine already presented remains of Tris. this means that the flame retardant compound, immediately passed the pyjamas to the body of the girl.

The level increased every time she put on her pyjamas, and when she stopped using it, the level decreased.

In laboratory we showed that this chemical modified the DNA." - Arlene Blum, in "Demain, tous crétins", Arte France, 2017.

> *"Recently tris-BP has been found to damage human DNA in vitro, to be a potent mutagen in Drosophila, and to cause unscheduled DNA synthesis in human cells in tissue culture (the latter test is quite effective in detecting carcinogens and is an indicator of a chemical's ability to damage DNA)." - Arlene Blum, "Flame-retardant Additives as Possible Cancer Hazards", Science Vol. 195, 7 January 1977.*

> *"Infection and toxemia resulting from tissue breakdown lead to a pronounced inflammatory reaction in many tissues. Subtle DNA damage in germ cells compatible with continued life and reproduction can be transmitted to offspring in the form of point or chromosomal mutations." - in "Cecil-Loeb Textbook of Medicine", Vol.1, 1971.*

The Chemical Toxicity Load in Our Food

Agriculture workers who use (or are exposed), to herbicides and pesticides will also increase their toxic load.

And, inevitably in the end everyone who purchases food grown with herbicides and pesticides, ingests a certain amount of unnatural toxic chemical load, and any poisonous chemical toxicity will hack havoc upon the glands.

Health Problems of Today

"The number of cases of right-sided cardiac preponderance is increasing, and it would seem as if it must play an ever-increasing role in raising the incidence of cardiac disease in the future.

The type of case referred to is affecting children and the author cannot help feeling that these are going to swell in another generation the numbers of cases of Pulmonary Oedema, Thrombosis, and so-called "Embolism".

The same condition of affairs occurring in the systemic circulation causes left-sided cardiac preponderance and so-called "Status lymphaticus".

The activity of the Bacillus faecalis alkaligenes and of the Bacillus Friedlander appears to select the lesser circulation, while that of the bacilli of epidemic jaundice, the three main causes of so-called "influenza", the greater circulation.

Prevention and Treatment

Prevention rests in checking the incidence of inherited disease and in reducing to a minimum the ravages caused by chronic intestinal intoxication.

What man wants today is suitable exercise, wholesome food and adequate elimination of its waste products.

It is useless putting good food into a dirty intestine, therefore in most cases Colonic Lavage is indicated.

Wholesome food means home-grown and unmodified

products; imported food-stuffs are second-rate, and artificially prepared articles are useless.

Animals under domestication need as little interference by man as possible, and their food should be more natural and less artificial than is the case at present.

Animals in captivity require much greater freedom and more wholesome food than they generally receive." - Prof. Dr. James Eustace Radclyffe McDonagh, MD, FRCS in "The Nature of Disease, Journal" Vol. I, 1932.

The Role of: The Lymphatic Tissues of Respiratory and Gastrointestinal Mucosal Membranes

"The lymphatic tissues of respiratory and gastrointestinal mucosal membranes have been the object of much research during recent years because of **their central role in immunological defence mechanisms against infections."** - K.-I. Meistrup-Larsen, et al., in "Lymphocytes of Adenoid Tissue", Acta Otolaryngol, Suppl. 360, 1979.

TEFLON

Kidney Cancer, Testicular Cancer, Thyroid Disease, High Cholesterol, Pre-Eclampsia, Ulcerative Colitis

"In December 2011, after 7 years, the scientists began to release their findings: there was a ''probable link'' between PFOA and kidney cancer, testicular cancer, thyroid disease, high cholesterol, pre-eclampsia and ulcerative colitis.

As of October, 3,535 plaintiffs have filed personal-injury lawsuits against DuPont.

The first member of this group to go to trial was a kidney-cancer survivor named Carla Bartlett.

In October 2015, Bartlett was awarded US$1.6 Million.

At the rate of 4 trials a year, DuPont would continue to fight PFOA cases until the year 2890.

DuPont, which is currently negotiating a merger with Dow Chemical, last year severed its chemical businesses:

They have been spun off into a new corporation called Chemours." - in "The New York Times Magazine", 6 January 2016.

"DuPont transferred the Chambers Works Site deed, and its performance chemicals division, to a spinoff company called Chemours in July 2015.
The transfer dumped $4 billion of DuPont's debt and most of its environmental liabilities to Chemours, according to the lawsuit." - in "Polluted New Jersey Town Sues DuPont for $1.1 Billion", CourtHouseNews, 20 December 2016.

Why PFOA Is Dangerous

"In the mid-1990s, the water in the creek [on the Tennant family farm near a landfill they had sold to DuPont] turned black and foamy.

The cattle started going blind, sprouting tumors. Family members were being hospitalized." - in " One of the most brazen, deadly corporate gambits in U.S. history", Huff Post, 27 August 2015.

"PFOA does not easily degrade. When PFOA is dumped into rivers and landfills, it remains for a very long time, where it can continue to poison people. That also means it can remain in the body for a long time and accumulate with continued exposure. It has, in fact, been detected in the blood of most Americans." - in "Toxic Teflon Dumped in the Water Supply: Ohio AG Files Lawsuit Against DuPont", Plevin & Gallucci, 14 March 2018.

DuPont Lawsuits

"DuPont is a manufacturer of the plastic material, Teflon, in Parkersburg, West Virginia, USA.

Teflon was, until 2013, produced with Perfluorooctanoic acid, or PFOA or C-8. Studies have found that PFOA exposure is linked with several diseases.

Leaked internal company documents revealed that DuPont knew about the dangers of PFOA as far back as 1961, and knew in 1984 that the chemical was present in the local water supply and being emitted in dust from the factory chimneys, yet did not disclose this to workers or the surrounding public.

In 2016 a federal jury found that DuPont acted with malice and ordered the company to pay US$5.6 Million in punitive damages and compensatory damages.

In February 2017, DuPont settled over 3,550 PFOA lawsuits for US$671 Million."- in "Business & Human Rights Resource Centre", 19 May 2020.

> *"Class-action suits comprised of individuals exposed to PFAS-contaminated water have cropped up in Colorado, Michigan, New York, and Pennsylvania. A nationwide claim was filed last year. In 2018, North Carolina settled its lawsuit for $13 Million and a requirement that Chemours provide "permanent replacement drinking water supplies" for residents whose wells were contaminated." - in Quartz , 29 May 2019.*

American Cancer Society

"**Do Teflon and PFOA cause cancer?**

Whether Teflon and other non-stick coatings themselves cause cancer has not been the main focus of concerns.

The main concerns have been with PFOA, as well as with similar polyfluoroalkyl substances (PFAS), such as perfluorooctane sulfonate (PFOS), perfluorobutane sulfonate (PFBS), and "GenX" chemicals.

Studies have looked at cancer rates in people living near or working in PFOA-related chemical plants.

Some of these studies have suggested an increased risk of testicular cancer with increased PFOA exposure.

Studies have also suggested possible links to kidney cancer and thyroid cancer, but the increases in risk have been small and could have been due to chance.

What expert agencies say

In most cases, the American Cancer Society does not determine if something causes cancer (that is, if it is a carcinogen).

Instead, we look to other respected organizations that classify potentially cancer-causing exposures.

The International Agency for Research on Cancer (IARC) is part of the World Health Organization (WHO). One of its goals is to identify causes of cancer." - in "Perfluorooctanoic Acid (PFOA), Teflon, and Related Chemicals", American Cancer Society, 4 March 2020.

The HIV/AIDS

"Anthony Fauci, the director of the US National Institutes of Health's (NIH) National Institute of Allergy and Infectious Diseases (NIAID), has won the 2016 Global Health Award from Canada's Gairdner Foundation for his work on HIV/AIDS.

Fauci is "one of the towering figures in understanding the natural history of HIV.

Without him, we would not have made the overwhelming progress that we have made.

He turned AIDS, in most places, into a Chronic Disease.", John Dirks, president of the Gairdner Foundation, tells The Lancet.

> *"I foresaw that even though **we didn't know what the virus was**, we were just seeing the tip of the iceberg, **I had an ominous feeling it would explode into something huge for global health.**" - Fauci*

He established the HIV/AIDS programme at the institute and led the largest research effort on the disease in the world, which succeeded in turning around the AIDS epidemic **through the discovery of drugs and treatments** that could **suppress the virus.**" - NIAID director wins Canada Gairdner Global Health Award", 23 March 2016.

"In the past 20 years the HIV field has made enormous efforts to determine the relevance of Nef-mediated receptor downmodulation for HIV pathogenesis.

However, **no mechanism has emerged that would explain the dramatic Negative Regulatory Factor (Nef) effects in vivo on HIV replication in a satisfying manner.**

Thus after 2 decades of research the Nef protein of Human Immunodeficiency Virus (HIV) remains a mysterious protein with an indisputable role in HIV pathogenesis.

The ability to downregulate CD4 and major histocompatibility complex class I (MHC-I) was the first ascribed function of Nef and, whereas the number of downmodulated receptors by Nef is rising, so are the explanations for how their downregulation could contribute to HIV pathogenesis.

At the same time there is increasing evidence that Nef not only induces endocytosis but also exocytosis, namely of cytokines and microvesicles that contain Nef itself. Because **endocytosis** (a type of active transport that moves particles, such as large molecules, parts of cells, and even whole cells,

into a cell) and **exocytosis** (the reverse process of moving material into a cell), **these are connected events**, this is not surprising – and **raises the intriguing possibility that HIV aims at secretion, rather than ingestion.**

Have we therefore barked up the wrong tree over the past two decades? Nef-induced secretion is most probably the pathogenesis-relevant function behind this elusive viral effector." - Andreas S. Baur, Department of Dermatology, University of Erlangen/Nurnberg, Germany, in "HIV-Nef and AIDS pathogenesis: are we barking up the wrong tree?", Trends in Microbiology, Vol. 19; Iss. 9, 2011.

Spreading HIV/AIDS Research

"Turn back the clock to the summer of 1983.

HIV had just been isolated, but scientists had vet to Drove conclusively that it caused the disease.

AIDS itself, which had first been recognized 2 years earlier in Los Angeles, was labeled a disease of "the four H's": Homosexuals, Heroin addicts, Hemophiliacs, and Haitians." - in "The Rise and Fall of Projet SIDA", Science, 28 November 1997.

"HIV had just been isolated" Editor Note: This is a LIE

"In April 1984, the retrovirologist Robert Gallo from the National Institutes of Health in Bethesda and the American Secretary of Health and Human Services announced, at an international press conference in Washington, that the Acquired Immunodeficiency Syndrome (AIDS) was caused by a retrovirus, now termed human immunodeficiency virus (HIV).

The announcement was made before even 1 (one) American study on HIV had appeared in the scientific literature.

Gallo and his collaborators cited antibodies against the virus in "about 85% of patients with AIDS" as the only evidence for their hypothesis.

Although AIDS occurred despite antiviral antibodies, the researchers expressed 'hope that a vaccine would be ready in about 2 years.

In the scientific papers that followed the next month , HIV was said to cause AIDS by depleting T-cells.

The hypothesis proposed that HIV would cause all of the 30 heterogenous AIDS diseases, including those that are not consequences of immunodeficiency, such as cancer, weight loss and dementia.

In 1986, the American Academy of Sciences and the Institute of Medicine assembled a blue ribbon committee of medical scientists to confront the growing AIDS epidemic.

The committeee, chaired by Davis Baltimore. Concluded that the isolation of HIV by Montagnier et al. and Gallo et al. led to its definitive identification as the cause of AIDS.

Without mention of dissent, a derivative committee declared in 1988:

"The committee believes that the evidence that HIV causes AIDS is scientifically conclusive" and proposed to rename AIDS "HIV disease".

The committees had sealed the hypothesis into national dogma. **The committee's conclusion was based only on circumstantial evidence, including 5 questionable assumptions."** - Prof. Peter H. Duesberg, Molecular Biologist, in "Infectious AIDS - Stretching the Germ Theory Beyond Its Limits", Int. Arch. Allergy Immunol., 1994.

"**Robert Charles Gallo** is an American biomedical researcher. **He is best known for his role in the discovery of the human immunodeficiency virus (HIV) as the infectious agent responsible for acquired immune deficiency syndrome (AIDS)** and in the development of the HIV blood test, and he has been a major contributor to subsequent HIV research.

Gallo is the director and co-founder of the Institute of Human Virology (IHV) at the University of Maryland School of Medicine in Baltimore, Maryland, established in 1996 in a partnership including the State of Maryland and the City of Baltimore. Gallo is also a co-founder of biotechnology company Profectus BioSciences, Inc. and co-founder and scientific director of the Global Virus Network (GVN).

Gallo was the most cited scientist in the world from 1980–1990, according to the Institute for Scientific Information, and he was ranked third in the world for scientific impact for the period 1983–2002.

After completing his medical residency at the University of Chicago, he became a researcher at the National Cancer Institute, where he worked for 30 years, mainly as head of the Laboratory of Tumour Cell Biology.

HIV/AIDS Research

On 4 May 1984, Gallo and his collaborators published a series of 4 papers in the scientific journal Science demonstrating that a retrovirus they had isolated, called HTLV-III in the belief that the virus was related to the leukemia viruses of Gallo's earlier work, was the cause of AIDS.

A French team at the Pasteur Institute in Paris, led by Luc Montagnier, had published a paper in Science in 1983, describing a retrovirus they called LAV (lymphadenopathy associated virus), isolated from a patient at risk for AIDS. Lymphadenopathy an inflammation of the lymph nodes, in which they are abnormal in size or consistency.

> *"Dr Anthony Fauci, MD* ***took on the role of Director of NIAID in 1984 largely so he could expand the institute's efforts on AIDS****. One of his most important research contributions was the discovery that even when the disease seemed to be clinically latent, the virus was still active in the* ***lymph nodes*** *and continued to prey on the immune system." - in "The Lancet", 26 March 2016.*

Gallo was awarded his 2nd Lasker Award in 1986 for "determining that the retrovirus now known as HIV-1 is the cause of Acquired Immune Deficiency Syndrome (AIDS)."

In 1991, following years of controversy surrounding a 1987 out of court settlement between the National Institutes of Health and France's Pasteur Institute, Gallo admitted the virus he claimed to have discovered in 1984 was in reality a virus sent to him from France the year before, putting an end to a 6 year effort by Gallo and his employer, the National Institutes of Health, to claim the AIDS virus as an independent discovery.

In 1989, at a conference sponsored by the Catholic Church at Vatican City on HIV/AIDS, Gallo promised attendees that there would be an effective vaccine by 1992.

In July 2007, Gallo and his team were awarded a $15 Million grant from the Bill and Melinda Gates Foundation for research into a preventive vaccine for HIV/AIDS.

Additionally, in 2011 Gallo and his team received $23.4

Million from a consortium of funding sources to support the next phase of research into the Institute of Human Virology's (IHV) promising HIV/AIDS preventive vaccine candidate.

The IHV vaccine program grants included $16.8 Million from the Bill & Melinda Gates Foundation, $2.2 Million from the US Army's Military HIV Research Program, and other research funding from a variety of sources including the US National Institutes of Health (NIH)." - in "Wikipedia", 25 May 2020.

Questioning the HIV-AIDS Hypothesis: 30 Years of Dissent

"Since 1984, when the hypothesis that HIV-causes-AIDS was announced, **many scholars have questioned the premise and offered alternative explanations.**

Thirty years later, competing propositions as well as questioning of the mainstream hypothesis persist, often supported by prominent scientists.

> *"A few years ago, I was driving from Mendocino to San Diego, like everyone else by now, I knew a lot more about AIDS than I wanted to. But I still didn't know who had determined that it was caused by HIV. I switched on the radio and tuned into Professor Peter Duesberg, a prominent virologist at Berkeley University, who was talking about AIDS. I'd heard of him, but had never read his papers or heard him speak.* ***I listened, while he explained exactly why I was having so much trouble finding the references that linked HIV to AIDS. There weren't any. No one had ever proved that HIV causes AIDS.*** *When I got home, I invited Duesberg to San Diego to present his ideas to a meeting*

of the American Association for Chemistry. Mostly skeptical at first, the audience stayed for the lecture, and then an hour of questions, and then stayed talking to each other until requested to clear the room. Everyone left with more questions than they had brought. ***We have not been able to discover any good reasons why most of the people on earth believe that AIDS is a disease caused by a virus called HIV.*** *There is simply no scientific evidence demonstrating that this is true.* ***We have also not been able to discover why doctors prescribe a toxic drug called AZT (Zidovudine) to people who have no other complaint than the presence of antibodies to HIV in their blood. In fact, we cannot understand why humans would take that drug for any reason.*** *We cannot understand how all this madness came about, and having both lived in Berkeley, we've seen some strange things indeed. We know that to err is human, but* ***the HIV/AIDS hypothesis is one hell of a mistake. I say this rather strongly as a warning."*** *- Kary Mullis, in "Inventing the AIDS Virus", 1996.*

Mullis, a Nobel Laureate in Chemistry, 1993 and other distinguished scientists have claimed the HIV-causes-AIDS hypothesis is: False, Unproductive, and Unethical.

They have done so since 1984, when the hypothesis was proposed.

In 1984, Margaret Heckler (then Secretary of the Department of Health and Human Services) announced a retrovirus was the "probable cause" of the alarming immune system collapse emerging in the US since 1981.

When scientists identified antibodies to a retrovirus known as LAV, or HTLV-III, in 48 persons (from a sample of 119, with and without immune deficiency symptoms), the retrovirus became the culprit of what would be perceived as

"the most urgent health problem facing the country" in recent history.

The announcement intended to assure the public: the mystery surrounding this apparently contagious and decidedly fatal illness – later labeled AIDS for acquired immune deficiency syndrome – was solved.

The newly identified virus – soon renamed HIV, for human immunodeficiency virus – was, almost certainly, responsible for debilitating people's immune system and making them vulnerable to infections which.

Yet almost immediately, scientists who knew a great deal about retroviruses and immunology began to voice misgivings regarding the HIV-causes-AIDS hypothesis, and to question it.

They highlighted the difficulties, flaws, and contradictions they saw in the hypothesis, and offered alternative explanations." - Patricia Goodson, Department of Health & Kinesiology, Texas A&M University, in "Journal Frontiers in Public Health", 29 October 2014.

> *"A positive test for most individuals in populations at greater risk of acquiring AIDS will probably mean that the individual has been infected at some time with HTLV-III/LAV [the names originally used for HIV].* ***Whether the person is currently infected or immune is not known, based on the serologic test alone."*** *- in "Antibodies to a Retrovirus Etiologically Associated with Acquired Immunodeficiency Syndrome (AIDS) in Populations with Increased Incidences of the Syndrome", MMWR, CDC, 13 July 1984.*

"At first sight it appears that there is no common factor, apart from HIV infection, linking the various AIDS risk groups. However, homosexuals are exposed to relatively ***high levels of nitrites and anally deposited sperm, drug abusers to opiates and nitrites, hemophiliacs to factor VIII. All these are known potent oxidizing agents."*** *- E Papadopulos-Eleopulos , V. F. Turner, J. M. Papadimitriou, in "Oxidative Stress, HIV and AIDS", Research in Immunology, February 1992.*

*"****A number of drugs the extent of rectal absorption has been reported to exceed oral values, which may reflect partial avoidance of hepatic first-pass metabolism after rectal delivery. This phenomenon has been reported for morphine, metoclopramide, ergotamine, lidocaine (lignocaine) and propranolol.****" - Evan Hoogdalem , A. G. de Boer, D. D. Breimer, in "Pharmacokinetics of Rectal Drug Administration, Part I. General Considerations and Clinical Applications of Centrally Acting Drugs", Clinical Pharmacokinet,1991.*

*"****The clinical value of rectal formulations has been demonstrated for various drugs.*** *In general, rectal bioavailabilities tend to be lower than the corresponding oral values, but for* ***drugs such as ergotamine and morphine****, the opposite has been reported, possibly reflecting the partial avoidance of hepatic first-pass metabolism after rectal absorption." - Ewoud J. van Hoogdalem, Albertus G. de Boer, Douwe D. Breimer, in "Pharmacokinetics of Rectal Drug Administration, Part II Clinical Applications of Peripherally Acting Drugs, and Conclusions", Clinical Pharmacokinet,1991.*

*"**The administration of drugs by the rectum has been practised from the earliest times**. Prescriptions for suppositories were found in the Ebers Papyrus (Bryan, 1930). It would appear that these suppositories were intended for the local treatment of disease of the proctodeum. In more recent years, the idea arose that the rectal route could be used for systematic medication, either as supplementary to the oral route or as an alternative when medicine could not be given by mouth. The absorption of **potassium bromide, sodium salicylate and sulphanilamide given per rectum has been studied. It has been shown that when given in solution, all these substances are readily absorbed from the rectum.**" - J. W. A. Mackenzie, MD, in "Absorption of drugs from the rectum", Archives of Disease in Childhood, March 1943.*

*"**Medications administered per rectum (PR) are ideal for local or systemic treatment, as the rectal mucosa has a blood and lymph supply that is capable of effective systemic absorption.**" - in "Rectal Drug Administration in Adults: How, When, Why", Nursing Times, 22 February, 2016.*

*"There is not a single organism that is the cause of AIDS, and there should exist AIDS patients who do not test positive for HIV . **It is an overwhelming number of distinct organisms, which causes the immune dysfunction. These may individually be harmless**." - Kary B. Mullis, in "A hypothetical disease of the immune system that may bear some relation to the Acquired Immune Deficiency Syndrome", Genetica, March1995.*

HIV Does Not Meet Koch's Postulates

"HIV Cannot Account for the Loss of T Cells and the Clinical Course of AIDS.

The causative agent of an infectious disease is classically defined by the postulates of Robert Koch and Jacob Henle.

They were originally formulated a priori by Henle about 50 years before bacteria and viruses were discovered to be pathogens. However, their definitive text was formulated by Koch to distinguish causative from other bacteria at a time when bacteriologists applying newly developed tools in the search for pathogenic microbes found all sorts of bacteria in humans.

This situation was quite similar to our current increasing proficiency in demonstrating viruses.

The first of these postulates states that "the parasite must be present in every single case of the disease, under conditions that can account for the pathological lesions and the clinical course of the disease".

However, there is no free virus in most-and very little in some-persons with AIDS, or in asymptomatic carriers.

Due to Extremely Low Titers, HIV Can Be Isolated Only with Great Difficulty from AIDS Patients.

Koch further postulated that it must be possible to isolate and propagate the etiological agent from all cases of the disease.

IHV Does Not Meet Established Epidemiological, Biochemical, **Genetic, and Evolutionary Criteria of a Viral Pathogen. Epidemiologies of AIDS and HIV Are Not Consistent.**

HIV Is a Conventional Retrovirus, Without an AIDS Gene.

The virus-AIDS hypothesis proposes that HIV is an unorthodox retrovirus containing specific suppressor and activator genes that control the 2 to 15-year intervals between infection and AIDS.

However, the 2 known HIVs are profoundly conventional retroviruses.

The Paradoxes of an AIDS Virus with Country and Risk Specific Pathologies and Host Ranges.

It is yet another paradox of the virus-AIDS hypothesis that HIV is said to cause very different diseases in different risk groups and countries.

What Are the Causes of AIDS? I propose that AIDS is not a contagious syndrome caused by one conventional virus or microbe, **because no such virus or microbe would average 8 years to cause a primary disease,** or would selectively affect only those who habitually practice risk behaviour, or would be able to cause the diverse collection of over 20 degenerative and neoplastic AIDS diseases.

Neither could a conventional virus or microbe survive if it were as inefficiently transmitted as AIDS, and killed its host in the process." - Prof. Peter H. Duesberg, Molecular Biologist, in "Human immunodeficiency virus and acquired immunodeficiency syndrome: Correlation but not causation", Proceedings National Academy of Sciences, February 1989.

"The newly defined syndrome AIDS includes 25 unrelated parasitic, neoplastic, and noninfectious indicator diseases.

Based on epidemiological correlations, the syndrome is thought to be due to a new, sexually or parenterally transmitted retrovirus termed human immunodeficiency virus (HIV). **Epidemiological data conflict with this hypothesis.**

Above all, the AIDS diseases occur in all risk groups in the absence of HIV.

American AIDS is incompatible with infectious disease, because it is almost exclusively restricted to males (91%), because if it occurs, then only on average 10 years after transfusion of HIV, because specific AIDS diseases are not transmissible among different risk groups, and because unlike a new infectious disease, AIDS has not spread exponentially since the AIDS test was established and AIDS received its current definition in 1987.

There is no precedent for an infectious agent that causes primary diseases on average only years after it is neutralized by antibodies. Yet HIV is claimed to cause AIDS on average 10 years after transfusion in adults." - Professor Peter H. Duesberg, Molecular Biologist, in "AIDS epidemiology: Inconsistencies with human immunodeficiency virus and with infectious disease", Proceedings National Academy of Sciences, February 1991.

SARS Still Does Not Meet Koch's Postulates

"Severe Acute Respiratory Syndrome (SARS) has recently emerged as a new human disease.

Here we provide proof from experimental infection of cynomolgus macaques that the newly discovered SARS-associated coronavirus (SCV) is the aetiological agent of this disease. **According to Koch's postulates, as modified by Rivers** for viral diseases, 6 criteria are required to establish a virus as the cause of a disease." - **Albert Osterhaus**, et al., in "Koch's postulates fulfilled for SARS virus", Nature, 15 May 2003.

"**Albert Osterhaus** is a leading Dutch virologist and influenza expert.

An Emeritus Professor of Virology at Erasmus University Rotterdam since 1993, Osterhaus is known throughout the world for his work on SARS and H5N1, the pathogen that causes avian influenza.

He has been criticised for what has been described as a "Fear Campaign", for exaggerating the consequences of the 2009 flu pandemic and pushing for extensive measures, even though the pandemic influenza (H1N1) is now treated as if it were a common flu.

Physician and microbiologist Miquel Ekkelenkamp **called Osterhaus a 'scaremonger'** in an opinion piece in "nrc.next", and said:

> ***"Expert' Osterhaus should be banned indefinitely from television. Everything he claimed turned out to be untrue:*** *we're not all going to die like we did in 1918, not everyone needs a Vaccination, we are not going to give Tamiflu to everyone and the virus has not mutated into something much more dangerous."*

Osterhaus claimed he has not exaggerated the risks. During debate 'De Kwestie live' he said:

> *"I have named a wide spectrum of possibilities and minister Ab Klink decided to go for the worst-case scenario."*

In September 2009, a controversy arose when **it became known Osterhaus has a 9.8% share in ViroClinics B.V., a Pharmaceutical Company that supposedly benefits from the 34 Million Vaccines Health minister Ab Klink bought based on his advice as government consultant."** - in "Wikipedia", 26 May 2020.

Viruses and Koch's Postulates

"In 1890, speaking of bacteriological research before the 10th International Congress of Medicine in Berlin, Koch expressed the following:

"If it can be proved;

1. The parasite occurs in every case of the disease in question, and under circumstances which can account for the pathological changes and clinical course of the disease.
2. It occurs in no other disease as a fortuitous and nonpathogenic parasite.
3. After being fully isolated from the body and repeatedly grown in pure culture, can induce the disease anew."

The occurrence of the parasite in the disease can no longer be accidental, but in this case no other relation between it and the disease except that the parasite is the cause of the disease can be considered.

The above conditions laid down for the proof of the etiological relation of a microorganism to a disease constitute what are now known as Koch's postulates.

His dictum has had a profound influence on workers investigating infectious maladies and for many years an infectious agent was not accepted as the cause of a disease unless the postulates had been satisfied. In spite of this fact, there are certain workers who still refuse to agree that the cause of an infectious disease has been discovered unless all the conditions originally laid down by Koch have been met.

This is particularly true regarding the viral maladies, the etiological agents of which have not been cultivated on ordinary lifeless media.

It is unfortunate that so many workers have blindly followed the rules, **because Koch himself quickly realized that in certain instances all the conditions could not be met. It is obvious that Koch's postulates have not been satisfied in viral diseases.**

The conditions are:

a) A specific virus must be found associated with a disease with a degree of regularity.
b) The virus must be shown to occur in the sick individual not as an incidental or accidental finding but as the cause of the disease under investigation.

In many respects the conditions just stated for viral maladies are similar to those of Koch for the proof of the specific relation of bacteria to disease. Nevertheless, there are certain differences. In the first place, **it is not obligatory to demonstrate the presence of a virus in every case of the disease produced by it.**
Secondly, **the existence of virus carriers is recognized**.
Finally, **it is not essential that a virus be grown on lifeless media or in modified tissue cultures**.

How does one go about proving that a virus is the cause of a disease?

Viruses, regardless of whether they are parasites or the fabrications of autocatalytic processes, are intimately associated with host cells and, therefore, should always be **found at the proper time in specific lesions**.
In addition, viruses, as is the case with bacteria, may be found also in the blood stream, **not necessarily multiplying**

there **but appearing frequently only as a phenomenon of overflow from lesions in the tissues."** - Dr Thomas M. Rivers, MD, The Rockefeller Institute for Medical Research, New York, in "Viruses and Koch's Postulates", Journal of Bacteriology, 1937.

"Growth in Pure Culture" Leads to a loss of virulence

"It is a common laboratory practice to propagate viruses in cell culture.

While convenient, these methodologies often result in unintentional genetic alterations, which have led to adaptation and even attenuation in animal models of disease.

An example is the attenuation of Hanta viruses (Bunyaviridae, Hanta virus) **when cultured in vitro.**

In this case, viruses propagated in the natural reservoir species cause disease in non-human primates that closely mimics the human disease, **but passaging in cell culture attenuates these viruses to the extent that do not cause any measurable disease in non-human primates."** - Joseph Prescott, Heinz Feldmann, David Safronetz, in "Amending Koch's postulates for viral disease: When "growth in pure culture" leads to a loss of virulence", Antiviral Reseasrch, January 2017.

Koch's Postulates to identify the causative agent of an infectious disease in 1884	Koch's Postulates from his presentation before the 10th International Congress of Medicine in Berlin in 1890
1. The microorganism must be found in abundance in all organisms suffering from the disease, but should not be found in healthy organisms.	0. Koch dismissed the universal requirement of the first postulate following the discovery of asymptomatic carriers of diseases such as cholera.
2. The microorganism must be isolated from a diseased organism and grown in pure culture.	1. The parasite occurs in every case of the disease in question and under circumstances which can account for the pathological changes and clinical course of the disease.
3. The microorganism (from the pure culture) should cause disease when inoculated into a healthy organism.	2. The parasite occurs in no other disease as a fortuitous and nonpathogenic parasite.
4. The microorganism must be re-isolated from the inoculated, diseased experimental host and identified as being identical to the original specific causative agent.	3. After being fully isolated from the body and repeatedly grown in pure culture, the parasite can induce the disease anew.

The Birth of Modern Virology

"In the 1920s, virology was not an established discipline.

Researchers had no criteria to describe viruses chemically, in fact, the very definition of a virus was a subject for debate.

The best scientists could do, was to say that, if an infectious agent passed through a fine porcelain filter that held back bacteria, then it was probably a virus, "a filterable agent".

> ***"In March 1922, Rivers headed the infectious disease ward at the Rockefeller Institute for Medical Research and became the institute's director in June 1937.*** *After retiring in 1956, he remained active with the Rockefeller Foundation.* ***His work in the 1930s and 1940s contributed to making the institute a leader in viral research."*** *- in "Wikipedia, 26 May 2020*

In 1926, Thomas M. Rivers director of the Rockefeller Hospital, made a bold statement about the essential nature of viruses, that set the course of virology for decades to come.

He said:

> *"Viruses appear to be obligate parasites, in the sense that their reproduction is dependent on living cells."*

In stating that viruses needed living cells in order to replicate, Rivers was contradicting many workers in the field, including Simon Flexner, the director of the Rockefeller Institute, who claimed to have isolated and cultivated the polio virus in a cell-free medium.

But Rivers had both laboratory and clinical experience on which to base his view.

When, in 1926, the Society of American Bacteriologists invited him to organize a symposium on viruses, and deliver a lecture, he reviewed the body of knowledge on viruses.

Several observations on the problem of growing viruses in the laboratory led him to his conclusion: **the difficulty of cultivating viruses on artificial media could not be explained**; although viruses were small, size should not prevent their cultivation; viruses were not particularly delicate or susceptible to destruction during laboratory procedures; **nor had any viruses been found multiplying free in nature.**

His synthesis of the state of virology was published in the book, Filterable Viruses, in 1928.

Rivers' hypothesis led to many advances in the culturing and characterization of viruses that cause human disease." - in "The Birth of Modern Virology", Rockefeller University Hospital, 26 May 2020.

Rivers' Criteria

"Rivers proposed his own postulates to establish a causal relationship between a virus and a disease:

1. A specific virus must be found associated with a disease with a degree of regularity;
2. The virus must be shown to occur in the sick individual not as an incidental or accidental finding but as the cause of the disease under investigation.

Rivers postulates differed from Koch's postulates in that the pathogenic virus did not need to be present in every case of the disease, the possibility of a viral carrier state was recognized, and the requirement for propagation of the pathogenic virus in media or cell culture was abandoned.

Rivers proposed several approaches to fulfilling the second postulate, which distinguished between causation and simple association.

The pathogenic virus should be present at the proper time in specific lesions.

Disease should be produced with some regularity by serial inoculation of infected material (tissue, blood, or exudate) "free from ordinary microbes or rickettsiae" into susceptible hosts, incorporating appropriate controls.

Scientists have been no more successful today than a century ago in culturing the etiologic agent of leprosy, Mycobacterium leprae.

The inability to isolate M. leprae in pure culture prevents the fulfilment of Koch's 3rd postulate. Nonetheless, Koch stated:

> ***"Therefore, we are justified in stating that if only the first two conditions of the rules of proof are fulfilled, i.e., if the regular and exclusive occurrence of the parasite is demonstrated, the causal relationship between parasite and disease is validly established."***

The limitations of Koch's postulates, evident in the 1800s, are even more pronounced today. Organisms such as Plasmodium falciparum and herpes simplex virus or other viruses cannot be grown alone, i.e., in cell-free culture, and hence cannot fulfil Koch's postulates.

Similarly, certain microbes such as human immunodeficiency virus (HIV) exhibit a host range that is restricted to humans; they cannot produce typical disease in other hosts, thereby making impossible or unethical the final fulfilment of the 3rd postulate.

Furthermore, how does one meet criteria for causation when a pathogenic microbe is also capable of a carrier state (e.g., Neisseria meningitidis), causing disease in one individual and not in another?

The fundamental limitations of Koch's postulates are no more apparent than when applied to obligate parasites. Since viruses propagate by usurping cellular machinery, they cannot be propagated in pure (lifeless or cell free) culture and therefore cannot fulfil Koch's postulates." - David N. Fredricks, David A. Relman, Departments of Medicine and Microbiology & Immunology, Stanford University School of Medicine, Stanford, California, in "Sequence-Based Identification of Microbial Pathogens: a Reconsideration of Koch's Postulates", Clinical Microbiology Reviews, January 1996.

> ***"At the time when they were formulated Koch's postulates were essential for the progress of knowledge of infectious diseases; but progress having left behind old rules requires new ones which some day without doubt will also be declared obsolete."*** *- Dr Thomas M. Rivers, MD, The Rockefeller Institute for Medical Research, New York, in "Viruses and Koch's Postulates", Journal of Bacteriology, 1937.*

"The time has arrived.
And for this reason, the present book, along with others, which, have been compiled.
Shall serve to declare, that the ideas voided of truth, and with much error, which in an epidemic manner, brought misery, disease and death to so many .
Today due to these false teachings, the International Labour Organisation has warned that nearly half of the global workforce, is in immediate danger of losing their livelihood.
Thus we have 1.6 Billion workers worldwide without a job." -
Rui Alexandre Gabirro, Emunctologist

99% of Those Who Died From Virus in Italy Had Other Illness

"More than 99% of Italy's coronavirus fatalities were people who suffered from previous medical conditions, according to "Coronavirus Bollettino Report COVID 2019, 17 Marzo v2", by the country's national health authority.

More than 75% had high blood pressure, about 35% had diabetes and a third suffered from heart disease." - in "Bloomberg", 18 March 2020.

Forensic doctor "Nobody has Died of Covid-19 in Hamburg Without Previous Illness"

"Professor Klaus Püschel, head of Hamburg forensic medicine, Autopsies the corona dead in Hamburg.

"This virus affects our lives in a completely exaggerated way.

This bears no relation to the danger posed by the virus.

And the astronomical economic damage now arising is not commensurate with the danger posed by the virus.

We want to learn from the dead for the living.

We try to understand what the so-called corona dead actually died from, in order to draw conclusions for the clinical treatment of the people suffering from it.

We take a closer look: How did the virus affect the heart, lungs and other internal organs?

All of those we have examined so far had; Cancer, Chronic Lung Disease, were Heavy Smokers or Heavily Obese, suffered from Diabetes or Had Cardiovascular Disease.

We had - nobody knows yet - the first 100-year-old who died of Covid-19." - Olaf Wunder, in "MOPO Hamburg Morning Post", 6 April 2020.

Global Virus Network

Internationally Renowned Virologist Christian Bréchot Appointed President of the Global Virus Network

Brings Decades of Scientific & Organizational Leadership To Advance GVN's Mission

"The Global Virus Network, an international coalition of the world's foremost medical virologists, comprising 40 Centers of Excellence in 24 countries, dedicated to identifying and researching, combatting and preventing, current and emerging pandemic viruses that pose a critical threat to public health and wellbeing, today announced the appointment of Dr Christian Bréchot, MD, as President of the GVN.

Dr Bréchot, who recently stepped down as President of France's internationally renowned Institut Pasteur, will assume his new position with the GVN effective 1 October 2017.

The announcement was made during the opening address of the 9th International Global Virus Meeting in Melbourne, Australia by Prof. Robert Gallo, MD, the GVN's co-founder and scientific director, and by Prof. Sharon Lewin, MD, director of The Peter Doherty Institute for Infection and Immunity, a GVN Center of Excellence.

Said Dr Gallo, "When the GVN was founded in 2011, **our mandate was to safeguard mankind from potential catastrophic and devastating pandemic virus** by coalescing the finest public health expertise in order to undertake collaborative research, to train the next generation of

virologists as well as to catalyze, **engender and foment advocacy amongst leaders of government, the private sector and the scientific community throughout the world**.

While we have made great strides in the last 6 years, having the unprecedented expertise, inspired vision and consummate leadership of Dr Bréchot, a man of extraordinary ability in public health and basic science virology, will enable the GVN to fulfill its mandate and realize its ultimate potential for the betterment of mankind."- in "Business Wire", 25 September 2017.

"People Are Scared" The fight against a deadly Virus No One Has Heard Of

"Human T-lymphotropic virus type 1 (HTLV-1) is transmitted through sexual contact, blood transfusion and from mother to child by breastfeeding.

It can cause a **rapidly fatal form** of leukaemia.

Some people die within weeks of diagnosis.

HTLV-1 also causes inflammation of the spinal cord leading to paralysis, severe lung disease known as bronchiectasis and other inflammatory disease.

Worries there will be "significant mortality" over the next 5 to 10 years from HTLV-1 **related bronchiectasis (lung disease)**. The world doesn't know enough about it. In the early 1980s, HTLV-1 and HIV were discovered around the same time.

Vaccine research overdue

Slowly, the world's virologists are coming to admit they could have done more, and now is the time to make amends.

Dr Robert Gallo in 1984 he co-discovered HIV, helping prove the link between HIV and Aids.

Prior to the Aids epidemic, in 1980 Gallo was the first to identify HTLV-1 as the only known human leukaemia virus.

"I think it's time to be a bit more muscular for HTLV-1, this virus that's been forgotten about. You might ask, **why isn't there a Vaccine against HTLV-1?**

I don't know how hard it's been tried. We never did.

But we need to stimulate more governmental involvement, we need to push the importance of the disease, the seriousness of it.

We need to do significantly more with HTLV-1." - Lorena Allam, in "The Guardian", 24 April 2018.

Ancient HTLV-1 Virus Making A Comeback In Australia

"An ancient virus infecting residents across Australia's Northern Territory is leaving death and despair in its path, and doctors are now calling for greater efforts to stop the spread of infections. The rates of human T-cell leukemia virus type 1, or HTLV-1, infection are exceeding 40 percent among adults in remote regions of central Australia, with indigenous communities being the hardest hit.

> *"**The prevalence is off the charts**" in Australia, said Dr. Robert Gallo*

HTLV-1 — **an ancient virus whose DNA can be found in 1,500-year-old Andean mummies**.

The virus is associated with myriad serious health problems, such as diseases of the nervous system and a

lung-damaging condition called Bronchiectasis, and it weakens the immune system.

HTLV-1 is sometimes called a cousin of the human immunodeficiency virus, HIV.

The focus has come about now because of the high prevalence among indigenous Australians, "which is probably the highest-ever reported prevalence in any population." - Dr. Graham Taylor, clinician and professor at **Imperial College London** who runs the United Kingdom's HTLV clinical service based at St. Mary's Hospital." - in "CNN", 8 May 2018.

"A coalition of the world's foremost scientists, activists and researchers has written to the World Health Organisation to plead for action to combat the cancer-causing retrovirus HTLV-1, while the federal government is being urged to "show leadership" in dealing with the spread of the virus in central Australia.

In an extraordinary move, 60 representatives from 26 countries have signed the letter **published** on Friday by the **medical journal the Lancet**, telling WHO it is "time to eradicate HTLV-1" and conceding that "our global community has been slow to respond to the HTLV-1 predicament".

Dr Robert Gallo, wants WHO to develop and promote more up-to-date, evidence-based information on the virus.

"**Visibility leads to greater funding, and greater funding leads to more science**, and that solves problems." - Lorena Allam, in "Time to eradicate HTLV-1, World Health Organisation is warned", The Guardian , 10 May 2018.

GVN-Singapore

"The Global Virus Network and the GVN-Singapore Center of Excellence, comprised of 7 virology research intuitions led by Duke-NUS Medical School, announced today the induction of the Singaporean coalition as GVN's newest Center of Excellence.

The GVN represents 42 Centers of Excellence and 7 affiliates in 27 countries and comprises foremost experts in every class of virus causing disease in humans.

"Joining the 7 institutions to form GVN's latest Center of Excellence in Singapore was a terrific idea by Prof. Linfa Wang", said Gallo." - in "Global Virus Network Adds Singapore Consortium as Newest Center of Excellence", 22 August 2018.

> *"The Institute of Human Virology (IHV) at the University of Maryland School of Medicine will lead a $12 Million dollar project to improve the morbidity and mortality of people with Opioid Use Disorder. Utilizing a novel compound, IHV researches will implement a series of investigations, entitled SEARCH, to evaluate the underlying mechanisms of craving reduction as a strategy to prevent opioid misuse, dependence, and relapse. The grant is awarded through the National Institutes of Health's (NIH) Helping to End Addiction Long-term (HEAL) Initiative, made possible through groundbreaking funding from the US Congress. "We are pleased to have the opportunity through Dr Shyam Kottilil's terrific team here at the Institute to meaningfully address the critical issue of addiction," said Robert Gallo, MD." - in "Business Wire", 19 September 2018.*

Breakthrough Research by Scientists on Chikungunya Virus

"For reasons such as these, **Singapore was recently inducted as the newest centre of excellence of the Global Virus Network, a cluster of 42 global centres with the foremost experts in many areas of virus-causing disease in humans.**

The aim of GVN is to **strengthen medical research and response to current viral causes of human disease.**" - in "BioSpectrum", Asia Ed., 27 September 2018.

Global Virus Network Launches Anticipation & Preparedness Taskforce

Following 10th International Meeting in Annecy, France

"The GVN Undertakes Worldwide Initiative to Support Public Health Authorities.

The Global Virus Network, a worldwide coalition of preeminent virologists engaged in the preparedness, defense and first research response to emerging, exiting and unidentified viruses that pose a clear and present threat to public health, has launched the Anticipation & Preparedness Taskforce (A&P Taskforce).

The A&P Taskforce is led by Dr Christian Bréchot, President of the GVN, and Co-Chaired by Elodie Ghedin, PhD, Director of the Center for Genomics and Systems Biology, and Professor of Biology and Global Public Health at New York University, and Giuseppe Ippolito, MD, the Scientific **Director of the National Institute for Infectious Diseases (INMI) "Lazzaro Spallanzani" in Rome** and

Director of the **World Health Organization** (WHO) Collaborating Center for clinical care, diagnosis, response and training on Highly Infectious Diseases at INMI.

> ***"The identification of emerging, re-emerging and unknown infectious diseases and surveillance of viral pathogens humans and wildlife is critical for early prediction of future disease outbreaks and epidemics. The Taskforce will also facilitate and expedite the development of critical epidemiological protocols and guidelines for the diagnosis, treatment and prevention of emerging, re-emerging and unknown viruses,*** *as well as training healthcare professionals in all geographical areas to deal with infectious diseases caused by such viruses;* ***being science-driven it will work in close interaction with the other organizations at stake on this major issue."*** *- Dr. Bréchot*

A recent article published by the BBC titled, "The Mystery Viruses Far Worse Than the Flu" (Gorvett, 2018), emphasized **the critical and timely need to anticipate and prepare for the next human pandemic**; and this is one of the primary mandates for the formation and implementation of the Anticipation & Preparedness Taskforce.

> *"I think the chances that the next pandemic will be caused by a novel virus are quite good", says Kevin Olival, a disease ecologist from the EcoHealth Alliance. One not-so-surprising finding was that* ***the next pandemic will probably emerge from bats****. No one knows why, but bats are absolutely riddled with nasty viruses. They're known to be the source of many, many human pandemics, including Sars, which we picked up from cave-dwelling bats in China, as well as Ebola."* ***- in "Future", BBC, 14 November 2018.***

The Taskforce's Biodefense and Biosecurity initiative will be led by James LeDuc, PhD, the director of the Galveston National Laboratory and a professor in the Department of Microbiology and Immunology at the University of Texas Medical Branch in Galveston.

Said Dr. LeDuc in his recent article:

> *"We direct a newly constructed maximum biocontainment laboratories (MCLs) in Wuhan, China. In preparation for the opening of the new China MCL, we engaged in short-and long-term personnel exchanges focused on biosafety training, building operations and maintenance, and collaborative scientific investigations in biocontainment. We succeeded in transferring proven best practices to the new Wuhan facility. Both labs recently signed formal cooperative agreements that will streamline future scientific and operational collaborations on* ***dangerous pathogens. We benefited from meetings jointly sponsored by the U.S. National Academy of Sciences and the Chinese National Academy of Sciences, and from World Health Organization initiatives. Our partnership still requires input from foundations and governmental agencies that are involved in security, commerce, and transportation, as well as from the commercial sector."*** *- James W. Le Duc, Zhiming Yuan, in "Network for safe and secure labs", Science, 19 October 2018.*

The A&P Taskforce, as well as 8 new Virus Watch Groups, were adopted by the Leadership Committee of the GVN at the organization's tenth international meeting in Annecy, France in the Fall of last year. The objective of the Virus Watch Groups is to establish regular communication and collaboration between the GVN's experts, further highlighting the GVN as the go-to organization for virus

science expertise in the event of an emerging epidemic.

The Virus Watch Groups will enable rapid responses to threats in the following categories: Arboviruses; Gastrointestinal; Hemorrhagic Fever; Herpes; Oncogenic; Respiratory; Retroviruses; and Zoonotic." - in "PRNewswire", 27 Mar 2019.

"The Hot Zone" Scenario - Will It Happen Again?

The Global Virus Network (GVN) Confirms That Deadly Hemorrhagic Viruses Are a Real & Imminent Threat

"The Hot Zone", which premiered on 27 May 2019, is a three night limited series on National Geographic, based on Richard Preston's best-selling book that depicts the **true story** of deadly, airborne hemorrhagic fever viruses, Ebola and Marburg.

According to the Global Virus Network, a worldwide coalition of preeminent virologists engaged in the preparedness, defence and first research response to emerging, existing and **unidentified viruses** that **pose a clear and present threat to public health**, what took place in 1989 foretells of what **could well occur both in the present and in the foreseeable future**.

Said internationally renowned virus hunter, Dr Robert C. Gallo, MD, most widely known for discovering the first human retrovirus and for co-discovering HIV as the cause of AIDS.

"What people the world over should be asking is not whether an outbreak of a lethal virus has the potential to become a global pandemic, as there are a myriad and multitude of viral threats that are an unequivocally real and indisputably present danger to mankind, but whether the world's doctors and scientists are capable, let alone prepared, to handle a devastating viral outbreak."

In relation to hemorrhagic viruses, scientists and the GVN are predicting the following:

The cost to the global economy is estimated to be in excess of $200 Billion annually, an increase of almost $50 Billion since 2001." - in "PRNewswire", 28 May 2019.

"**We offer the GVN a truly unique skill set in bioengineering and technology innovation that will nicely complement the more classic virology focus of most other members of the network**, as well as numerous powerful enabling technologies that GVN members should find extremely useful.

We look forward to the GVN helping us to identify relevant funding opportunities and sources of clinical samples, and to team with us to build stronger consortia around specific problems, and if possible, to provide support for fellows and trainees." - Donald Ingber, MD, Wyss Founding Director, Professor of Vascular Biology at Harvard Medical School." - in "Wyss Institute joins Global Virus Network as new Center of Excellence to fight viral threats", Wyss Institute, 24 October 2019.

"The Global Virus Network (GVN), representing 53 Centers of Excellence and 9 Affiliates in 32 countries comprising foremost experts in every class of virus causing disease in humans and some animals, is holding regular strategic discussions with its members regarding the growing novel coronavirus, known as 2019-nCoV.

The GVN has identified areas to support its Centers and work with international organizations addressing the growing epidemic.

> ***"GVN Centers of Excellence and Affiliates, with strong working relationships among them, are poised to engage in any outbreak situation by providing the world's only network of top basic virologists from around the globe covering all classes of human viral threats. Many members of the GVN are initiating various projects regarding diagnostics, Vaccines and therapeutics to combat this rapidly expanding, novel, outbreak.*** *However, there are still resource needs and information gaps that need to be filled, and GVN is helping to serve as that important resource.* ***In particular, we have engaged GVN Africa to foster collaborations on diagnostics and other important resource needs."*** *- Dr Christian Bréchot, MD, President of the GVN, and a Professor at the University of South Florida*

- in "Global Virus Network (GVN) Convenes Discussions with International Top Experts to Combat Growing Novel Coronavirus Epidemic", PRNewswire, 6 February 2020.

"The Global Virus Network (GVN), representing 53 Centers of Excellence and 9 Affiliates in 32 countries comprising foremost experts in every class of virus causing disease in humans and some animals, is holding regular strategic discussions with its members regarding the COVID-19.

The GVN, among other critical tasks, is forming subcommittees to make scientific recommendations requested of the network.

> *"GVN is serving as an information hub, not just for its Centers and Affiliates,* ***but for public health entities and some industry leaders. We will be providing recommendations and suggested guidelines for researching COVID-19 in laboratories worldwide,*** *while working with organizations such as the China CDC and Africa CDC as well as companies with scientifically-proven products for testing." - Dr Christian Bréchot, MD, President of the GVN, and a Professor at the University of South Florida*

- in "Global Virus Network Coordinates Efforts Between Top International Experts Researching COVID-19", PRNewswire, 18 February 2020.

> *"Darren Adam had Professor Gallo, on the line to discuss his research in the past and the work he's carrying out during the coronavirus crisis.* ***"We have learned to live with HIV"*** *Darren began, listing out how it has changed from a death sentence to a disease that humans can live a long life with.* ***He wondered if this could be possibly the path we're taking with Covid-19****." - in "Expert breaks down coronavirus research: Is it worse than HIV? Is it mutating?", 27 April 2020.*

> ***"Type 2 Diabetes, Heart Disease, Alzheimer's, Cancer, Covid-19 — apparently unconnected conditions, but at the root of them all lies one problem: inflammation.*** *Inflammation is a clue to what lies behind the high number of coronavirus deaths in Britain, reflecting the serious extent of underlying chronic disease and justifying our new label as the sickest population in Europe.* ***Government statistics show that more than 90% of Covid deaths are among people aged over 60, with 3 in 4 people classed as obese.*** *In the U.S., Robert Gallo, co-founder of the Global Virus Network and one of the original discoverers of HIV, plans to test whether the polio Vaccine can protect healthcare workers against Covid-19. It is based on the fact that Vaccines generally boost the immune system beyond their immediate effect on the disease they are targeting." - in "The Daily Mail, 11 May 2020.*
>
> *"They saw recombinant forms, and those are scary.*
> *The structure of the spike has features reminiscent of HIV's spike protein." - in "Tribune News Service", 14 May 2020.*

"When researchers in Los Alamos published a study last month revealing the emergence of a mutant coronavirus strain, a finding buried deep inside **alarmed Robert Gallo**, one of the co-discoverers of HIV.

The mutation of the coronavirus's outer spikes could help the virus escape the grasp of otherwise neutralizing antibodies and **"make individuals susceptible to a second infection"**, the study warned." - in "Tribune News Service", 15 May 2020.

> *"**88% of deaths in Italy have been in patients over 70 years old**." - Edward Livingston, MD in "Coronavirus Disease 2019 (COVID-19) in Italy", JAMA, 17 March 2020.*

The Zika

"Although MAYV was originally isolated in Trinidad in 1954, subsequent reports of illness associated with this virus have tended to be associated with small, occasional outbreaks (30–100 cases) in northern South America, within and close to the Amazon forest.

Signs and symptoms reported in association with MAYV infection include:

Arthralgias, Eye Pain, Fever, Headache, Myalgias, Rash, and occasionally; Nausea and Vomiting, Photophobia, Abdominal Pain, Cough, Diarrhea, Sore Throat, and Bleeding Gums.

The emergence of CHIKV has further added to this confusion, especially because prolonged Arthralgia is reportedly associated with CHIKV and MAYV infections.

The recent emergence of Zika virus infection in the Caribbean region, and **its identification as a major cause of birth defects**, has brought a great deal of attention to arboviruses.

Our findings highlight the multiplicity of arbovirus species in Haiti and the evolutionary relatedness among the viruses in Haiti and those circulating in Brazil, in keeping with prior work on Zika virus.

Findings also underscore the complexity of the interactions among different species and the apparent proclivity for Zika virus/DENV and MAYV/DENV co-infections.

A better understanding of Zika virus infection is clearly needed, careful studies of other arboviruses (and their

vectors and possible reservoirs) **in these same geographic regions are correspondingly needed.**

We do not know if MAYV has epidemic potential; however, in light of recent observations with CHIKV, DENV, and Zika virus and the potential for transmission of MAYV by Aedes and Haemagogus spp. mosquitoes, inclusion of MAYV in studies of arbovirus transmission seems to be indicated." - in "Mayaro Virus in Child with Acute Febrile Illness, Haiti", Emerging Infectious Diseases, 2015.

"The 3rd case of the Zika virus was detected in **South Korea** on Friday from a man having traveled to the Philippines, the Korea Centers for Disease Control and Prevention said.

The virus was detected from his saliva and urine, but he didn't show any symptoms of the virus such as rash and muscle pain.

The man's 20-year-old brother, the second Zika case who had traveled to the Philippines together with the man, was classified as a confirmed patient on Wednesday.

The younger brother developed symptoms of flu from 20 April and started to show rash in his body on April 22.

He was discharged from a hospital on Thursday as he recovered from the viral disease.

The first South Korean Zika case was found from a 43-year-old man on 22 March." - in "Xinhua", 29 April 2016.

Common Coincidences

1. The Zika virus, strikes in the winter months!
2. Plus; they are all ever so similar!

The Mayaro

"An outbreak in the Chuquisaca Department in Bolivia, involving 12 persons, was reported in May 2007.

Six of the 9 departments of Bolivia are affected by outbreaks of Malaria, Dengue, Hanta Virus, Yellow and Mayaro Fevers, after the damage caused by the rains in the first months of the year (January to May), the Ministry of Health confirmed today.

The damages caused by the "El Niño" climate phenomenon in Bolivia also caused losses of $ 443 million, according to an evaluation presented in late April by the Economic Commission for Latin America (ECLAC)." - in "Six regions of Bolivia affected by outbreak of epidemics after rains", Terra, 13 May 2007.

*"**A New Threat:** Watch out for Mayaro Fever.*
***This New Disease is Very Similar to Chikungunya**." - in "El Debate", 27 April 2016.*

Mexico: Worries About Mayaro Fever

"The Mexican Health Secretary announced the arrival of a new disease transmitted by the Haemagogus mosquito, Mayaro fever, is an arbovirus, of the Alphavirus genus.

The official said that the Pan American Health Organization disclosed about this fever that reached Brazil and is in Central America and is expected to possibly enter Mexico.

Among the symptoms of this disease are: **Fever, General Discomfort, and Joint Pain**, although he said that no other complication has been shown to him.

In addition, he commented that the course of the disease is 3 to 5 days, however **the joint pain can last for months so it is very similar to Chikungunya**." - in "Centro Nacional de Información de Ciencias Médicas", Cuba, 28 April 2016.

Mayaro: An Emerging Viral Threat?

"**Mayaro virus (MAYV), an enveloped RNA virus, belongs to the Togaviridae family and Alphavirus genus.**

This arthropod-borne virus (Arbovirus) is similar to Chikungunya (CHIKV), Dengue (DENV), and Zika virus (ZIKV). The term **"ChikDenMaZika syndrome"** has been coined for clinically suspected arboviruses, which have arisen as a consequence of the high viral burden, viral co-infection, and co-circulation in South America. In most cases, **MAYV disease is nonspecific**, mild, and self-limited.

Fever, Arthralgia, and Maculopapular Rash are among the most common symptoms described, **being largely indistinguishable from those caused by other arboviruses.**

However, severe manifestations of the infection have been reported, such as Chronic Polyarthritis, Neurological Complications, Hemorrhage, Myocarditis, and even death.

Currently, **there are no specific commercial tools for the diagnosis of MAYV**, and the use of serological methods can be affected by cross-reactivity and the window period.

A diagnosis based on clinical and epidemiological data alone is still premature." - Carolina Ramírez-Santana, et al., in "Emerging Microbes Infections", 26 September 2018.

What was SARS?

"Almost as inexplicable as the rapid rise and fall of the SARS epidemic is its definition.

According to WHO a suspect case of SARS was highly constrained in both space and time but the only symptom required was a fever: Presentation after 1 November 2002, High fever (over 38C – 100.4F), and being in a SARS-affected area within the last 10 days or having close contact with a person with SARS." - David Crowe, in "SARS - Steroid and Ribavirin Scandal", The Infectious Myth, draft, 31 January 2020.

The Hanta

"Hanta virus infection. Recent observation indicates that symptoms generally begin from 1 to 6, potentially 7, weeks after exposure. Early symptoms include: **Fatigue, Fever, Chills, and Muscle Aches.** About 50% of patients will experience: **Headaches, Nausea, Vomiting, Dizziness and Abdominal Pain.** The disease progresses rapidly (4-10 days after initial symptoms) to include Coughing, Shortness of Breath and Severe Difficulty Breathing.

The types of Hantavirus that cause the infection in the United States cannot be transmitted from one person to another. - in "United States of America - Hanta virus infection – Update", 10 September 2012.

"A man in China's Yunnan Province who died in late March tested positive for Hanta virus, prompting Chinese authorities to test 32 people who shared a bus with the man.

This has provoked new interest in Hanta virus, along with concerns of outbreak in the context of the ongoing COVID-19 pandemic." - Peter Schelden, in "Hantavirus Death in China: How Likely Is a Coronavirus-Like Pandemic?", MedicineNet, 25 March 2020.

Hanta Virus, Medicine Men, And the Other

"Some called it the Navajo Flu.
A friend was really sick,
And went to a medicine man.
The dust of dried deer mouse urine
Sinister particles floated off the desert floor.
Try not to breathe in too much
You never know what's in a breath these days.
Men of science postulated, empiricized
Hypothesized and guessed.
Medicine men knew what to say.
They'd been watching and listening to mother earth.
The old ones knew it was coming.
They saw rain, the lush greenery spreading,
The balance more one-sided.
Their warnings of disharmony went unheeded." - Deborah Dozier, in "Anthropology & Humanism", 1997.

Viral Infection & Kidney Disease

"**Viral infection-associated kidney diseases are an emerging public health issue in both developing and developed countries.**

Many new viruses have emerged with new paradigms of kidney injury, either directly through their cytopathic effect or indirectly through immune-mediated glomerulopathy, tubulointerstitial disease, and acute kidney injury as part of multiorgan failure.

Our understanding of kidney diseases associated with viral infections is in its infancy.

Many viruses affect the kidneys directly by disruption of the cellular machinery or indirectly by complement activation and other immune responses with consequent inflammation, hemolysis, rhabdomyolysis, thrombocytopenia, and coagulation abnormalities.

Several of these viruses cause viral hemorrhagic fever, which is associated with endothelial dysfunction, capillary leak, and hemodynamically mediated acute kidney injury.

Viral Hemorrhagic Fevers are associated with acute kidney injury, consequent on endothelial dysfunction and capillary leak syndrome. **Diagnosis is based on serology and detection of viral nucleic acids**." - James E. Novak, et al., in "Kidney Diseases Associated With Parvovirus B19, Hanta, Ebola, and Dengue Virus Infection: A Brief Review", Advances in Chronic Kidney Disease, May 2019.

"The world is suffering from a massive delusion based on the belief that a test for RNA is a test for a deadly new virus. If the virus exists, then it should be possible to purify viral particles. *From these particles RNA can be extracted and should match the RNA used in this test. Until this is done it is possible that the RNA comes from another source, which could be the cells of the patient, bacteria, fungi etc.* ***There might be an association with elevated levels of this RNA and illness, but that is not proof that the RNA is from a virus. Without purification and characterization of virus particles, it cannot be accepted that an RNA test is proof that a virus is present.*** *This strange new disease,* ***has none of its own symptoms. Fever and cough, previously blamed on uncountable bacteria, as well as environmental contaminants, are most common, as well as abnormal lung images, despite those being found in healthy people."*** *- David Crowe, in "Flaws in Coronavirus Pandemic Theory", 19 May 2020.*

Chapter 27

Medicine

At Best A Dubious Science And At Worst Fraudulent

"In this State we are suffering from an incubus in the shape of an inefficient and overbearing commission, closely allied to doubtful political parties who, unfortunately, in a measure, have secured the support of certain party organs, and some medical men, who are at best but ill-informed as to their doings." *- Dr Allan M'Lane Hamilton, MD, in "Journal of Nervous and Mental Disease", 1894.*

"Disease can influence the actions of a drug, both therapeutic and undesired, in many ways. ***These include changes in the rate and extent of its absorption from the gastrointestinal tract and other sites, its disposition throughout body compartments, its hepatic uptake and metabolism, and its clearance from the body by one of more routes of elimination.*** *In addition to these pharmacokinetic changes, disease may modify the pharmacological action of a drug, for example by influencing receptor number and responsiveness." - P. Turner, in "Influence of Disease on Drug Toxicity", Arch. Toxicol., Suppl. 7, 1984.*

"There are more than sufficient research institutes and journals, but it is results which count, not numbers. ***The whole foundation upon which modern science has been built is unsound, and many further additions to the edifice will bring about its downfall."*** *- Professor James Eustace Radclyffe McDonagh, FRCS, in "The Nature of Disease Journal", Vol. 2, 1932.*

"Calling modern medicine "scientific" does not make it any different from what it really is. Medicine was born of magic, it has evolved from magic, and it will go the way of all products of magic." *- Professor James Eustace Radclyffe McDonagh, FRCS, in "The Nature of Disease Journal", Vol. 3, 1934.*

"If you look at the world today, lies are mainstream – truth is a fringe phenomenon." - Dr Aseem Malhotra, MD, 19 October 2019.

"It should always be remembered, that, the Medical Trade is Vicious & Malicious, when it comes to silencing its critics. Instead of coming to their senses, and rectifying their ways, the Medical Trade as a sect, become instead, in their actions more poisonous then those drugs that they themselves prescribe." *- Rui Alexandre Gabirro, Emunctologist*

The Genes Question

"Dear Dr Richard Wooster, MD

These are 2 genes identified in your research published papers which have been published along with other researchers:

"The BRCA2 gene has been localized to chromosome 13q12-q13." & "BRAF gene is faulty in a wide range of cancers."

1. Could you please indicate if this gene, or genes include the genome of the individual microbiome, or are this genes not related to the microbiome?

2. Could you please indicate what it is meant by:

"Hereditary predisposition", and if this, has anything to do with the microbiome which is transmissible from parent to offspring by normal birth without caesarean section?" - E-mail sent to several Medical Trade so-called "researchers" responsible for the major finds on the so-called "disease genes connection", 5 Sept. 2019.

Soon after sending the e-mail, I looked again at the wording just sent and found another question, which begged to be asked:

"BRAF gene is faulty in a wide range of cancers"

What are the "wide range of cancers"?
Could you enumerate the cancers in which this "BRAF gene" is at fault?" - Rui Alexandre Gabirro, Emunctologist

The Pharma Factor in Genetics

"It comes at no surprise then that "Richard Marais' research on BRAF led to the development of the Drug Vemurafenib which is used to treat melanoma." - in "Cancer Research UK", 24 August 2009.

*"Cancer drugs, **Getting close and personal, Researchers and Drug Companies are ganging up** for a new push against cancer." - in "The Economist", 4 January 2014.*

"**Those living with genetic disease, the rise of genomic medicine is particularly exciting**, is encouraging to see renewed focus on this area in the NHS Long Term Plan.
Harness the power of genomic technologies, NHS has ambition of being the world-leading in genomic medicine.

We need to set in place the right framework across the entire health system to ensure patients, can benefit from the promise of genomic medicine.

This isn't something that can be done in isolation by the NHS alone, and nor should it be.

Industry has an important role to play, in partnership.

Pfizer has been at the forefront of cutting-edge science working with the government to ensure the ambition of leading the world in genomic medicine.

We are all collectively **here to help**." - in "Addressing the common challenges of rare cancers", Pfizer, 26 June 2019.

Vemurafenib Side effects

"31% of patients get skin lesions that may need surgical removal." - in "Nature", No. 467, 2010.

"A trial combining vemurafenib and ipilimumab was stopped in April 2013, because of signs of liver toxicity." - in "Cancer drugs", The Economist, 4 January 2014.

Vemurafenib Drug Toxicity

"In the few toxicity reports, it has been shown an incr**eased in the development of cutaneous squamous cell carcinomas or acceleration in pre-existant tumour growth."** - in "DrugBank", Canada, 2019.

Vemurafenib marketed as Zelboraf

"ZELBORAF can cause serious side effects, including:

- Risk of new cancers. ZELBORAF may cause certain types of skin cancer called cutaneous squamous cell carcinoma (cuSCC) and keratoacanthoma. New melanoma lesions have occurred in people who take ZELBORAF.

ZELBORAF may also cause another type of cancer called non-cutaneous squamous cell carcinoma (non-cuSCC).

Talk with your healthcare provider about your risk for these cancers.

What are the possible side effects of ZELBORAF?

Severe skin reactions.
Blisters on your skin
Blisters or sores in your mouth
Peeling of your skin
Fever
Redness or swelling of your face, hands, or soles of your feet

Liver injury.
Yellowing of your skin or the white part of your eyes
Dark or brown (tea color) urine
Nausea or vomiting
Loss of appetite
Pain on the right side of your stomach

Eye problems.
Eye pain, swelling, or redness
Blurred vision or other vision changes

Kidney injury." -
in "gene.com/patients/medicines/zelboraf", 2017.

Lets see if we understand this right?

The Medical Trade and the Pharmaceutical Industry found a new "Drug" to cure cancer, which also causes cancer!

Biotechnology

"Considered the founder of the industry, Genentech, now a member of the Roche Group, has been delivering on the promise of biotechnology for more than 40 years.

Genentech is a biotechnology company dedicated to pursuing groundbreaking science to discover and develop medicines for people with serious and life-threatening diseases.

Our transformational discoveries include the first targeted antibody for cancer and the first medicine for primary progressive multiple sclerosis." - in "Genentech", 2019.

In the Genentech website their description is in itself a big eye opener, from the start to the last word on their own company description.

In the last sentence they claim to have made "the first medicine for primary progressive multiple sclerosis", in our publication "The Unknown Causes of Disease, or the Idiopathic Nature of Medicine", it can be found information pertaining to the clinical fact that progressive multiple sclerosis, is a state of toxaemia not a "genetic disease", caused by a transmitted "disease gene".

They place the following quote on their website, which becomes farcical.

> *"The scientist is not a person who gives the right answers, he's one who asks the right questions." - Claude Lévi-Strauss*

> ***"Medical Science, also called: "Medical Wisdom", is easily found to be mainly based upon Theories, not Facts!"** - Rui Alexandre Gabirro, Emunctologist*

Everything Smells Like Fudge

"- In: "Elements", Myka makes a reference to the questions when she tells Lattimer that she smells fudge.

- In: "Time Will Tell", the smell of fudge in the warehouse leads Artie to discover the Chameleon Mines, MacPherson left for him.

- In: "The Greatest Gift", Pete, while in an alternate universe, was asked by MacPherson: "Do you smelled fudge?"

- In: "Personal Effects", Claudia asked a store clerk if she noticed the smell of fudge, to which the clerk replied: "That's the fudge store next door. Yum!"

- In: "The Big Snag", after being pulled into the noir novel, Pete commented that: "Everything smells like fudge."

- in "Warehouse 13", Science Fiction Television Series, 2009.

Until we get back to the old methods medical science will not progress

"**Until we get back to the old methods of clinical observation medical science will not progress.**

Until we cease pinning our faith to the results obtained in the laboratory, we cannot expect but to fail in our treatment of disease. By all means let us come back to the bedside, and to practical methods of observation.

Let us train our students to use all their senses. By means of the ear, the eye, the finger, much may be learned which the laboratory can never teach us.

Let us be practical.

Let us cease to be the slaves of the laboratory diagnostician and the theorist.

Then only will our knowledge increase, and our success in the diagnosis and treatment of disease advance." - Editorial in "Laboratory versus Clinic", Medical Times, July 1934.

> *"There is scarcely, a more dishonest trade imaginable than medicine in its present state. The monarch who would entirely interrupt the practice of medicine would deserve to be placed by the side of the most illustrious characters who have ever conferred benefits on mankind." - Dr. Forth, quoted in "Diet Pill Industry Hearings", Ninetieth Congress, Second Session, Pursuant to S. Res. 26, Part 56, 1968.*

In Conclusion

"The writer hopes that this brief retrospect will not induce the reader to come too hastily to the conclusion recorded by the late Sir James Mackenzie that: "discoveries of the origins of common disease were so few during the past 50 years that we had difficulty in recognizing any advance." *Otherwise he might be sorely tempted to agree with McDonagh that:* ***"The whole foundation upon which medicine has been built is unsound."*** *If Wunderlock was correct (and who should know better?) when he remarked that* ***"the history of medicine is the history of human error."*** *Moreover, there are clear indications, the writer firmly believes, that a time is not far distant when Medicine will no longer present that "Hippocratic appearance" which its critics both within and without the profession deplore, but will become more fully alive because wholly devoted to the well-being spiritual as well as material, of mankind." - in "Hearings Before the Subcommittee, Public Health, Hospitals and Charities, Committee on the District of Columbia, House of Representatives, January 1938.*

"Much yet, therefore, remains to be done; much error to be exposed, and many false notions to be corrected or eradicated." *- Dr Edward Jukes, Surgeon, 1833.*

"Ignorance breeds stupidity. Medicine: medical science, medical trade; is the result." *- Rui Alexandre Gabirro, Emunctologist*

"The real problem which, after all, presents itself in this connection is the value of human life." - Dr George F. Keene, MD 28 July 1900.

"In medicine, more than in any other type of human endeavour, a little knowledge is a dangerous thing. False knowledge is even worse, and can no longer be safely ignored by either the public or the profession." *- Evelyn Barkins in "Are these our Doctors", 1952.*

Advise to the Medical Trade

"When in doubt, tell your patient the truth." *- George Laughtin*

"Falsehood flies, and truth comes limping after it, *so that when men come to be undeceived, it is too late; the jest is over, and the tale hath had its effect: like a man, who hath thought of a good repartee when the discourse is changed, or the company parted; or* ***like a physician, who hath found out an infallible medicine, after the patient is dead."*** *- Jonathan Swift*

The Absence of Autopsies for Covid-19 Deaths in Italy

"Nine scientists from the universities of Catania, Foggia and Catanzaro in Italy reported **the absence of autopsies for Covid-19 deaths in Italy** in their report entitled: "It's the Lockdown of Science" published in the "Journal of clinical medicine", 14 may 2020.

"A missed opportunity since the absence of post mortem investigations for the deaths of Covid-19 means not being able to "photograph" what really happened inside the human organism *affected by viruses, and therefore, understand dynamics and decide on therapies. It is also important to raise a political issue because although WHO has suggested that autopsies be performed for people who have died with Covid-19, many governments, including Italy, have not provided adequate tools to perform a sufficient number of autopsies.* ***The Ministry of Health discourages the use of the autopsy practice in Cobid-19 deaths: we are therefore experiencing the incredible situation of unfortunately having thousands of deaths but almost no autopsy."***

The Research Team of Forensic Doctors, Resuscitative Anaesthesiologists, Biochemists, Forensic Geneticists, lead by Cristoforo Pomara, Ordinary of Forensic Medicine of the University of Catania, leading international expert in the field of Judicial Autopsy, author of a popular text on autopsies in the world." - Isabella Di Bartolo in "Coronavirus Catania, scientists report: Error the absence of autopsies on the Covid dead", La Republica, 23 May 2020.

"Despite the increasing number of published studies on COVID-19, in all the examined studies the lack of a well-defined pathophysiology of death among patients who died following COVID-19 infection is evident.

Autopsy should be considered mandatory to define the exact cause of death.

Moreover, about 7%–10% of the total amount of COVID-19 infected patients require admission to an Intensive Care Units, and this percentage raises to about 35% among hospitalized patients with COVID-19 infection.

Despite the introduction of more modern diagnostic techniques and of intensive and invasive monitoring, the number of missed major diagnoses in ICU deceased has not essentially changed over the past 20 to 30 years; autopsies revealed ante mortem diagnostic errors or ante mortem unrecognized diagnoses in about 30% of cases.

Comorbidities were fully reported in 46 studies.

The most common comorbidities were:

1. Cardiovascular Diseases; Hypertension and Coronary Artery Disease
2. Metabolic Disorders; Diabetes, Overweight, or Obesity.
3. Respiratory Disorders; Chronic Obstructive Pulmonary Disease
4. Cancer

The most common reported complications were:

1. Acute Respiratory Distress Syndrome (ARDS)
2. Acute Kidney Injury
3. Cardiac Injury
4. Liver Insufficiency
5. Septic shock

Only 2 complete autopsies are described and the cause of death was listed as COVID-19 in only 1 of them.

The lack of postmortem investigation did not allow a definition of the exact cause of death to determine the pathways of this infection.

The time is now to shout out against this terrible Lockdown of Science: Autopsy!" - Monica Salerno, Francesco Sessa, Amalia Piscopo, Angelo Montana, Marco Torrisi, Federico Patanè, Paolo Murabito, Giovanni Li Volti, Cristoforo Pomara , in "**No Autopsies on COVID-19 Deaths**: A Missed Opportunity and the Lockdown of Science", Journal of Clinical Medicine, 14 May 2020.

Everything Was Piloted In A Certain Direction From The Beginning

"Sara Cunial, Member of the Italian Parliament, answered some questions that have been tormenting Italian citizens for months:

> ***"Why did Parliament, especially in the first months of 2020, remain silent in the face of tough government interventions? And why so many obstacles to all those doctors who were looking for other truths besides those dictated by WHO and task force?"***

Having handed over all the decisions to the WHO, even the Italian Ministry of Health has become a mat of these bodies, which we then know are not entirely public.

Everything was piloted in a certain direction from the beginning.

Having given all the power to the WHO we were actually commissioned and we basically lowered his head and said yes master". - in "Radio Radio", 10 June 2020.

"In the past two years I have happened to write insights on environmental and health conflicts for Italy that changes.

I have been dealing with ecology and health for many years and have always tried to give my contribution starting from my personal choices.

Thanks to these articles I followed some topics closely and interviewed several people.

So many times I have met the Hon. Sara Cunial, she has a degree in industrial chemistry from the University of Padua, and entered politics in 2018 by being elected to the Chamber of Deputies.

In fact, thanks to her, many press conferences were held in the Senate in which popular committees, experts,

independent researchers, scientific associations, doctors, lawyers, ordinary citizens and journalists were able to explain the state of affairs regarding the various territorial conflicts.

Thanks to Sara Cunial, we journalists, and experts in various capacities, have been able to get closer to the demands of those citizens who defend their territory from pollution, **from fraud of the control bodies, from conflicts of interest, from media censorship.**

Thus the problems of pesticides, glyphosate, sludge, toxic agriculture, water pollution from Pfas, large useless and energy-consuming works, pollutants in Vaccines, the constant transfer of the right to health to the interests of large industries and of the mafias, they were able to come to the surface." - Annalisa Jannone, in "Italia che Cambia", 5 June 2020.

Epidemic Diseases Influenza

"Since 1889, we have had 3 distinct Epidemics of Disease all called by the name Influenza.

Now no 2 of these 3 epidemics presented the same symptoms, and no 2 were amenable to the same remedies, as I found by experience.

These 3 epidemics were in fact 3 distinct diseases; and still they all went by the same name - Influenza. Perhaps this was inevitable, for it would be difficult to find new names for every new epidemic. But it is nevertheless important that we should not be led into error by mere names, as has too often been the case.

There is no more typical example of the epidemic or aerial class of diseases than is Influenza.

To discover its cause has baffled all our materialistic philosophers.

It is really shocking to reflect upon the stupidity of mankind in general, and of medical philosophers in particular.

Men whom we have been accustomed to respect for the

solidity of their judgment and the justness of their conclusions in other respects, have, when speculating upon the causes which may have given rise to Influenza, proved themselves quite unworthy of their position as leaders of science.

They have talked about "the floods in China", the origination of "a morbid germ in Russia", and I know not what besides.

All have been intent upon finding some material cause. They have all, with only two exceptions in England, ignored the existence of the influence of other worlds, or of all other atmospheres save that which the books on chemistry told them was composed of 21 parts of oxygen and 77 of nitrogen.

Their ideas are stereotyped; all things, they seem to believe, must continue invariable - as it was in the beginning so must it ever be, world without end.

The disease was not spread by infection. The epidemic, therefore, for it made its appearance here, there, and all over in a most erratic manner, and was completely untraceable." - Dr G. Herring, MD in "The Homeopathic Recorder", March 1896.

The Cause of Influenza

"Dr B. W. Richardson, writing on this subject in the current issue of The Asclepiad, says that those who try to trace every thing in disease to germs and their effects have taken it for granted that the present epidemic is due to a microbe.

They have not afforded the slightest proof in favour of their contention.

The direction in which we are led by such evidence as admits of being gathered is that the affection is nervous in its character, and depends on an influence which directly affects the organic nervous function.

It is an organic nervous paresis.

The nearest approach I have witnessed to the phenomena of influenza - phenomena induced by a known cause - was in some experimental researches with ozone.

I produced in my own person, by the inhalation of air admixed with ozonized air.

Every one of the primary symptoms which at first demonstrate influenza:

1. Irritability in the nasal cavities, succeeded by free secretion of watery fluid in those cavities;
2. Tightness of the chest a distressing headache, with pain in the eyeballs;
3. A sense of nausea.

These were the symptoms induced in a temperature of 60 degree Fahr., and were followed by intense depression and exhaustion.

I described these symptoms as those of severe cold, nasal catarrh, passing even into bronchial catarrh.

On the lower animals exposed still more determinately to ozone the phenomena were easily rendered fatally severe.

Rats and guinea-pigs submitted to its influence died from it, although the air was kept in constant current, and carbonic acid was removed as fast as it was formed.

The mode of death was invariably the same:

It was from congestion of the lungs, or, as it would be called in the human subject, congestive pneumonia.

With this there were bronchial symptoms, and if the fatal event was not too rapid there was hydrops-bronchialis (a term I have ventured to introduce, as a name for the condition of disease described in "Condensation of Waterin the Bronchial Passages during Narcotism and in Disease", Asclepiad, 1884).

There was also some congestion of the kidneys, and of other vascular organs, although not in so marked a degree as in the lungs.

All round, the symptoms induced by ozone constituted a perfect synthesis of influenza, followed by pneumo-paresis, as we have seen so often in the current epidemic.

In the researches on ozone it was observed that the phenomena induced were modified by temperature.

Effects from the same ozonized atmosphere, that were rapidly fatal at 70 deg. Fahr., were extended over much greater lengths of time, at 40 deg. to 45 deg. Fahr.; but the general and special results were the same in the end.

Moisture also made a considerable difference, acting after the manner of cold, and prolonging the series of changes.

I observed another fact (that ought not to be forgotten), namely that; The presence of water vapour in the ozonized air, to the extent of rendering me unconscious of inhaling a foreign body, did not prevent the development of the distressing symptoms, and, as it seemed to me intensified the headache.

The physiological action displayed was on the organic nervous system throughout, and consisted of a paresis or reduction or controlling power of that system.

This was evidenced by the vascular congestion, the overflow of mucous secretion, and the sense of feebleness upon the subsidence of the first acute symptoms.

Until by future research, it be found that: **The atmosphere during epidemic catarrh is changed in character, either by having passed over some surface which has modified its physical constitution, or has charged it with infinitely-minute particles leading to an equivalent change.**

This may safely and strongly be said, that from synthetic observation the evidence in favour of such a view is more striking than any other line of evidence that has been adduced; and that further research is demanded in relation to atmospheric states during the existence of these great and distressing outbreaks." - Dr G. Herring, MD in "The Homeopathic Recorder", April 1896.

Cardiac Pulmonic Balance

"Great attention was paid to an attempt to determine the cardiac pulmonic balance, which may be presented in the course of disease.

The force of the heart and of the respiration were shown to be due to the 2 motive powers of the body derived from the 2 Primary Forces:

1. **The attraction of the earth;**
   Which tells on the whole body.
2. **The force of combustion;**
   Which develops within the body.

Each of them regulated during life by the respiring and circulating apparatus.

The balance between the 2 forces, exhibited by the body, was shown to be essential, the balance disturbed being always a cause of danger, and, actually broken, always fatal." - Sir Benjamin Ward Richardson, MD, LLD, FES, in "Vita Medica", 1897.

The following Account of Influenza

"Happening to be in charge of a large Provident Dispensary during the epidemic of influenza last autumn and spring I naturally had a large number of such cases under my care, and my experience of the symptoms and treatment may possibly be of some value to your readers should the threatened recrudescence of the disease occur.

Although I cannot give you the exact number of cases treated by myself and my 2 assistants, yet some idea of their number may be gathered from the fact that between us we paid some 800 or 900 visits a week, in addition to seeing all the less acute cases in the out-patient department of the dispensary.

Unfortunately, towards the close of the epidemic I contracted the disease myself, and can therefore give you the symptoms experienced by me.

In the first place I had a sore throat, in which the tonsils and the whole of the back of the pharynx was injected and glazed; this lasted for 2 days and was accompanied by malaise, although for that time I was able to continue in attendance upon my patients.

On the morning of the 3rd day I awoke with pains in all my limbs, great frontal headache, chilliness, T. 103° F., and pain in the lumbar region, so great that on getting out of bed I found that I was not able to stand and therefore had to tumble back again, and there I had to remain for 10 days, as my attack was followed by slight bronchitis and a most troublesome cough.

On being allowed to get about again I experienced great weakness in the lumbar region, so much so that on walking a few hundred yards I was completely exhausted and unable to stand upright, and this sense of weakness lasted for several weeks.

I may say that I met with sore throat in almost every case that came under my care, while running from the eyes and nose was generally also a prominent symptom.

Another curious symptom which I experienced myself and which I met with in a few of my patients was complete loss of taste, lasting for more than a week, while in 2 children only did I meet with any rash, this being of an erythematous nature, and in neither case was it followed by any desquamation.

The disease, so far as my experience went, was more prevalent among men than women, and, moreover, I found that the most severe cases occurred among the men.

I could not trace any instances of direct infection from one person to another, and in fact some of my earlier cases occurred in the surrounding country, and were quite isolated, one man in particular contracting the disease after having been employed for a couple of days repairing the roof of his own cottage, his being the first case to occur in that village.

A mild purge at the commencement of the illness, and a light diet of beef-tea or a little fish.

In quite a number of cases a relapse occurred some 2 or 3 weeks after recovery from the primary attack and in many cases the second attack was more severe, and more frequently attended by complications, than the primary.

It would appear that the malady is essentially miasmatic in origin, and considering the course which the epidemic took in traveling round the world." - Dr Francis W. Clark, LRCP, Lond., MRCS, late Hon. Visiting Surgeon to the Bute Hospital, Luton, author of "The Germ-theory of Disease", in "Influenza; Its Symptoms and Treatment.

The 3rd Stage of Syphilis

"The third stage of syphilis is liable to make its appearance at varying times, according to the severity of the original infection and the length of time the patient has been under anti-syphilitic treatment.

It is my firm belief, that, if treatment be started at the first appearance of secondary symptoms and continued vigorously for a period of 2 years, no case of syphilis would show tertiary symptoms at any time.

All cases of this disease are curable.

But once let tertiary symptoms become established and the patient is incurable, and unless he is kept constantly under treatment he is in continual danger.

These symptoms may manifest themselves at varying times.

I have seen the tertiary stage well established within a year and a half after the initial lesion, and I have seen patients who had been entirely free of the disease for 20 years develop well-marked tertiary Symptoms.

In these cases of long freedom from symptoms the manifestations are brought on by some other disease which weakens the body vitality, and gives the syphilitic virus weakened tissues to work upon.

Among these I may mention typhoid fever, pneumonia, malaria, influenza and any form of septic poisoning.

Tertiary syphilis is very often an unrecognised cause of complications and relapse in the course of these diseases.

The symptoms of this stage are so varied that only casual mention may be made of them." - Dr Clarence G. Clark, MD, Formerly Assistant Surgeon Presbyterian Hospital in "Tertiary Syphilis, Symptoms and Treatment", Medical Brief, Vol.1. 1904.

The Arrest of Consumption

"The problem of consumption of the lungs has acquired increased interest, evidently because of growing belief that the disease is preventable, and also curable in its earlier stages.

The Theory of its Contagiousness, in strict sense of that meaning, should be firmly resisted by all men who are broader in their reasoning than is the creed of any emotional claque, ever ready to spring new sensations.

After the bacilli seekers have rounded out their gameless pursuit of "germs" as producers of phthisis, the management of consumption will rise from therapeutic quagmires to practical altitude, where the world will learn the more available lessons of self defence through faithful attention to common-sense purity of breathing air at all times and places.

When the profession of medicine gets itself out of certain of its self-set grooves, emancipates itself from the conjury and chains of speculative vogue, and when it has been instilled into general human consciousness that habitual abuse of the breathing channels and lungs is sin and self-murder, then will a saving religion of life possess the world, and the dreaded spectre of consumption will shrink into a comparative shred of tradition.

And there is no fundamental reason why civilized, intelligent humanity can not attain that realization.

Let the deliverance begin, universally, at birth, and hourly

abide defensively throughout the ensuing years, and the blight of consumption is banished, broadcast, to desultory and exceptional cases, instead of rioting as the most common uncombated fatal scourge that prevails.

Consumption does not set in as an independent disease by itself, as do measles and Small-pox, for instance.

Consumption is rather a sequence of various pathological antecedents.

There have been various assaults of what are termed "common colds" from air irritants; catarrhs of breathing membranes; severer aggressions of influenza or of pneumonia; deflections of neuroses and nutrition; deviations from normal equilibrium and vital tone comprehensively.

All these have been slavishly wrought through subjugation of the breathing channels to such corrosive toxins mixed with the daily breathing-air as not only naturally induce physical disabilities, but consequently interfere with their cure.

The lungs are hard Worked organs.

All breathing leads to the lung tissues.

Every respiration either supports or discounts the perfection of lung function and lung texture.

The problem of the working integrity of lungs in general is as simple as are the ratios of the multiplication table.

Entirely too much time has been wasted in studying the diseased transformations that cripple the lungs themselves, instead of scrupulously analyzing and attending to the conditions of the air drawn habitually into the lungs, and with which they must work, on which they must feed, by which they must suffer.

All factious theories aside, it has been conclusively discovered that the abiding for a season in a fresh, pure air environment, under sanitarian regulations, arrests the progress of pulmonary phthisis.

By rational induction this fact is proof furthermore that what is the natural restorative in consumption, in said premises, is also the natural preventative of consumption.

This again brings us face to face with the fact that the prevalent cause of consumption is not a fugitive bacillus, but is the dethronement of systemic nutrition and lung tissue by the exhausting grind of toxic, deoxygenated, unsanitary breathing-air, doubtless ignorantly, but habitually inhaled by each individual victim.

The bacillian ferments can only have their development in the resultant debris of diseased tissue-waste and disorganization.

It is doubtless well known in most medical circles that a philanthropic endowment has been provided to encourage the study of prevention and cure of consumption.

Hence, we have the Henry Phipps Institute as the active working medium of this great object.

The Institute obtained recently the eminent tuberculosis specialist, Dr Sims Woodhead, of Cambridge University, England, to deliver a lecture to a large and appreciative audience of physicians and nurses in Witherspoon Hall, Philadelphia.

The present writer craves something of the reporter's function in referring here to that remarkably instructive lecture, "The Paths of Infection in Tuberculosis"- of the lungs.

The subject discussed was elaborately illustrated upon canvas, thrown up by lantern slides, and very learnedly explained in its clinical manifestations by the distinguished pathologist, who maintains that his study of pulmonary tuberculosis tends positively to reverse the discouraging views of earlier pathologists who believed, from their current observations, that consumption, once set in, Inevitably proved fatal.

He said the less remote discovery (rediscovery) of what he termed Virchow's caseous tubercle in its destructive simplicity seemed to leave no hope for recovery of any patient affected, and what the pathologist found one day, the physician accepted the next as his basis of prognosis.

The passive acquiescence to this idea of the incurability of consumption wrought a positive evil, and had more influence than any other single factor in interfering with

the successful treatment of a disease that now should be looked upon as one of the most curable - when taken early enough, under proper conditions, and for a sufficiently long period. **It has been observed in later studies.**

Dr. Woodhead continued, that In the lungs of old people who had succumbed to diseases other than those of tuberculous origin, there could often be found local apical thickening of the pleura, or, still more frequently, deeply pigmental irregular scars, which were evidently the result of some considerable loss of tissue at an early period of life.

Dr, Woodhead had taken the opportunity to make careful search for evidence of healed tubercular lesions, and he found that in old people such evidence was presented in at least one out of every three who came to the post-mortem table; hence he soon became firmly convinced that even in those cases that succumbed to tubercular disease, there was usually more or less marked evidence of a sturdy war waged by the tissues against the invading tubercular process, and that in most cases the tissues failed in their endeavour to check the advancing process, simply because they were subjected to disadvantageous conditions, not as result of the action of the specific materies morbi, but as the result of Interference with their nutrition.

> ***"The cod-liver oil treatment, had its foundation In the belief that this substance afforded a special nutrient or therapeutic effect by strengthening the tissues, and enabling them to resist the disease-producing factor,*** *whilst the present day* ***treatment of tuberculosis is founded on a similar belief that fresh air, good food, efficient excretion of waste products, rest or opportunity for building up the tissues, food that will supply energy with least draft on the tissues, will enable these tissues to withstand the attacks of the tubercle bacillus in the first place, to kill it or to render it harmless in the second, and finally to assist in the removal not only of the bacillus, but of the dead or degenerated tissue in which the bacillus had managed to effect a lodgment."***

At this turn of the learned doctor's discussion, he began the tangle in the logic of his elucidation by introducing the modern specious discrepancy of mistaking the bacterian evidence of the result of the degenerative process in the lungs for the operative cause of said degenerative process, viz., the invasion of a "tubercle bacillus" from without the body to the deep and but partly active apex as starter of the lung disease.

Let medical men clearly comprehend and the laity thoroughly understand that the forerunner and generator of consumption is not an atom of fugitive ferment called "germ" or bacillus, but is a vitiated condition of the individual's breathing-air and blood corpuscle and nutritive process combined in the lungs and general physical system.

Then will the pathological compass to the prevention and cure of consumption be sensibly leveled.

Then will the dismal problem of phthisis be robbed of its mystery and fatality.

> *"It is evident, that the tubercle bacillus may reach the lungs by way of the air passages; that they make their way to those points at which there is least movement, and In which, as a rule, there is some degree of collapse, often associated with a condition of catarrh, in which the protecting layer of epithelium has been damaged, and thence may be distributed, still by the air channels, to almost every part of the lung, setting up a condition of tubercular catarrhal pneumonia characteristic of the later stages of the so-called acute phthisis, or an* ***acute secondary pneumonia tuberculosis following a rapid distribution of the tubercle bacilli embedded in the caseous material derived from a chronic primary focus."***

Now the straight shoot through this laboured expository tangle is about this: the case already has consumption in process because the habitual use of scathing breathing-air has induced degenerate areas or foci locally, and some

development of bacilli ferment follows, only as natural sequence until the catarrhal areas become healed.

Heal over these degenerate areas through the antiseptic restorative functions of sanitary breathing air, and its improving local and systemic nutrition, and these supposed bacillian agencies or aggressors have spontaneously vanished.

Bacilli were not the precursors, but the incidental result dependent on diseased conditions.

"Germs" can "cut no Ice" where a healthful quality of breathing-air and blood current is maintained to nourish and insure cell and tissue integrity.

To this trend, Dr. Woodhead royally pulled through his tangle of context:

> *"In a case of phthisis, apical catarrh is the first condition noticed, this being accompanied by congestion, and followed by some consolidation, the result of proliferation of the epithelial cells, such cells gradually accumulating, and coming to oil the air vesicle. If at this stage the patient be placed under favourable conditions of nutriment, of rest, so that the waste products of the body may be carried away regularly and systematically, the reaction of the tissues is so complete that the dead patch is practically surrounded and cut off; the bacilli remain Inactive In the dead mass, or may even be killed.*
> *If the patient be not placed under favourable conditions, this focus of dead material may ultimately break through the surrounding layer of limiting tissue, and a further considerable patch of tubercular consolidation may be the result.*
> ***In intermittent congestion of the surrounding tissues, the degenerate or caseous material may become softened, and secondary infection goes on."***

I advance the problem that more or less consolidation in the passive apex may naturally result from the fact that the comparatively disused air cells in the apex afford convenient spaces for the deposit of deoxygenated, or carbonized, devitalized non-eliminated material from the unhealthy circulation, bald material being transformed, conservatively, into fatty or caseous "tubercle" substance, and stored by the chemistry of Nature's efforts to relieve physical encroachments against life.

Where else can the caseous or fatty material called "tubercle" come from?

It can only be produced in the body itself by transposition of worn-out, diseased, non-eliminated carbonized material.

The natural prevention of all this chain of evils and complications may confidently be secured through the protective mission of fresh air antisepsis, habitually maintained, as strenuously urged in my papers published more than a decade ago, from one of which I now quote:

> *"The lungs have been overwhelmed, the blood and nerves depressed, the appetite strangled and stomach sickened, the nutrition curtailed and recoveries retarded, physical nature swamped and undone by excess of chemical impedimenta In the name of antisepsis.* ***If bad air be liable to infect a surface wound or sore, how much more surely will bad air injure lung surface and blood current through continuous contact with the blood cells in the lungs by respiration?***
> ***Pure air is the only great natural antiseptic and restorative. The sheet anchor of lung protection and cure is grounded in antiseptic aeration and medication with fresh pure air to eliminate blood impurities, and promote nutritive reconstruction.*** *Again,* ***the antisepsis of pure air*** *can not be substituted or improved on. Chemical additions thrown into pure air never increase its purity, nor enhance Its vitalizing elasticity.* ***The source of disease is degenerate blood.***

The corrective for degenerate blood and tissue is continuous drafts of pure air breathed into the lungs to counteract putrefactive tendencies of worn-out material. *Pure air is the only gaseous germicide universally healthful in itself for constant requirements.* ***Any other mixture with breathing-air can not long be inhaled without prejudice to vital functions."***

From another paper written my myself, and published in 1890:

"Sanitary surroundings alone, pure air outdoors and indoors, freedom from bad drainage, and the corrosive poison of coal gas and other combustion gases in the house air, virtues of ventilation and sunlight, relief from drudgery of body and brain, plenty of food and rest - these potent agencies of health will usually prevent and cure threatened disease in general - ordinary tuberculous disease in particular - if timely and faithfully employed. Tuberculosis and cancer will yet need to find prevention and antidote In the hygiene of sanitary habits of life, and purer breathing-air indoors and outdoors, daytime and night-time, every hour of existence."

Reduced oxygenation, means blood impoverishment and malnutrition.

Besides the unwholesomeness of fetid re-breathed air in overcrowded quarters, acute and chronic anaemic conditions are everywhere induced by the carbonic oxide gases, fire gases, developed by the combustion of all or any of our common fuels, so carelessly managed when houses are closed, as to severely despoil the breathing-air, scathe the air-channels and lungs, rob the blood of its necessary oxygenation, inflame and devitalize lung tissue, continue the destructive sweep of consumption and bar its cure.

When closely looked after it will be found that the fuel gases infest the breathing-air of nearly every habitation and

business place and railway line in existence.

It is this insidious poisoner in the air inhaled by the people that depletes the homes of the human family.

Every depredation pointed out by Dr Woodhead from start to finish can be rationally accounted for through the natural ravages on the blood tissues by the blanch of fire gases from the combustion of ordinary fuels incident to the ordinary neglect of purity in the breathing-air.

The untoward situation is severely aggravated by heavy, damp air, "bad drafts", high winds pushing downward in chimneys, obstructed flues and lesser draft-spaces, mismanaged dampers at night, poisonous heating apparatus in bedrooms, kerosene traps and gas heaters with no smoke flue, chimneys of smaller houses pouring their fuel gas into the window air of taller houses, smoke stacks of factories throwing tremendous volumes of fuel gas into the general atmosphere, locomotives disgorging their death currents along every line of travel, why do so many lungs break down?

Hence, the sanitary pure air treatment for the arrest of consumption is the most rational and promising ever recognized, because it affords regenerative oxygenation and elimination and nutrition, all combined normally and savingly for the prevention, the arrest, and the cure." - Dr George B. H. Swayze, MD, Professor of Obstetrics and Gynaecology Ex-Dean of Medico Chirurgica, College of Philadelphia; Ex-Assistant Surgeon and Acting Surgeon, United States Infantry, in "The Medical Brief", April 1904.

Influenza Always Traverse the Globe from East to West

"The Western trend of influenza has been noticed by many observers, but the reason for this course of the disease, geographically speaking, has not hitherto been explained.

In fact, very little, if any, investigation upon the subject seems to have been made.

It would seem to me one of the most important points to be considered in connection with the disease.

We might well ask the question:

"Why does influenza always traverse the globe from east to west?"

H. Charlton Bastian's experiments showing the conversion of common microorganisms in the body into so-called specific bacteria, as likewise the most significant fact that boiled dilute liquor ammoniae injected into the tissues of the guinea pig or rabbit causes within a few hours a remarkable development of the bacillus, in swarms, found in the so-called "Pasteur's septicaemia" is still another.

It is not very difficult to conceive the idea that as a result of the absorption into the body of various chemicals, whether they be in a solid, liquid or gaseous condition, certain bacteria would spring into existence de novo just as they have been shown to do in the experiments with dilute liquor ammoniae.

The diseased condition that would undoubtedly ensue from the injection of the ammonia could hardly be said to be due to the bacteria developed; it would be the chemical absorbed.

It can be shown that chemicals either in a solid, liquid or gaseous form can simulate in their effects all the various processes generally attributed to bacteria (so-called germs) including periods of incubation, contagiousness, transmission to distances, etc.

The crowning triumph of chemicals over bacteria would seem to rest upon their adequateness to suit the conditions, a point upon which bacteria are woefully lacking.

This would bring us back to the subject of influenza, and its allied diseases - allied as closely to it as are the colours of the spectrum to one another.

And just as it might be asked of the latter, "Where does the red leave off and the orange be gin?" or "Where does the indigo begin and the blue leave off?" so it would seem

possible to transpose the inquiries to suit the case of the epidemic diseases and query, "Where does influenza leave off and e.g. cholerine begin?" and again, "Where does the latter leave off and cholera take its place?"

The relationship of the colours of the spectrum to one an other and their blending together are explainable on the basis of chemistry, and the same would hold good with regard to certain diseases of an epidemic nature, just as oxygen could be understood as related to ozone.

Were we to concede that influenza depended for its development and spread upon the motion of the earth from west to east, and that one of the factors in its causation was to be found in the gases that float in space, not leaving out the chemico-electric forces involved, how easy would become the solution of the apparent blending of diseases.

The varying nature of the different localities involved, regarded in a chemical sense, would suffice to explain the protean changes in a rough sense, the chemical affinities of the individual would go to wards explaining the various modifications in a finer sense.

And the various disturbances in the plant life that have at times gone hand in hand with epidemic diseases, the famines of history - how easy does the solution of their connection become when we adjust to it the theory set forth above." - Dr J. D. Harrigan, MD, in "The Etiology of Influenza-A. Brief Outline", The Medical Brief, February 1904.

"Complications" of Influenza

"No word, tends more to complicate the study of the etiology of influenza and other epidemic diseases than the word "complications". it throws one entirely off the scent.

We hear of influenza "complicated" by congestion of the lungs, congestion of the kidneys, liver, spleen, brain, spinal cord, etc. These conditions have no right to be regarded as complications, since they are part and parcel of the process transpiring, known to us as influenza.

The "congestion of the lungs," the "pleurisies," the "pneumonias," the "meningitis," and other so-called phenomena, are simply manifestations of the many and complex chemical and electro-chemical processes transpiring, and, grouped together, are known to us as influenza.

We can speak correctly of complications only when an entirely distinct and different disease occurs contemporaneously with a prior complaint.

Thus, for instance, a patient suffering from Influenza, with severe cerebral localization of the disease, might possibly get out of bed in his delirium and, falling on the floor, break a leg.

This certainly might be justly called a complication of his pre-existing ailment.

Similarly he might receive a burn or scald, or be wounded, and septicemia develop.

All of these would be complications.

But to speak of natural incidents of the disease as complications is erroneous and misleading.

It would be absurd to say of a great conflagration raging In New York, for Instance, that the fire was complicated by the burning of the Metropolitan Opera House, or that particularly striking feature of the city known as the "Flatiron."

These would be only Incidents of the general process going on.

Even if a particularly tremendous outburst of flame and smoke should suddenly attract our attention to some one place attacked by the flames, accompanied, possibly, by severe explosions, we would simply take for granted that a noteworthy incident of the conflagration was occurring, caused by the involvement of, perhaps, some great chemical warehouse.

A genuine complication of the fire would ensue if, for instance, the water supply should be suddenly cut off, owing, perchance, to the bursting of the water main.

So we might cite many instances of genuine complications as opposed to those that are really only apparent ones.

How can a clear, correct and thorough knowledge of the etiology of disease be had if we are unable to read aright the visible, outward manifestations of such disease and, not only that, but also their connections with each other and, likewise, the peculiar significance that must attach to them when viewed separately, together, and from various sides.

Is it not perfectly apparent that in a patient suffering, for instance, from syphilis, we would expect to and syphilitic lesions in many parts of the body?

Hence we would expect to speak of syphilitic iritis, syphilitic laryngitis, syphilitic periostitis, etc.

We would not say that the patient had syphilis complicated by periostitis, or by laryngitis, iritis, etc.

And yet this is exactly what is done with regard to influenza and other epidemic diseases.

We can cite instances almost without number of this misconception of the true significance of the various manifestations of these diseases.

As an example might be mentioned the following, taken from Prof. Zuelzer's work on Influenza in Zlemsen's Cyclopedia, "**Uncomplicated Forms of Influenza Seldom Lead to Death.**

> *"As essentially belonging to the disease we find only a more or less considerable hyperemia and catarrhal swelling of the Schneiderian membrane, as well as of the mucous membranes of the pharynx, larynx, trachea, and bronchi.*
> *The catarrh is often limited to the larger bronchi, but in other cases it extends even into their finest ramifications, which sometimes may be filled with clear, thin, frothy mucus, and sometimes with thick, viscid, opaque masses.*
> ***Catarrhal and croupous pneumonias, or pseudo-membraneous capillary bronchitis, etc., are included in the complications which generally bring about a fatal result. In the stomach, too, and more rarely in the Intestinal Mucous Membrane, we find more or less extensive hyperemia."***

According to this statement one would be led to consider influenza as a merely local affection, involving the Schneiderian membrane, pharynx, larynx, trachea, and bronchi.

Involvement of any other organs or structures must be regarded as an onset of new diseases - for that is exactly what the word "complications'' would indicate - if we were to take this statement literally. Local affections would supervene upon local affections. But is this the case?

We know that it is not. Zuelzer himself in a paragraph immediately preceding the above, shows that it is not.

> ***"The influenza is, as Biermer has properly described it, the sum of a series of catarrhal manifestations which have developed under common epidemic influences. The sudden onset and the often critical termination of the disease, its general seizure, the severe nervous symptoms, as well as the decided disposition to cough which invades the organs of respiration, with a proportionately blight I=increase of the secretion of the mucous membrane, all these are in favour of a general agent which rapidly affects the organism at large."***

If this is the case, as all certainly must acknowledge is surely the case, judging from the history of the disease and its symptoms, then why detract from its extraordinary significance and "complicate" matters by terming any of its manifestations "complications?"

No one surely would term any of the manifestations of syphilis "complications" of that disease.

We speak of these localizations of this affection as, e. g., syphilitic iritis, syphilitic periostitis, etc., as mentioned before.

Similarly, therefore, we should, to be strictly accurate, speak of Influenzic Pneumonia, Influenzic Gastritis, Influenzic Meningitis, etc.

Otherwise we would be influenced to think that we were dealing with several distinct, separate diseases, and not with one general disease, with innumerable local manifestations.

If we are dealing with one disease having "one general agent affecting the organism-at-large", the task of locating and naming this agent becomes easier by considering this one disease as one disease with various localizations, than it would be by considering a confusing array of "complications."

This, naturally, would bring up the question as to what way this general agent was distributed to the various parts of the body, and inevitably compel us to seek in the two grand trunk systems of supply to the tissues of the body, viz., the nervous system and the circulatory system, for its place of development.

To either of these great systems, or to both of them, must we look for this "general agent", as mentioned by Zuelzer.

It might be said, in passing, that **the extraordinary neglect of the nervous system as an important factor in the causation of diseases of an epidemic nature**, has caused no end of surprise to the author.

How any one can see the various wonderful operations in electro-chemistry going on at all times around us in Nature's laboratory, with a reduplication to a very limited extent of some of these operations by man, more particularly in electrochemical crystallizations, and not realize most deeply, and with far more than a passing interest, how intimately associated with all the functions and operations of the human body electro-chemical action is, is a matter for wonder.

It would seem only necessary to recall to mind some of the phenomena of the neuroses that have had as a result of their potency a complete change of anatomical structure in some one or other part of the body, to appreciate the fact that these results can be reduplicated to an incredible extent and to, if you might be so pleased to call it, an exaggerated extent.

Thus, we know that a sudden shock to the nervous system has had the effect of blanching a person's hair in a single night; a sudden fit of anger in a child has produced a crop of "shingles"; the sudden shock to the nervous system, caused by some passing emotion of pleasure, of

anger, etc., has caused the face to become suffused, a flush, or blush, being the result; in other words, a congestion has resulted.

Dozens of instances might be cited similar to these, but they are unnecessary.

The above suffice to serve as an example.

Where these so-called phenomena are possible, other phenomena on a much more extensive and grander scale would seem to me to suggest themselves. **Particularly would this be the case if, besides taking into consideration the nervous system? with its electro-chemical possibilities, as a factor in the matter, we should conjoin with it other chemical and electro-chemical possibilities in the shape of the food and fuel supply furnished by the circulatory system.** The processes of peripheral congestions (as likewise of central ones) would simply be multiplied and remultiplied and extended, not only as regards area and locality, but likewise as regards intensity, and we would have as but steps from the congestions resulting Inflammations, exudations - pseudo-membraneous and membraneous - disturbances of function of many parts of the body, with their greatest intensity localized at the point of least resistance; this intensity being modified in turn by several causes, not the least of which would be the quantity as well as the nature also, **of the chemical constituents making up the disturbing factors in the matter.**

By eliminating from our minds the idea that the "pneumonias", the "pleurisies", the "cerebro-spinal meningitises", the "nephritic", "hepatic", "enteric", "splenic", "cardiac", etc., manifestations are "complications", and simply considering them at their proper valuation as part and parcel of the disease we should certainly be able to clear the way for a much better understanding of **the intricate operations, having their bases of chemical and electrochemical activity in the nerve and blood supply in the animal economy, and which act as factors in bringing about that condition of the body which is a departure from what is known as "health", and has been known from time immemorial as "disease".**

If influenza is, as Biermer says, "the sum of a series of catarrhal manifestations due", as Zuelzer states it, "to a general agent which rapidly affects the organism at large", who is there who will place a boundary line for these manifestations?

Is it simply influenza when the Schneiderian membrane, as likewise the mucous membranes of the pharynx, larynx, trachea and bronchi are affected, and some other disease when the "general agent", mentioned above, escapee these limits and wanders up and down, and in and out through the rest of the system?

Is it simply influenza, when the patient gets better, and some other disease when the patient dice?

Has the "quantity" of influence material - the "general agent" mentioned above - nothing to do with the extension, as likewise with the intensity of the catarrhal manifestations, with nothing to prevent the latter from proceeding through all gradations of inflammation?

Shorn of its hydra-headed, mystifying "complications", influenza is not such a difficult matter to comprehend.

Due to a "general agent which rapidly affects the organism at large", affecting, primarily, the blood and nerve supply, going wherever these go, modified in many ways by peculiarities of the individual (chemical and electro-chemical), as, also, by peculiarities of chemical surroundings, generally termed hygienic, or sanitary, peculiarities of food and drink; also chemical peculiarities of climate, chemical and electro-chemical once more, it goes without saying, almost, that it must be different under different conditions, must be different in different parts of the world, must be different in different individuals, etc.

Add to this its possibility of localization of greatest intensity in any one, or several parts of the body, and it must certainly strike one with a force irresistible that certain of the epidemic diseases that go hand in hand with influenza, and that devastate the earth at various times, posing under various titles of disease, having as their basis a ridiculous and misleading arbitrariness of classification totally

unjustified, are simply manifestations of the influenzic principle, or principles, at work.

Is this not possible?

Is it not, by all manner of means, far more scientific to claim a gradation of diseases, basing our deductions on the known gradations in symptoms in different individuals, in different epidemics, in different localities, in different surroundings etc., than to lay down a strict line of demarcation between them, labelling them green, red, blue, yellow, or black, as the case might be?

In support of the gradation theory of disease it should certainly strike us very forcibly that never in the whole history of epidemics has one distinct type of disease appeared alone to afflict the globe.

The epidemics have been one long series of "dissolving views" of various shades and intensities of disease.

Delegate the so-called "complications" to their proper, subordinate positions In the economy, and bring into greater prominence this all-pervading "general agent which rapidly affects the organism at large," and whose limitations no one can Bay are definitely fixed, and how easy becomes the solutions of the coincidental occurrences of epidemic diseases.

Consider, for a moment, that this "general agent", or what appears to the author more probable, combination of "general agents", diffuses through the system with a rapidity and an intensity far greater than the "general agent" of syphilis, and, not unlike the latter disease, locating itself here, there and everywhere, and we can very readily see where the so-called "complications" belong.

Then would the terms appear more appropriate as, for example, "influenza with pleurisy predominating", "Influenza with pneumonia predominating"; or, better still, might be "pleuritic Influenza", or "pneumonic influenza", or "hepatic-icteric-choleraic Influenza", as the various manifestations would predominate.

It would be easy enough to devise a proper nomenclature for the varying phases of the disease.

The main principle involved is to keep forever foremost In our minds the influenzic agent of the trouble, and, just as we know that the syphilitic lesions, under whatsoever guise they may appear, are first, last and all the time syphilis, so must we appreciate the fact that the influenzic lesions are first, last and all the time influenza.

And just as sure as the influenzic principle is given its proper position of prominence, and the train of influenzic lesions properly relegated to less prominent positions than they now hold as "complications" will, **I have no doubt, the list of mystifying companions to the dread affliction be suddenly shortened."** - Dr J. D. Harrigan, MD, "Medical Brief", July 1905.

Respiratory Disease kills 150,000 People per Year

"Analyzing medical death rate data over a 8 year period, Johns Hopkins patient safety experts have calculated that more than **250,000 deaths per year are due to medical error in the U.S.**

Their figure, published 3 May 2016, in The British Medical Journal, surpasses the U.S. Centers for Disease Control and Prevention's (CDC's) **3rd Leading Cause of Death: Respiratory Disease, which kills close to 150,000 people per year.**

Using hospital admission rates from 2013, they extrapolated that based on a total of 35,416,020 hospitalizations, 251,454 deaths stemmed from a medical error, which translates to 9.5% of all deaths each year in the U.S.

According to the CDC, in 2013, 611,105 people died of Heart Disease, 584,881 died of Cancer, and **149,205 died of Chronic Respiratory Disease — the top 3 causes of death in the U.S.**" - in "Study Suggests Medical Errors Now 3rd Leading Cause of Death in the U.S.", 3 May 2016.

"Our Practice of Medicine has changed more in 1 week than in my previous 28 years combined." *- Dr Michael Grossbard, MD, Chief of Hematology, New York University's Langone Hospital, in "The Untold Toll — The Pandemic's Effects on Patients without Covid-19", New England Journal of Medicine, 11 June 2020.*

Combined Infections

"In 1928 we reported that the vaccinal infection of the rabbit was considerably enhanced when the virus was injected in the skin, along with aqueous extracts of rabbit, guinea pig and rat testicle.

The effect was exerted on the host tissues and not on the virus because enhancement was also observed when an area of the skin was prepared by the extract several days before the virus was injected in the same area, and because the virus isolated from the enhanced lesions did not show any alteration in its infectivity.

These observations were soon extended in our laboratory to other infectious agents on several animal species, and duplicated in England by McClean.

The spreading effect of extracts of testes, i.e., the power to increase. It would seem probable that the Bacterial Spreading Factors may offer an explanation of some puzzling clinical observations on combined infections.

The case of streptococcal complications suggests itself first.

Goodner has reported an acceleration in the rate of spreading of the dermal lesions that occur when Hemophilus influenzae is used as an associative infective agent with the pneumococcus in the rabbit, whereas H. influenzae injected alone induces only mild lesions." - Dr F. Duran-Reynals, MD, Department of Bacteriology, Yale University School of Medicine, in "Tissue Permeability and the Spreading Factors in Infection, a Contribution to the Host: Parasite Problem", Bacteriology Reviews, December 1942.

Everybody Speculation was they had AIDS

"**Diarrhoea due to dirty drinking water are major cause of child deaths in Africa.**

In Meka Self Help Group, which is in Mbitini Survival Group, in a Betina, Kenya, it was one area, where we had seen people die. **And the major issue, everybody died, everybody speculation was, they had AIDS.**

But this, was rather because they where drinking dirty water from the river, which was flooded with all sorts. After making those dams, **we hardly hear people dying**, because they are getting clean water. They are getting also success from other resources of water, like the water tank we had made there, so **they are getting cleaner water, and the death rate has reduced tremendously.**" - Joshua Silu Mukusya, Executive Director, Excellent, Pioneers of Sand Dams, 2002.

*"**75% of emerging infectious diseases are zoonotic**.*
***60% of known infectious diseases are, too**.*
$100 Billion has been lost to Zoonotic Diseases over the past 2 decades – not accounting for COVID-19. Zoonotic diseases are those that jump from animals to humans. Rats, bats, monkeys and apes, as well as animals kept as livestock, are among those more likely to spread zoonotic germs. Some of the illnesses and diseases that have been spread this way include Ebola, HIV, SARS and MERS, Zika, and the new Coronavirus. More than half a million deaths. Almost 12 Million infections. Plus an estimated $9 Trillion in economic stimulus from the world's governments. All that in a little over 6 months since the emergence of the COVID-19 coronavirus." - in "It's time to get serious about the causes of pandemics: UN Report", The Economic Forum, 7 July 2020.

Chapter 28

2014

Patient Data Available For Sale To Pharmaceutical Companies

"**Drug and Insurance Companies will from later this year be able to buy information on patients, including mental health conditions and diseases.** Harvested from GP and hospital records, medical data covering the entire population will be uploaded to the repository controlled by a new arms-length NHS information centre." - in "NHS Patient Data to be Made Available for Sale to Drug and Insurance Firms", The Guardian, 19 January 2014.

"It is vital, however, that this debate is based on facts, and that the complexities of how we handle different types of data are properly understood.

Patients and their carers, should know that **no data will be made available for the purposes of selling or administering any kind of insurance and that the NHS and the Health and Social Care Information Centre (HSCIC), never profit from providing data to outside organisations**." - Dr Geraint Lewis, MD, NHS England's Chief Data Officer, in "Response to Guardian story "NHS patient data to be made available for sale", NHS, 20 January 2014.

NHS Records "Sold to Insurers"

"A UK Insurance Society (Staple Inn Actuarial Society), was able to obtain 13 years of medical records of almost **50 million NHS hospital patients have been sold** for insurance purposes, in order to help companies "refine" their premiums.

Track the medical histories of patients, identified by date of birth and postcode, and were then able to combine these details with information from credit ratings agencies, which record the lifestyle habits of millions of consumers." - in "Daily Telegraph", also in "Press Association", 25 February 2014.

2015

Warning over Data Grabbed by Smart Gadgets

"A "deeply personal" picture of every consumer could be grabbed by futuristic smart gadgets, the chair of the US Federal Trade Commission has warned.

Speaking at CES, Edith Ramirez said a future full of smart gadgets that watch what we do posed a threat to privacy. The collated data could create a false impression if given to employers, universities or companies, she said." - in "BBC News", 7 January 2015.

"Today, I would like to focus on 3 key challenges that, in my view, the IoT poses to consumer privacy:
1. Ubiquitous data collection;
2. The potential for unexpected uses of consumer data that could have adverse consequences;
3. Heightened security risks." - in "Opening Remarks of FTC Chairwoman Edith Ramirez Privacy and the IoT: Navigating Policy Issues", International Consumer Electronics Show, 6 January 2015.

"Nearly **1 Million people are having their confidential medical data shared against their wishes**, it has emerged.

At least 700,000 opted out to having their GP data shared with 3rd parties by the Health and Social Care Information Centre in 2014, only to have their demands ignored.

The chair of the HSCIC admitted to MPs that the organisation was unable to process the objections and said it "may take some time" to resolve." - in "The Telegraph", 5 June 2015.

2017

Health Secretary Caught on a Secretive Trip to the US

"The Health Secretary was a guest speaker at the Patient Safety Movement, 5th Annual World Patient Safety, Science & Technology Summit.

One of the main topics of the summit was the open sharing of patient information.

As one keynote speaker said, healthcare providers need "unfettered access" to patient data.

And the thrust of the debate was that healthcare companies should have patients personal data, en masse.

Joe Kiani, CEO of US healthcare technology company Masimo, founded the Patient Safety Movement, and has contracts within the NHS for the supply of equipment.

The conference was sponsored by Private Healthcare Companies such as Cercacor (subsidiary of Masimo), Dräger, and Mallinckrodt Pharmaceuticals.

All 3 companies have the same multinational investment management group as a major shareholder: Vanguard, one of the biggest corporations in the world.

Both Dräger and Mallinckrodt Pharmaceuticals have NHS contracts." - in "The Canary", 6 February 2017.

Google Received 1.6 Million NHS Patients Data

"Google's Artificial Intelligence arm received the personally identifying medical records of 1.6 Million patients on an "inappropriate legal basis", according to the most senior data protection adviser to the NHS, Professor Stephen Powis, medical director of the Royal Free Hospital in London, which provided the patients records to Google DeepMind." - in "Sky News", 15 May 2017.

2018

"Facebook asked several large hospitals in the US, to share anonymised patient data, including prescriptions and illness information. *- in "iNews", 6 April 2018.*

My Vision for a More Tech-Driven NHS

"All around us, a new generation of technology is changing all of our lives.

From the mundane but useful, like the ubiquity of satnavs that stop family arguments and warn us of traffic jams, to the profound and extraordinary, like **the ability of genomics to design drugs for each individual**.

I started my working life in a tech business.

Now I intend to bring that knowledge and experience, and frankly my unsurpassable enthusiasm for tech to Britain's health and social care system.

We are increasing the NHS budget by £20 Billion by 2023 to 2024, to guarantee the NHS for the long term.

Like many federated ecosystems, digital technology in the NHS built up in a piecemeal fashion.

As the technology matured, in the early 2000s the senior management decided to try to upgrade NHS IT, and bring it together.

This was in vogue and had been done across many organisations. But almost no organisation - bar China's People's Liberation Army and Walmart - is as big as the NHS.

Despite best efforts, the top-down attempt to impose a new system (and procure a new system) for the whole NHS failed.

It failed pretty catastrophically, and millions of pounds were wasted.

I am today allocating £200 million for the next round of Global Digital Exemplars to help trusts go on this journey.

Britain has the chance to lead the world on HealthTech.

We already have some of the world's best HealthTech companies - Babylon, Touch Surgery, Benevolent AI and hundreds of others are all bringing new innovations to UK patients and further growing the international reputation of our world-leading science and research base.

We have exciting research going on across dozens of our universities. And we have the world's biggest health institution.

I want to use all of this to build an ecosystem of the best HealthTech in the world.

We need tech as good as we have at home – and there is no reason not to use some of the **same devices and software we all use to manage the rest of our lives.**

The app that helps a patient to manage their diabetes, the device that measures and celebrates when you go for a run, the gentle reminder to set sleep patterns – the HealthTech ecosystem can support prevention, and help us all manage our health like we do our finances." - Matt Hancock, in "Secretary of State for Health and Social Care Matt Hancock's speech at NHS Expo 2018", Gov.UK, 6 September 2018.

2019

Patient Data from GP Surgeries Sold to US Companies

"US Drugs Giants, including Merck (MSD, Merck Sharp and Dohme), Bristol-Myers Squibb and Eli Lilly, have paid the Department of Health and Social Care (UK), which holds data derived from GPs' surgeries, for licences costing up to £330,000 each in return for anonymised data to be used for research.

America appears to be pressing for unrestricted access to Britain's 55 million health records, which are estimated to have a total value of £10 Billion a year. Another US demand is for **"data localisation" to be ruled out, meaning the data of NHS patients could be stored on cloud servers abroad.**" - in "The Guardian", 7 December 2019.

2020

February 2020

Drugs Giants Have Access to Your Health Records

"**The Department of Health and Social Care has been selling the medical data of millions of NHS patients to American and other international drugs companies having misled the public into believing the information would be "anonymous"**, according to leading experts in the field.

The UK Government had raised £10 Million in 2018 by granting licences to commercial and academic organisations across the world that wanted access to data." - in "Revealed: how Drugs Giants can access your Health Records", The Guardian, 8 February 2020.

May 2020

The Vaccine Taskforce UK

"Kate Bingham has been appointed chair of the UK's Vaccine Taskforce – the group set up by the Government's Chief Scientific Adviser, Deputy Chief Medical Officer, Business Secretary and Health Secretary to lead UK efforts to find and manufacture a COVID-19 vaccine. Kate Bingham will report directly to the Prime Minister.

Kate will co-ordinate the work already underway across Government, academia and industry to rapidly develop vaccines. **The UK is a leader in the global response, committing £250 Million to the international drive to develop a Coronavirus Vaccine through the Coalition for Epidemic Preparedness Innovations and hosting the upcoming global pledging conference for Gavi, the Vaccine Alliance**, on 4 June 2020.

Kate having worked in the biotech sector in the UK and internationally for 26 years – most recently as Managing Partner at SV Health Investor.

Her work has led to the launch of 6 drugs for the treatment of patients with inflammatory and autoimmune disease and cancer." - in "Kate Bingham appointed chair of UK Vaccine Taskforce", Gov.UK, 16 May 2020.

July 2020

*"**Ministers spent an astonishing £10 Billion on the bungled test and trace programme** as part of an extra £48 Billion of spending on public services during the coronavirus crisis, it has emerged. **The programme was championed by Health Secretary Matt Hancock** when introduced at the end of May." - in The Daily Mail, 8 July 2020.*

Ministers have spent £10 Billion on bungled Test and Trace system

"Ministers are spending £10 Billion on the Test and Trace Programme which is failing to hit targets – and it's still not yet fully operational.

The Government has allocated £48 Billion for public services during the coronavirus crisis.

The NHS ditched the latest version of the track and trace app last month to merge it into the **Google-Apple model.**

Of the £48.5 Billion of additional expenditure on public services for the immediate response to the outbreak, £31.9 Billion was allocated to the NHS.

Personal protective equipment (PPE) for frontline health staff cost the Government £15 Billion over 3 months, which is more than the annual budget of the Home Office.

A further £5.5 Billion went on the hiring of private sector health facilities." - in "Metro", 9 July 2020.

September 2020

Tests Only Work in 7% of the Cases, 93% have a False Sense of Security

"Every one thinks that you can have some tests at an airport, that will answer if you got it or not, unfortunately **it only works in 7% of the cases, in 93% of the time you could have a real false sense of security, a false sense of confidence when you arrive and take a test." - Boris Johnson, Prime Minister, UK**, in "Coronavirus: Airport tests 'give false sense of security', says Johnson", BBC, **4 September 2020.**

The Diversion of Public Money and the Vested Interests of Commercial Companies

"The UK Government has drawn up plans to carry out up to 10 Million Covid-19 Tests a day by early next year as part of a huge £100 Billion expansion of its national testing programme.

The leaked documents reveal a heavy reliance on the private sector to achieve the mass testing and details 'letters of comfort' which have already been signed with companies to reach 3 Million Tests per day by December.

Firms named are GSK for supplying Tests, AstraZeneca for lab capacity and Serco and G4s for logistics and warehousing." - in "Covid-19: UK government plans to spend £100 Billion on expanding covid-19 testing to 10 million a day", BMJ, 9 September 2020.

Coronavirus Tests that Don't Exist could cost £100 Billion

"Now documents leaked to the British Medical Journal and the Guardian claim the plan would have an enormous price tag.

It adds: "The expectation is that this would require around 6 million tests per day and that it would **cost over £100 Billion to deliver."** - in "Boris Johnson's plan for 'moonshot' coronavirus tests that don't exist could cost £100 bn", Mirror, 10 September 2020.

Sir Patrick Vallance

"Sir Patrick Vallance has a £600,000 shareholding in a Pharmaceuticals Giant which is racing to develop a Covid Vaccine for the Government, a report has revealed.

The Chief Scientific Adviser holds the deferred bonus of 43,111 shares in GlaxoSmithKline (GSK) from his time as president of the multinational company.

Sir Patrick has already sold more than £5 Million in shares he received during his tenure from 2012 to 2018, when he was appointed by the Government.

Accounts seen by the Telegraph show that **Sir Patrick held 404,201 GSK shares when he resigned, worth £6.1 Million at today's price."** - in "Conflict of interest row as it emerges Chief Scientific Officer Sir Patrick Vallance has £600,000 of shares in vaccine maker contracted to make UK's coronavirus jabs", The Daily Mail, 24 September 2020.

October 2020

> *"The government was asked today why it took "£12 Billion and 7 wasted months to realise the blindingly obvious" inadequacy of its privatised test-and-trace system." - in "Government slammed over admission that privatised test and trace has failed", Morning Star, 12 October 2020.*

World Bank $12 Billion for COVID-19 vaccines

"The World Bank said the financing program will include technical support to recipient countries so they can prepare for deploying Vaccines at scale, and will signal to drug companies that there will be strong demand and ample **financing for Covid-19 Vaccines in developing countries.**" - in "World Bank board approves $12 Billion for COVID-19 Vaccines, treatments in developing countries", Reuters, 14 **October 2020.**

"Private sector consultants are being paid day rates of around £7,000 by the Government to help with its coronavirus test and trace system.

Sky News said it has seen documents revealing Boston Consulting Group (BCG) was paid about £10 Million for around 40 consultants to provide 4 months' work between the end of April and late August.

The Department of Health and Social Care (DHSC) received a 10 to 15% discount from BCG, whose day rates for public sector work range from £2,400 to £7,360 for the most senior consultants.

Some 165 consultants were recruited to work on the scheme between now and November.

This includes 84 more from Deloitte, 31 from Ernst & Young and 50 from KPMG, with a further 42 roles potentially available for consultants.

Its report comes amid ongoing criticism of the Government's £12 billion test and trace system." - in "Test and trace consultants 'paid £7,000 day rates by Government'", Express & Star, 14 October 2020.

Deloitte, Ernst & Young and KPMG are multinational professional services network, and are part of the Big Four accounting organizations. *The Big Four is the nickname used to refer collectively to the 4 largest professional services networks in the world, consisting of Deloitte, Ernst & Young, KPMG and PricewaterhouseCoopers.*

£12 Billion Paid to Private Companies to help Run the System

"Outsourcing giant Serco has said it expects profits to exceed expectations in 2020 as a result of the uptick in work since the global pandemic.

Updating the London Stock Exchange in an unexpected announcement, the company said the excess profits could now be returned to shareholders.

The company, is one of the largest companies involved the UK Government's Test and Trace scheme, said it had achieved strong revenue growth in the 3 months from July, highlighting extensions to contracts to provide test sites and call handlers. Bosses said this was "an indication of our customer's satisfaction with the quality of work we have delivered" as part of the £12 Billion committed by the Government to the system.

It expects a trading profit, before any one-off costs, of between £160 million and £165 million." - in "£12 billion test and trace scheme has its 'worst week ever'", Plymouth Herald, 22 October 2020.

Serco Group Plc

"Serco Group Plc: British company with headquarters based in Hook, Hampshire, England. Serco manage over 500 contracts worldwide.

The company employs over 50,000 people. Serco operates in the following sectors of public service provision: Health, Transport, Justice, Immigration, Defence, and Citizens Services. Serco primarily derives income as a contractor from the provision of government services.

In July 2019, a fine of £19.2 Million was imposed on Serco for fraud, and false accounting over its electronic tagging service for the Ministry of Justice.

The company was also ordered to pay the Serious Fraud Office's investigative costs of £3.7 Million.

In health services, Serco's failures include the poor handling of pathology labs and fatal errors in patient records.

At St Thomas' Hospital, the increase in the number of clinical incidents arising from Serco non-clinical management has resulted in patients receiving incorrect and infected blood, as well as patients suffering kidney damage due to **Serco providing incorrect data used for medical calculations.** A Serco employee later revealed that the company had falsified 252 reports to the National Health Service regarding Serco health services in Cornwall." - in Wikipedia

"To help to accelerate the development of successful vaccines, we launched the National Health Service COVID-19 vaccine registry and have enrolled over 295 000 volunteers, with a focus on populations who are at high risk of severe infection and mortality from COVID-19.

We plan to accelerate recruitment in disease hotspots with mobile research teams informed by robust PCR testing, and have provided funding for clinical trials of crucial importance, including Janssen's two-dose Ad26 protocol (NCT04505722), **Imperial College London** self-amplifying RNA (ISRCTN17072692), and Valneva's whole inactivated vaccine." - Kate Bingham, Vaccine Taskforce, Department for Business Energy and Industrial Strategy, UK Government, in "The UK Government's Vaccine Taskforce: strategy for protecting the UK and the world", The Lancet, 27 October 2020.

> ***"I sense a moral, as well as an intellectual failure of the medical establishment. The NHS's (mostly Serco's) £22 Billion test and trace programme fails to enable outbreak control, and yet it received a further £15 Billion in the recent budget. Lateral flow tests and their use in screening pupils is a mockery of scientific process."*** *- in "The medical establishment is failing the UK public on covid-19", BMJ, 22 March 2021.*

November 2020

Kate Bingham

"Kate Bingham, worked in the biotech and life sciences sectors for 30 years.

She is a proven drugs discovery expert with superb deal-making skills and an excellent global reputation, **recently appearing alongside Bill Gates at the Gates Grand Challenge Conference.**

She is well known and highly rated by Multinational Pharmaceutical and Vaccine Companies.

She has a first class degree in Biochemistry from the University of Oxford, an MBA from Harvard Business School (Baker Scholar) and is a board member of the Francis Crick Institute.

Her investments have led to the launch of 6 drugs for the treatment of patients with inflammatory and autoimmune disease and cancer.

Kate stepped back from her full-time role as Managing Partner at SV Health Investors to take on this role as Chair of the Taskforce, for which she is unpaid.

Under her leadership of the Vaccine Taskforce, in the past 6 months: Britain has struck agreements to buy 350 Million doses of vaccine: these involve the 6 leading candidates under development including the Oxford/AstraZeneca and Pfizer vaccines.

The VTF has reached in principle agreement with AstraZeneca to supply a neutralising antibody cocktail as a prophylactic treatment once clinical trials are completed and it is approved by regulators.

The UK is pioneering controlled human challenge studies, to assess and accelerate the development of effective vaccines more quickly and with far fewer participants than a standard phase 3 trial.

The Vaccine Taskforce has provided funding in several UK sites to manufacture vaccine to cover the UK population.

The UK has committed to ensuring that everyone at risk of SARS-CoV-2 infection, anywhere in the world, has

access to a safe and effective vaccine, and has donated £500 Million to the Covax international vaccine-sharing initiative to enable this." - in "A statement regarding Kate Bingham and the Vaccine Taskforce", Gov.UK, 1 November 2020.

UK's Vaccine Taskforce Chief Shared Documents in US

"Kate Bingham, the head of Britain's vaccine taskforce, showed a detailed list of vaccines which the UK government is closely monitoring to a "premier webinar and networking event" for women in private equity hosted by a Massachusetts company.

Bingham, a venture capitalist married to the Conservative minister Jesse Norman, was appointed to the role by Boris Johnson in May and reports directly to him.

She combines her job leading the vaccine taskforce with her role as managing director of SV Health Investors, a private equity firm." - in "UK's vaccine taskforce chief shared sensitive documents in US", The Guardian, 2 November 2020.

"Boris Johnson was warned of a 'crony virus' at the heart of Downing Street yesterday as furious MPs tore into his plans for a second countrywide lockdown.

The prime minister defended Test and Trace boss Dido Harding, despite contact tracing falling to a record low, and rejected calls to sack the head of his Vaccine taskforce, Kate Bingham, after she was accused of revealing confidential information to US financiers.

Neither woman faced competition for their jobs – both are married to Tory MPs.

Baroness Harding studied at Oxford with David Cameron.

Her husband, John Penrose, is a member of a think-tank calling for the NHS to be replaced by an insurance system.

Ms Bingham's husband is Jesse Norman, who attended Eton at the same time as Mr Johnson. Ms Bingham went to school with the PM's sister." - in "Crony Virus'", Metro, 3 November 2020.

"A terrifying graph predicting up to 4,000 deaths a day was based on a model produced a month ago.

The slideshow presented by Sir Patrick Vallance at Downing Street on Saturday suggested the figure could be reached in early December.

Yesterday it emerged that the graph was already out of date, based on research showing around 1,000 deaths by now – if no restrictions were imposed.

Yesterday there were only 136 new deaths." - in "Calling the Boffins' bluff: How No10's experts manipulated data and drew biased conclusions to 'terrify' England into locking down", The Daily Mail, 3 November 2020.

> *"You may not be personally responsible for every decision made in recent months but you are at the heart of the prime minister's inner circle, and the chief advocate of the government's coercive and economically ruinous policy." - Kathy Gyngell, Editor of The Conservative Woman, in "Dear Michael Gove: Coercive Lockdown is Dishonest, Disproportionate & Repressive of Civil Liberties", 4 November 2020.*

"The OptiGene Lamp tests, for which the government has paid £323 Million, are separate to the nasal swab tests used by the public, and there are questions about their accuracy.

A trial in Greater Manchester found they missed half of infections."- in "Covid: Liverpool mass testing trial 'could do more harm than good'", The Guardian, 6 November 2020.

"The head of the government's vaccine taskforce has failed to publicly declare that she manages private investments in 2 companies involved in the race to develop coronavirus drugs.

Kate Bingham is a managing partner at SV Health Investors, a venture capital firm.

Two months after she was appointed by Boris Johnson, she said it was the "perfect time" to launch a fund that invested in a company researching coronavirus antibody cocktails, The Times can reveal." - in "Coronavirus vaccine taskforce chief Kate Bingham manages investments for drug firms", The Times, 7 November 2020.

> ***"The head of the government's vaccine taskforce has charged the taxpayer £670,000 for a team consultants.***
> *Since June she has used 8 full-time consultants from Admiral Associates, a London Public Relations agency, to oversee her media strategy. According to leaked documents, she has already spent £500,000 on the team.* ***It means each consultant is on the equivalent of £167,000 a year, more than the Prime Minister's salary."*** *- in "Vaccine tsar Kate Bingham runs up £670,000 PR bill", The Times, 7 November 2020.*

Edward Argar
Minister for Health

"Edward Argar was appointed Minister of State at the Department of Health and Social Care on 10 September 2019." - in "Gov.UK", 10 September 2019.

> ***"Ex-Head of UK and Europe Public Affairs at Serco, working there until he was elected MP for Charnwood in 2015."*** *- in "Mirror", 14 June 2018*

"Argar is the former head of UK and Europe public affairs at outsourcing giant Serco. Among a huge portfolio of running public services for profit**, Serco governs 5 private prisons in the UK. And the corporation is subject to a criminal investigation by the Serious Fraud Office."** - in "The Canary", 15 June 2018.

> ***"Last year, Serco was fined almost £23 Million after being found to have defrauded the Ministry of Justice, falsely charging the government for electronic tags on individuals who were either still in prison, had left the country, or were even dead."*** *- in "Morning Star", 23 October 2020.*

"Serco has so far been awarded £108 Million for Test and Trace programme, despite claims from those employed as contact tracers they were so under-used they were being "paid to watch Netflix".

They also have won the most coronavirus related contracts from the government of any company." - in "Ministers are Addicted To Outsourcing Covid-19 Contracts", Politics Home, 22 September 2020.

"**The £108m contract was directly awarded to Serco by the Crown Commercial Service on behalf of the Department of Health and Social Care in May.**

It was not put out to open tender but selected via an existing framework of suppliers." - in "UK government urged to justify £108m contact-tracing deal with Serco", The Guardian, 11 August 2020.

The Untold Story of Moderna Race for a COVID-19 Vaccine

"**Moderna** had worked with **Barney Graham deputy director of the Vaccine Research Center at the National Institutes of Health (NIH)**, over the past few years on its quest to bring a whole new class of vaccines to market.

Stéphane Bancel (**mystified his colleagues by leaving a plum CEO job at a French multinational diagnostics company and moving to Boston to run Moderna**) sent an email directed at Barney Graham (NIH).

Moderna had worked with Graham and the NIH over the past few years on its quest to bring **a whole new class of vaccines to market**. **Hamilton Bennett had managed Moderna's Zika program that produced a vaccine in a mere 10 months**, a company record.

Stéphane Bancel (Moderna) forwarded Barney Graham (NIH) email to Hamilton Bennett, program leader on Moderna's vaccine portfolio.

Three days later, on **10 January 2020**, Hamilton Bennett (Moderna) was on a previously scheduled call with Barney Graham (NIH) when the subject of China's low-level viral outbreak came up.

Barney Graham (NIH) asked Hamilton Bennett if Moderna would be interested in using the new virus to test the company's accelerated vaccine-making capabilities.

Stéphane Bancel knew he needed to reach out to Moderna cofounder Noubar Afeyan, the serial biotech entrepreneur who runs Flagship Pioneering in Cambridge and chairs Moderna's board of directors.

Dan Barouch (head of the Center for Virology and Vaccine Research at Beth Israel Deaconess Medical Center), **has spent most of his career seeking one for HIV and has worked on one for Ebola, too.**

His work during the **2016 Zika outbreak** rocketed him to fame after he produced an investigational **vaccine in a then-unheard-of 180 days.** The promising news not only shot **Moderna's share price higher, but sent the entire stock market soaring by more than 900 points.**

Stéphane Bancel (Moderna) says he might be ready to submit for FDA approval for the Vaccine by year's end.

Moderna announced a 10-year agreement with Swiss drugmaker Lonza to produce a Billion doses a year.

Stéphane Bancel (Moderna) says: **"The only way the world gets back to normal is with broad vaccination."** - Catherine Elton, in "The Untold Story of Moderna's Race for a COVID-19 Vaccine", Boston Magazine, 4 June 2020.

> ***"The company Moderna has a reputation for secrecy and little of its work has ever been published, and none peer-reviewed or scientifically validated**." - in Damien Garade, in **"Ego, ambition, and turmoil: Inside one of Biotech's most secretive startups**", 3 September 2016; David Crow, in "Secretive Moderna yet to convince on $5 Billion valuation", Financial Times, 6 September 2017.*

30 June 2020

China Study Warns of Possible New "Pandemic Virus" from Pigs

> *"A team of Chinese researchers looked at influenza viruses found in pigs from 2011 to 2018 and found a "G4" strain of H1N1 that has "all the essential hallmarks of a candidate pandemic virus", according to the paper, published by the US journal, Proceedings of the National Academy of Sciences (PNAS)." - 30 June 2020.*

"Dr Anthony Fauci, MD said Tuesday that the United States was keeping an eye on the new strain, named G4, but said **there was no evidence it had jumped from pigs to humans yet**. But it is exhibiting reassortment capabilities.

In other words when you get a brand new virus that turns out to be a pandemic virus its either due to mutations and or the reassortment or exchanges of genes." - in "Dr Fauci compares new G4 virus to 1918 Spanish Flu pandemic and says it could infect humans", Metro, 30 Jun 2020

6 July 2020

China Records Case of Bubonic Plague

*"Authorities in China have stepped up precautions after a city in the Inner Mongolia autonomous region confirmed **1 case of Bubonic Plague**." - in "China Bubonic Plague: Inner Mongolia takes precautions after case", BBC News, 6 July 2020.*

7 July 2020

China Records Case of Dengue Virus

"China has recorded a new case of Dengue Virus within 24 hours of Bubonic Plague outbreak, according to officials.

Last week, Singapore reported 1,454 cases of the Dengue Virus, the 4th consecutive week that cases have exceeded 1,000 and the largest weekly total ever recorded in Singapore.

At least 16 people have died of the Dengue Virus, Singapore reports, compared to 26 who have died from Coronavirus." - in Daily Mail, 7 July 2020.

*"PM Lee said Singapore looks forward to working with the European Commission, like-minded countries, the **World Health Organisation, the Coalition for Epidemic Preparedness Innovations and Gavi, the Vaccine Alliance, "to develop vaccines and distribute them fairly and expeditiously to people in all countries**". - in "**Coronavirus: Singapore will work to develop and distribute vaccines fairly and quickly to all countries**, says PM Lee", The Straits Times, 28 June 2020.*

"**Global Virus Network Adds Singapore Consortium** as Newest Center of Excellence: The announcement was made by **Prof. Robert Gallo, MD**, Co-founder and Scientific Director of the GVN, Prof. Linfa Wang, PhD, Professor & Director of the Emerging Infectious Diseases Programme at Duke-NUS, professor at the **Duke Global Health Institute**, and Prof. Christian Bréchot, MD, President of the GVN.

The 7 institutions comprising the Global Virus Network GVN-Singapore Center of Excellence include:

Duke-NUS Medical School is a collaboration between Duke University and National University of Singapore.

Singapore Immunology Network (SIgN).

Environmental Health Institute (EHI) is the research arm of Singapore's National Environment Agency (NEA).

National Public Health Laboratory (NHPL) is an accredited laboratory under Singapore's Ministry of Health.

The laboratory performs testing for viruses of public health significance and receives clinical specimens from public hospitals in the country for surveillance and outbreak investigation. **NUS Yong Loo Lin School of Medicine** is the medical faculty of the National University of Singapore.

Lee Kong Chian School of Medicine (LKCMedicine), a partnership between Nanyang Technological University, Singapore (NTU) and **Imperial College London** (Imperial).

DSO National Laboratories is the national defense research agency in Singapore. The Biological Defense Program is a core program within the Defense Medical & Environmental Research Institute (DMERI).

The Global Virus Network is a global authority and resource for the identification and investigation, interpretation and explanation, control and suppression, of viral diseases posing threats to mankind.

It enhances the international capacity for reactive, proactive and interactive activities that address mankind-threatening viruses and addresses a global need for coordinated virology training through scholarly exchange programs for recruiting and training young scientists in human and animal virology." - in "Global Virus Network", 22 August 2018.

*"A **Nigerian** national was tested positive for Monkeypox, the first case of the rare viral disease reported in Singapore. It is a rare disease caused by **a virus that is primarily transmitted from animals to humans**. The disease is called monkeypox because it was first discovered in laboratory monkeys in 1958. Those infected with monkeypox typically experience:*

1. Fever
2. Headache
3. Muscle Ache
4. Body Ache
5. Swollen Lymph Node
6. Skin Rash

*The virus can cause serious complications like: **Pneumonia, Brain Inflammation and Eye Infection.**" - in "First case of Monkeypox in Singapore: 6 things to know about the Virus", Strait Times, 10 May 2019.*

"In 1958, von Magnus was the first to confirm the identity of the monkeypox virus and to describe monkeypox in laboratory crab-eating Macaques (**cercopithecine primate native to Southeast Asia**) during two outbreaks of the disease in the summer and autumn of that year. A little more than 30 cases of monkeys with monkeypox were reported, more than 50 days after their arrival by ship from **Singapore**. **There were no deaths and no monkey-to-human transmission. Not all the exposed monkeys exhibited the illness.**" - in Wikipedia

*"Monkeypox was first discovered in 1958 when two outbreaks of a pox-like disease occurred in colonies of monkeys kept for research, hence the name 'monkeypox.' **The first human case of monkeypox was recorded in 1970 in the Democratic Republic of Congo during a period of intensified effort to eliminate smallpox. The natural reservoir of monkeypox remains unknown.** However, **African rodent species are suspected to play a role in transmission.***

*There are **2 distinct genetic groups** (clades) of **monkeypox virus—Central African and West African**." - in "About Monkeypox", National Center for Emerging and Zoonotic Infectious Diseases, CDC, 28 January 2019.*

*"**Nipah virus experts and stakeholders** gathered at an international conference in Singapore Dec. 9 and 10 to commemorate the 20th anniversary of the virus' discovery and to discuss innovative and effective solutions to combat the threat to global health security posed by Nipah. The session was co-hosted by **Duke-NUS Medical School** (Duke-NUS) and the Coalition for **Epidemic Preparedness Innovation**s (CEPI). The conference was also co-sponsored by **WHO** and the National Institute of Allergy and Infectious Diseases, one of the U.S. **National Institutes of Health NIH**. Nipah virus was first identified in 1999 following a large outbreak affecting Malaysia and Singapore. The virus is 1 of 8 categories of diseases that the World Health Organization has identified as epidemic threats in need of prioritization. **The virus causes severe disease, including respiratory symptoms and inflammation of the brain** leading to coma and death." - in "Duke Today", Duke University, 11 December 2019.*

*"Britain is close to agreeing to a £500 Million supply deal with **Sanofi** and **GlaxoSmithKline** for 60 million doses of their potential **Covid-19 vaccine**." - in "The Sunday Times", 5 July 2020.*

*"Alwaleed Philanthropies has made a fresh commitment to preventing the spread of disease by investing a further US $5 Million in its partnership with **Gavi, the Vaccine Alliance**." - in "Alwaleed Philanthropies Invests $5 Million to Gavi's INFUSE Initiative to Support the Global Fight for Vaccines", Al Bawaba, 2 September 2019.*

Symptoms of Dengue Virus

"Symptoms can include:
1. **High temperature, or feeling hot or shivery (Fever)**
2. **Severe headache**
3. **Pain behind the eyes**
4. **Muscle and joint pain**
5. Feeling or being sick
6. **Widespread red rash**
7. **Tummy pain and loss of appetite**" - in "NHS", 8 July 2020.

Pneumonia Kills a Child Every 39 Seconds, Health Agencies Say

"Pneumonia killed more than 800,000 babies and young children last year: or one child every 39 seconds: despite being curable and mostly preventable, says the GAVI Vaccines Alliance." - in CNA, 12 Nov 2019.

"It is well known that the relatively great fatality of Pneumonia, and other Acute Diseases is explained by the greater Toxaemia which exists late in life. *Auto-intoxication increases the Blood Pressure, and induces prematurely the fatal events of Cerebral, Cardiac and Renal Diseases." - Dr Charles G. Stockton, MD in Oration on Medicine at the 56th annual session of the American Medical Association, in "JAMA", 15 July 1905.*

World Health Organization Welcomes Facebook Pledge to Curb Anti-Vaccine Misinformation

"**The World Health Organization WHO said it welcomed a commitment by Facebook that it would direct users seeking vaccine information on its Instagram, Facebook Search, Groups and other forums towards facts, not misinformation.**

"Major digital organizations have a responsibility to their users - to ensure that they can access facts about vaccines and health", the WHO said in a statement." - in "CNA", 8 July 2020.

"Over the next few days, **we will begin deploying automated tools to build on our efforts to label Tweets that may contain misleading information around COVID-19 vaccinations. These tools will help our teams gradually scale their enforcement of our COVID-19 misinformation policies."** - @TwitterSafety, Twitter, 6 April 2021.

The Tobacco Epidemic

"The **Tobacco Epidemic** is one of the **biggest public health threats the world has ever faced**, killing more than **8 Million** people a year around the world." - in "Tobacco", World Health Organization, 27 May 2020.

World Number of Deaths by Cause 2017

Cardiovascular diseases.....17.79 Million
Cancers.....9.56 Million
Respiratory Diseases.....3.91 Million
Lower Respiratory Infections.....2.56 Million
Dementia.....2.51 Million
Digestive Diseases.....2.38 Million
Diarrhoeal Diseases.....1.57 Million
Diabetes.....1.37 Million
Liver Diseases.....1.32 Million
Kidney disease.....1.23 Million
Tuberculosis.....1.18 Million
HIV/AIDS.....954,492
Malaria.....619,827
Parkinson Disease.....340,639
Meningitis.....288,021" - in "Causes of Death", Our World in Data, Oxford University, December 2019.

COVID-19 Global Deaths

Without any autopsies, or second opinion, the alleged number of deaths recorder by the Medical Trade is:

"2.8 Million" - in, "Coronavirus COVID-19 Global Cases Map,Johns Hopkins Center for Systems Science and Engineering", from **11 January 2020 to 8 April 2021.**

Global Daily Deaths 2017

"Cardiovascular Diseases.....48,742
Cancers.....26,181
Respiratory Diseases.....10,724
Lower Respiratory Infections (Bronchitis, Bronchiolitis, Pneumonia).....7,010
Dementia.....6,889
Digestive Diseases.....6,514
Diarrhoeal Diseases.....4,300
Diabetes.....3,753
Liver diseases.....3,624" - in "Causes of Death", Our World in Data, Oxford University, December 2019.

> ***"The only aim of the virus is to find people to infect."*** *- Tedros Adhanom, Director General of the World Health Organization, in "Press WHO Conference", 15 July 2020.*

In 1992, Tedros received a Master of Science degree in Immunology of Infectious Diseases from the **London School of Hygiene & Tropical Medicine**. Tedros as Minister of Health in Ethiopia, was very active in global health initiatives. Ethiopia was the first country to sign compact with the **International Health Partnership**. Chair of Roll Back Malaria Partnership 2007–9, Programme Coordinating Board of **UNAIDS** 2009–10, **Global Fund to fight AIDS**, Tuberculosis and Malaria 2009–11, served as member of the **Global Alliance for Vaccines and Immunization** (GAVI).

With only 4,291 claimed deaths during a period 71 days WHO Declares a Pandemic on the 11 March 2020

Total number of deaths attributed to Covid-19, from the 31 December 2019 to 11 March 2020

4,291

"We have therefore made the assessment that COVID-19 can be characterized as a pandemic." - in "WHO Director-General's opening remarks at the media briefing on COVID-19", World Health Organization, 11 March 2020.

"WHO Director-General in his regular media briefing today stated that WHO has been assessing this outbreak around the clock and we are deeply concerned both by the alarming levels of spread and severity, and by the alarming levels of inaction. **WHO therefore have made the assessment that COVID-19 can be characterized as a pandemic**.

SUBJECT IN FOCUS: **Risk Communication guidance - COVID-19, older adults and people with underlying medical conditions**

The virus that causes COVID-19 infects people of all ages. However, evidence to date suggests that 2 groups of people are at a higher risk of getting severe COVID-19 disease.

These are older people (that is people over 60 years old); and those with underlying medical conditions (such as Cardiovascular Disease, Diabetes, Chronic Respiratory Disease, and Cancer).

The risk of severe disease gradually increases with age starting from around 40 years." - in "Coronavirus Disease 2019 (COVID-19), Situation Report – 51, World Health Organization", 11 March 2020.

Covid-19 Deaths by Country 11 March 2020

Country	Total Deaths
China	3,158
Italy	827
Iran	354
S. Korea	60
Spain	55
France	48
USA	38
Japan	15
UK	8
Diamond Princess	7
Iraq	7
Netherlands	5
Switzerland	4
Germany	3
Belgium	3
Australia	3
Hong Kong	3
San Marino	2
Lebanon	2
Philippines	2
Sweden	1
Canada	1
Egypt	1
Thailand	1
Taiwan	1
Ireland	1
Indonesia	1
Argentina	1
Albania	1
Panama	1
Bulgaria	1
Morocco	1

- in “Worldometer”, 23:35 GMT, 11 March 2020.

Did the Medical Trade, carried out any autopsy, in the cases which reported, as to be the cause of death from the COVID-19?

We know as for a recorded fact that **in Italy, Germany, Spain, Brazil, USA, no Autopsy was carried out** or the number of autopsy's where negligible in number.

Furthermore the question also rises in relation to how they knew for example on board the Cruise Ship Diamond Princess, that the the onboard passengers had Covid-19?

Did the ship have an Electron microscopy onboard?

This without mentioning all the other cases reported, from the rest of all the other countries. Autopsy's of Covid-19 deaths where actively discouraged.

COVID-19 Daily Deaths

31 December 2019 to 15 May 2020….....2,205 average

Declared a Pandemic by WHO on the 11 March 2020

11 March 2020 to 15 May 2020.....4,517 average

The Week with Peak of Deaths

13 April 2020 to 19 April 2020.....7,504 average

- in "European CDC", Situation Update Worldwide, 15 May 2020.

Respiratory Disease

"**Respiratory disease affects 1 in 5 people and is the 3rd biggest cause of death in England** (after Cancer and Cardiovascular Disease).

Lung Cancer, Pneumonia and Chronic Obstructive Pulmonary Disease (COPD) are the **biggest causes of death**.

Hospital admissions for Lung Disease have risen over the past 7 years at 3 times the rate of all admissions generally.

Respiratory Diseases are a major factor in winter pressures faced by the NHS; most respiratory admissions are non-elective and **during the winter period these double in number**.

The annual economic burden of Asthma and Chronic Obstructive Pulmonary Disease COPD on the NHS in the UK is estimated as £3 Billion and £1.9 Billion respectively.

In total, all lung conditions (including lung cancer) directly cost the NHS in the UK £11 Billion annually." - in "Respiratory disease", NHS, 11 July 2020.

Covid19 Deaths in China

"China: Population **1.4 Billion**

Covid19 Deaths in China by 11 March 2020.....**3,158**
4 Months after
Covid19 Deaths in China by 11 July 2020.....**4,634**

" - in "Worldometer", 11 July 2020.

Pathology Encountered at Autopsy

"Likely pathological features of COVID-19 infection

Organ / Tissue	**Pathological features**	**Potential HG3/HG2 infection**
Chest	Purulent pleurisy, pericarditis and consolidated lung lobes	**Bacterial infections**
	Acute lung injury +/- secondary **bacterial pneumonia**	COVID-19 and MERS infections

Cases in which death may be due to COVID-19 infection but in which infection is not confirmed

The criteria to assess whether a death may have been due to COVID-19 infection but in which COVID-19 infection has not been proved prior to death are the same as those used to assess the possible infection risk in the living, but with the caveat that the times referred to in the guidelines refer to the time before death or a relevant illness developing prior to death developing." - in "Briefing on COVID-19, Autopsy practice relating to possible cases of COVID-19", Royal College of Pathologists, February 2020.

These criteria are:

"**Patients who meet the following criteria** (inpatient definition)

Requiring admission to hospital (a hospital practitioner has decided that admission to hospital is required with an expectation that the patient will need to stay at least one night)

and

Have either clinical or radiological evidence of **pneumonia**

or

Acute Respiratory Distress Syndrome

or

Influenza like illness (fever ≥37.8°C and at least one of the following respiratory symptoms, which must be of acute onset: persistent cough (with or without sputum), hoarseness, nasal discharge or congestion, shortness of breath, sore throat, wheezing, sneezing

or

A loss of, or change in, normal sense of taste or smell (anosmia) in isolation or in combination with any other symptoms." - in "COVID-19: investigation and initial clinical management of possible cases", Public Health England, 22 May 2020.

The CDC
Centers for Disease Control and Prevention

A percentage of the CDC's funding comes from the independent, 501 (c) 3 Organization: the "CDC Foundation".

This foundation, due to not being a government agency, can receive donations and do things that the CDC wouldn't directly be able to.

The following is a list of some companies, and private foundations who are known to fund the CDC.

1. Bill and Melinda Gates Foundation
2. Government of Canada
3. Health Canada
4. Kaiser Permanente (Health care company)
5. Johnson & Johnson
6. Diazyme Laboratories
7. Quest Diagnostics
8. Roche Diagnostics
9. Pfizer
10. Novartis
11. Merk
12. Procter & Gamble
13. National Association of Chain Drug Stores Foundation
14. Cargill (Food Conglomerate)
15. Exxon Mobile
16. Pepsico
17. Coca-Cola
18. Facebook

"I was involved in deceiving millions of taxpayers. We lied about the scientific findings. The CDC can't be trusted." *- Dr William Thompson, Senior Scientist US Centers for Disease Control and Prevention (CDC), in Vaxxed: From Cover-Up to Catastrophe, 2016.*

The WHO
World Health Organization

"The WHO has systemic structural problems, and has the same problems such as those of the CDC and some of the other health health regulators in America and Europe have.

Which begin with the fact that those agencies rely a large part of their **funding Pharmaceutical Industry. And those ties and other conflicts of interest, brought those agencies very close, that they really have become not just captive agency's but almost subsidiaries of the Industry.**

The World Health Organization gets half its money from from Nations, and the other half comes from the Industry. After the United States the single biggest contributor is the Gates Foundation, which has a very close relationship to the Pharmaceutical Industry and has goals that are almost identically aligned with the industry.

Historically the Pharmaceutical Industry has used the WHO.

The WHO has tremendous power in developing countries, and particularly if there are drugs at the Pharmaceutical Industry wants to dump on Africa, drugs that are stale or that are poison don't work, they can usually persuade a WHO to to force them on African populations the WHO test drugs on African populations, and it compels African populations to take drugs often against their will.

The way they do this is that the WHO controls the the the funding for the Health Organizations and almost all the Nations in Africa.

For example the HIV program pumps millions of dollars into those Nations, every year, and if they didn't have those HIV dollars they would be in deep trouble, that gives the WHO tremendous leverage to make other requirements.

The Scandinavian Governments did a study on DPT vaccine (a combination of Vaccines: Diphtheria, Pertussis (whooping cough), and Tetanus), that Vaccine is given to virtually every child in Africa under orders by the WHO.

They found that the Vaccine was killing children at 10 times the rate unvaccinated children are dying.

It was killing more children than if they had Diphtheria, Pertussis and Tetanus.

Gates and the WHO continued to insist that Vaccine which has been completely discredited by credible sources, by the Scandinavian Government, and by the best scientists in the world, continues to be administered to every child in Africa." - Robert F. Kennedy Jr., Lawyer in "Robert Kennedy Jr slams WHOs sordid ties to Big Pharma", RT News, 14 April 2020.

"Whole-cell Diphtheria–Tetanus–Pertussis (DTP), and Oral Polio Vaccine (OPV) were introduced to children in Guinea-Bissau in 1981.

We previously reported that DTP in the target age group from 3 to 5 months of age was associated with higher overall mortality.

Conclusion: Although having better nutritional status and being protected against 3 infections, **6–35 months old DTP-vaccinated children tended to have higher mortality than DTP-unvaccinated children.**

All studies of the introduction of DTP have found increased overall mortality." - Peter Aaby, Søren Wengel Mogensen, et al., in "Evidence of Increase in Mortality After the Introduction of Diphtheria–Tetanus–Pertussis Vaccine to Children Aged 6–35 Months in Guinea-Bissau: A Time for Reflection?", Frontiers in Public Health, 19 March 2018.

Metabolic Linkages Between Air Pollution and Cardiorespiratory Function

"**Conclusions: Increased Negative Air Ions (NAI) and decreased Particulate Matter (PM), Ameliorated Respiratory Function by Increasing Energy Production, Improving Anti-Inflammation and Anti-Oxidation Capacity.**

Decreased Heart Rate Variability Improved Cardiac Autonomic Function by Increasing Energy Production and Anti-Inflammation Capacity.

Methods: Urine samples were collected from 44 healthy children 3 times of each study period in an existing randomized, double-blind crossover study. Ultra-high performance liquid chromatography/mass spectrometry was conducted in metabolomics analysis, the associations between indoor Increased Negative Air Ions, decreased Particulate Matter, and the cardiorespiratory function were investigated via the Meet-In-Metabolite Approach (MIMA) based on statistical and metabolic pathway analysis.

Mixed-effect models were used to establish associations between exposure, health parameters and metabolites.

Results: 28 and 14 metabolites were identified with significant correlations to Increased Negative Air Ions and Particulate Matter, respectively.

Besides, 8 and 18 metabolites were separately associated with Respiratory Function and Heart Rate Variability (HRV).

The increased Increased Negative Air Ions and decreased Particulate Matter improved respiratory function mainly with 8 pathways, promoting energy production, anti-inflammation and anti-oxidation capacity.

Decreased Particulate Matter ameliorated Heart Rate Variability with 6 main pathways, increasing energy production and anti-inflammation capacity while increased Increased Negative Air Ions deteriorated Heart Rate Variability with 5 main pathways, lowering energy generation and anti-oxidation capacity." - Shan Liua, Qingyu Huangb, Yan Wu, et al., in "Metabolic linkages between indoor negative air ions, particulate matter and cardiorespiratory function", Environment International, May 2020.

For more information on the so-called "Virus Living Thing Theory", please read the Book:
"The Nescience of Medicine"

Pneumonia: "Captain of the Men of Death"

"Few if any diseases exact such a toll at the economic prime of life." *- Heffron Roderick, Gaylord W. Anderson, "Two Years' Study of Lobar Pneumonia in Massachusetts," JAMA, 1933.*

Pneumonia ***"It is a self-limited disease, and has its course uninfluenced in any way by medicine."*** *- Dr William Osler, MD, in "The Principles and Practice of Medicine", 1892.*
"The demand for pneumococcus typing has increased approximately four fold. *The demand for anti pneumococcic serum has about paralleled this. If serum were to be distributed without restriction to all physicians desiring it, our total present budget would undoubtedly be insufficient to finance its production." - in "The Massachusetts Pneumonia Program", 13 October 1933.*

"I am starting to use sulfathiazole and sulfa-pyridine prophylactically. And why not? It has not been proven to work that way! Not scientific, you say!
Remember we are front line soldiers; when we see the enemy we do not have to wait for orders from headquarters through a long line of red tape. We must go for him, without waiting for the attack! Again, it seems to me, that is common sense medicine.
What do we fear in grippe or a bad cold? Pneumonia.
What do we fear in whooping cough and other contagious diseases, or post-operative? Pneumonia.
Can you tell when pneumonia is going to develop?
If it does develop, you would use sulfathiazole or sulfapyridine with confidence.
Then why not get the jump on those tough, little bacteria?
Kill them before they get a foothold. Why wait for the attack?

Bomb their channel ports!
Wipe out their bases of supply!
Prevent their starting out in the blood stream; meet force with force!" - William B. McIlwane, in "The Use of Sulfapyridine and Sulfathiazole in General Practice," Virginia Medical Monthly, 1941.

"During the past year, the facilities of the hospital wards have been employed almost entirely in the care of patients suffering from pneumonia. *A large number of patients treated have been soldiers sent from nearby camps." - RC, October 1918.*

"In the latest (1901) edition of his scholarly and most instructive "Principles and Practice of Medicine" Prof. William Osler, treating of Pneumonia in the section of specific infectious diseases, says: **The most widespread and fatal of all acute infectious diseases, Pneumonia, is now the "Captain of the Men of Death"**.

He then adds :

In the United States during the census year 1890 there died of it 76,496, a death rate per 100,000 of population.

In Chicago during the past 10 years it has gradually replaced consumption as the principal cause of death, which A. R. Reynolds attributes to the predisposing influence of Influenza.

In the last decade the death rate from pneumonia in Chicago was 18.03 per 10,000 of population, against 12.36 per 10,000 in the previous decade.

There has been a marked increase in the disease in Baltimore, and Folsom has brought forward evidence to show that there has been a progressive increase in the death rate from pneumonia in the state of Massachusetts.

The admission of pneumonia cases to hospitals during the past few years has, in some places, almost doubled.

These passages are cited for 2 purposes:

1. That I may put their reader on his guard against the assumption that the great increase in pneumonia during the last 10 or 12 years is attributed by me solely "to the predisposing influence of influenza."
2. That I may emphasize more fully than Professor Osler has done the extent of this increase, both in point of time and of proportion.

As to the first, it will probably be sufficient to call attention to the title of the paper on which the assumption was based.

This paper appeared in the March, 1901, Bulletin of the Chicago Health Department, and was entitled "Influenza as a Factor of Recent Mortality", not the only - but one factor.

That influenza has been such a factor and a very important one since December 1889, is now admitted by etiologists generally.

That the increase of pneumonia mortality is due solely to its predisposing influence is disproved by the following figures of deaths from all causes, those from consumption and those from pneumonia during the last 30 years.

It is obvious that influenza, while it undoubtedly has been a potent factor in increasing the mortality rate from other diseases - such as those of the heart, kidneys and respiratory system - is not the sole, nor even the principal, cause of any recent increase of pneumonia.

Since the census year 1900 pneumonia has claimed more than 1/8 of all the victims of the Grisly Reaper in Chicago, 1/3 more than consumption and 44% more than all the other contagious and infectious diseases combined, including diphtheria, erysipelas, influenza, measles, puerperal fever, scarlet fever, smallpox, typhoid fever and whooping cough, the total of which deaths was 4,489, as compared with a total of 6,560 deaths from Pneumonia.

The facts that house epidemics are not infrequent and that the disease prevails, as other contagious and highly infectious ones do, in the winter season, when people are

most crowded together and live much of the time in badly-ventilated apartments, suggests another prophylactic measure, which the public should be taught to apply, namely, thorough ventilation of houses, offices, factories, theatres, churches, cars and other public places, in order that the air which must be breathed may be kept clean and free from infectious matter.

Laymen should be taught not to be afraid of a patient who has pneumonia, influenza or tuberculosis, but to be afraid of lack of cleanliness about him during his illness, of failure to enforce prophylactic measures and of close, badly ventilated apartments during the season when these diseases prevail.

The organism which causes pneumonia may live in the tissues and air passages of human beings for a considerable time without producing the disease.

Every person here present has doubtless had the germ in his tissues scores of times, and at this very moment it is in the bronchial tubes of many of us.

But before pneumonia can develop in such persons some change must take place, either in the organism or in the individual. At present those of us who are acting as hosts to the germ of pneumonia do not get the disease because there is something in us that, for the time being, renders us immune.

That something is to be found in every human body in normal health and vigour.

The moment the vitality becomes lowered sufficiently from any of the many causes to which we are liable to become subject-and no one can measure the exact time or place then the pneumonia organism begins to multiply, to feed on our substances and to give off a poison, and the result is pneumonia.

The element first in importance in keeping the health up to standard is pure air. Without air no one of us can live an hour, while we may live days without water and weeks without food.

An important element in the increasing prevalence of pneumonia is, doubtless, the fact that more persons are

spending their lives indoors than formerly in shops, factories and offices.

Sufficient air is only obtained by living as much as possible, both day and night, in the open air.

The air in dwellings, offices, factories and shops must be kept as pure within as without.

Next in importance to pure air in dwellings is the necessity for sunlight. No room is fit to sleep in all night that has not been flooded with sunlight all day long. Human beings need the sun and the beneficial effect it has on the air they breathe quite as much as the vegetable kingdom needs it.

The fashion of shades and shutters on windows will be abandoned as the beneficial effects of sunlight are understood.

Less need be said of the necessity for pure water and its constant use, both within the body and on its surface for the world is now becoming awake to this fact.

With reference to food, no general rules can be laid down for all; but it is safe to say that the average adult person m the United States, who lives chiefly indoors eats very much more than he requires to nourish his body; the extra amount is a burden on digestive power clogs excretory organs and accounts for most of the malaise, headache and premature breaking down.

Greater attention must be paid in the future to the cleansing not only of the floors of such places, but of the air. What the American people seem to need is more and better air.

Overwork, overindulgence, excesses, all lower the vitality and render one a fit subject for pneumonia."

- Dr Arthur R. Reynolds, MD, Commissioner of Health, Chicago, in "Pneumonia: The New "Captain of the Men of Death", its increasing prevalence and the necessity of methods for its restriction, JAMA, 1903.

Risks Inconsistent Results and Lack of Evidence from Influenza Vaccines

"There is strikingly limited good-quality evidence (all Grade B, C or not existing) of the effectiveness of influenza Vaccination on complications such as pneumonia, hospitalisation and influenza-specific and overall mortality.

Inconsistent results are found in studies among children younger than 6 years, individuals with Chronic Obstructive Pulmonary Disease (COPD), institutionalised elderly (65 years or older), elderly with co-morbidities and healthcare workers in elderly homes, which can only be explained by bias of unknown origin.

The immunisation of individuals who share a household with people at a higher risk for influenza complications is recommended in a few countries (Belgium, USA, WHO), but **there is little evidence of its effectiveness.**

The immunisation of health care and other care workers is recommended in many EU countries and in the USA, but again, **there is little evidence that such immunisation is effective in protecting patients.**

Jefferson et al. (2010) highlighted the lack of solid evidence of the effectiveness of influenza Vaccination on the prevention of pneumonia, hospitalisation and mortality in all age groups.

Baxter et al. (2010) estimated an adjusted effectiveness of 5% (95%CI: −1% to 11%) among those 75 years old or older.

No effectiveness of influenza Vaccination on the prevention of pneumonia in immune-competent elderly people could be found in a nested case-control study by Jackson et al. (2008) after adjusting for frailty and co-morbidities.

Especially when evidence regarding important outcomes such as hospitalisation and mortality is scarce and conflicting, two ways to deal with it emerge.

First, **if no reliable evidence can be found, no recommendation should be made.**

If efficacy against influenza has been proven, then a theoretical profit based on hospitalisation or mortality could be assumed, as these outcomes occur as a direct consequence of influenza cases.

In this case, estimating effect sizes remains guesswork." - Barbara Michielsa, et al, in "A systematic **review of the evidence on the effectiveness and Risks of inactivated Influenza Vaccines in different target groups"**, **Vaccine, 12 August 2011.**

Inactivated Influenza Vaccine Adjuvanted

Fluad Inactivated Influenza Vaccine Adjuvanted, marketed as Chiromas in Spain.

"Therapeutic indications - Active immunisation against influenza in the elderly (65 years of age and over), especially for those with an increased risk of associated complications)

Undesirable effects

A higher incidence of mild post-immunisation reactions has been reported with Fluad compared to non-adjuvanted influenza vaccines.

Adverse reactions observed from clinical trials

The safety of the Adjuvanted Trivalent Influenza Vaccine (aTIV) in elderly subjects was assessed in 36 clinical trials in subjects ≥65 years of age, including 19 randomized controlled trials and 17 uncontrolled seasonal studies.

This database includes 12,730 subjects, 7,532 subjects who received aTIV and 5,198 subjects who received conventional Trivalent Influenza Vaccines (TIV).

In this pooled analysis, a higher percentage of subjects who received aTIV reported both local and systemic reactions post-immunisation compared with those that received conventional TIV.

These included Pain at injection site (26.1 vs 13.7%), local Tenderness (22.2 vs 12.2%), Erythema (3.2 vs 1.7%), Induration (2.5 vs 1. 2 %) and Swelling (1.6 vs 0.6%) in addition to Myalgia (11.0 vs 7.9%) Chills (5.0 vs 4.0%), Fatigue (11.3% vs 10.5%) and Malaise (6.3% vs 5.8%).” - in “Electronic Medicines Compendium”, 2 July 2020.

Possible Cause of the Coronavirus Pandemic: Immune Interference Between The Vaccine Adjuvant Influenza and SARS-CoV-2

“Based on an epidemiological analysis of COVID-19 deaths in the Health Sector attended by the Hospital of Barbastro, Spain, and the study of the pharmacotherapeutic history of affected patients, it was found that the **most common drug to all the deceased** was Chiromas (Fluad).

This led to the hypothesis that the influenza vaccination of the 2019-2020 campaign could be associated with an increased risk of deaths by COVID-19 in people over 65 years of age, that is to say, to the suspicion of a possible iatrogenesis, **suspicion that was confirmed when accessing data from another sector**.

There is an apparent overconfidence in Vaccine safety far from the principle of prudence. A possible mechanism of action is proposed for the hypothesis of immunological interference with parenteral POLYSORBATE 80, and the degree of concordance of the expected data is compared to those observed, concluding that the hypothesis could be valid, and that is why it is decided to publish it.

Results: The first relevant data found is the fact that the 20 deceased in the Sector were all over 65 years. Of them, 17 had registered the administration of the Vaccine and its batch by Primary Care, and the other 3 does not appear.

Those vaccinated against influenza would represent by as much as at least 85% of the total number of deaths.

This data was higher than expected according to the vaccination rate in the Health Sector of Barbastro, which, according to the Aragón Weekly Epidemiological Bulletin, had been 63.1% in that age segment.

According to these results, influenza vaccination not only would not have improved the prognosis of older vaccinated with respect to COVID-19, but would have worsened it.

The inconsistency of the data on the effectiveness of influenza vaccination in preventing complications such as pneumonia, hospitalization, and general mortality in the elderly institutionalized and with comorbidities has already been shown by previous studies with a much higher number of cases (Michielsa 2011).

The data found led to the hypothesis that the influenza vaccination of the 2019-2020 campaign could be associated with an increased risk of death from COVID-19 in people over 65 years.

To test the hypothesis, a comparison of those 20 deaths / 100,000 inhabitants was sought with other environmental data, in an attempt to expand the sample. The deceased were analyzed in the other Sector of the province of Huesca, encountering certain difficulties in accessing the registry of vaccinations in the Electronic Health Record.

The data of a nursing home that had to date is accessed 11 August 2019 with 94 inmates, of which 25 have died from COVID-19, which reveals the finding of that more people have died in that nursing home with 94 inmates (25 deceased) than in our health sector of 100,000 (20 deaths), in a proportion 1,000 times higher.

1. **Of the 80 Vaccinated, 24 (30%) Died.**
2. **Of the 14 Not Vaccinated, 13 are still alive today, only 1 has died.**
3. **Therefore, the Death Rate in registered Vaccinates Quadruples that of non-vaccinated,** for an already important amount of 94 individuals.

We searched the bibliography on immunological adverse effects described for other vaccines of parenteral administration that also contain Polysorbate 80.

1. Pandemrix: Following Sweden's 2009-2010 influenza **Vaccination campaign, demonstrated an association of the use of the Pandemrix Vaccine with an increase in cases of Narcolepsy** (brain condition that involves a decreased ability to regulate sleep-wake cycles, that causes a person to suddenly fall asleep at inappropriate times), especially in those under 20 years of age who carry the HLA-DQB1*06:02 by multiplying the risk of suffering this disorder by 12.

> *"**Pandemrix Vaccine:** Research carried out in 2013 found an **association between the flu Vaccine**, Pandemrix, which was used during the swine flu epidemic of 2009-10, and **Narcolepsy in children."** - in "Narcolepsy", NHS, 13 May 2019.*

2. **Gardasil: Among the adverse effects detected for this Vaccine** against the Virus Human Papilloma in post-marketing, **are "Disorders of the system immunological: Hypersensitivity reactions including Anaphylactic (potentially life-threatening reaction to a trigger such as an allergy), Anaphylactoid reactions".**

3. Prevent: Among the adverse effects detected for this post-marketing pneumococcal vaccine, are: "Immune system disorders: Rare: Reaction of Hypersensitivity, including Facial Edema, Dyspnea, Bronchospasm "

The current state of Vaccine Pharmacovigilance in Spain was analyzed, with the following relevant findings:

1. **Flu Vaccines are Drugs whose composition changes every year, but strangely they don't have an additional black tracking triangle.**

2. **The influenza Vaccine is considered a prescription drug, but in the campaign of Vaccination, there is no medical prescription**, nor are individualized prescriptions issued per patient, nor are Vaccines dispensed in the pharmacy. The Vaccine is administered "per protocol".

3. Vaccines are often served on pallets from the pharmaceutical laboratory to the administration centers, without basic pharmaceutical controls or delivery notes or batches distributed.

4. The Pharmacovigilance Plan for Pandemic Vaccines of the AEMPS dated 14 October 2009, that is to say nothing less than prior to the date on which the association of the use of the influenza Vaccine Pandemrix with an increase in risk of Narcolepsy 4 to 9 times higher in children and adolescents Vaccinated, with regarding the unvaccinated.

The hypothesis would explain facts observed in the pandemic, such as the following:

1. Geographic differences in terms of COVID-19 cases worldwide, focusing on the northern hemisphere (Europe, United States, Mexico...), where the Vaccination was carried out influenza before winter, while in the southern hemisphere it was autumn.

2. Late onset of COVID-19 in Brazil, where the flu Vaccination campaign is started on 23 March 2020, and has been followed by an exponential increase in number of affected.

3. Geographical differences in cases of COVID-19 at European level, where there are Influenza Vaccination rates in people over 65 very low in European countries such as Estonia, which does not even reach 5%, compared to Spain, the United Kingdom, France or Italy, with rates of 50-60%. There are also differences in terms of access to Vaccinations. Thus, in Estonia, the flu Vaccine is paid.

4. Geographic and social differences at the national level, with higher rates in residences and areas rural areas, where the vaccination rate is higher than in residents of the own home and urban areas. Aragon would be an emblematic case of rural affectation and of residences, with a casuistry superior to the one that due to its low population density would correspond." - Juan F. Gastón Añaños, Pharmacy; Elisa Mª Sahún García, Pharmacy; Dr Ana Martínez Giménez, MD, Preventive Medicine, in "Possible Cause of the Coronavirus Pandemic: Immune interference between Polysorbate 80 in the Vaccine Adjuvant Influenza and SARS-CoV-2", Internal Clinical Memo, Hospital of Barbastro, Spain, June 2020.

> *"**Polysorbate 80** is an excipient that is used to stabilize aqueous formulations of medications for parenteral administration, and used as an emulsifier in the making of the popular antiarrhythmic amiodarone. **It is also used as an excipient in some European and Canadian influenza vaccines. Influenza vaccines contain 2.5 μg of polysorbate 80 per dose. Polysorbate 80 is found in many vaccines used in the United States.**" - in Wikipedia*

Mortality rate of Coronavirus per 100,000 people in Spain as of 23 July 2020

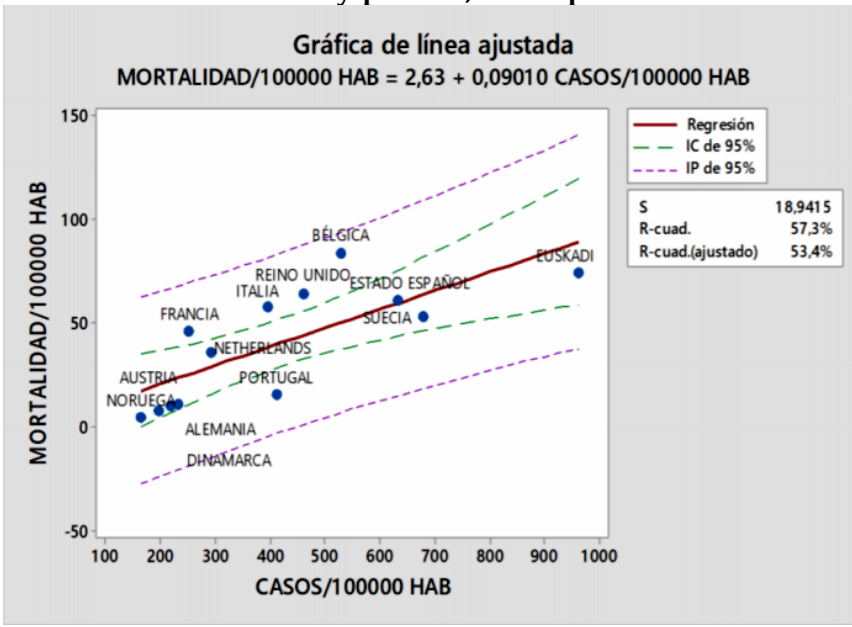
Region	2018-2019 >65 Years Vaccinated by Flu	Mortality per 100,000
La Mancha	58.80%	149
Madrid	57.30%	127
Castille and Leon	61.10%	117
La Rioja	64.60%	116
Navarre	59.80%	81
Catalonia	51.00%	74
Basque Country	58.00%	71
Aragon	54.20%	69
Extremadura	59.60%	49
Cantabria	51.60%	37
Asturias	57.00%	33
Valencia	52.10%	29
Galicia	58.60%	23
Balearic Islands	41.50%	20
Andalucia	49.00%	17
Sources: Secretaria General de Sanidad; Statista.		

Reflections on the Measures Adopted by the State and Basque Sanitary Administration

"The Lockdown

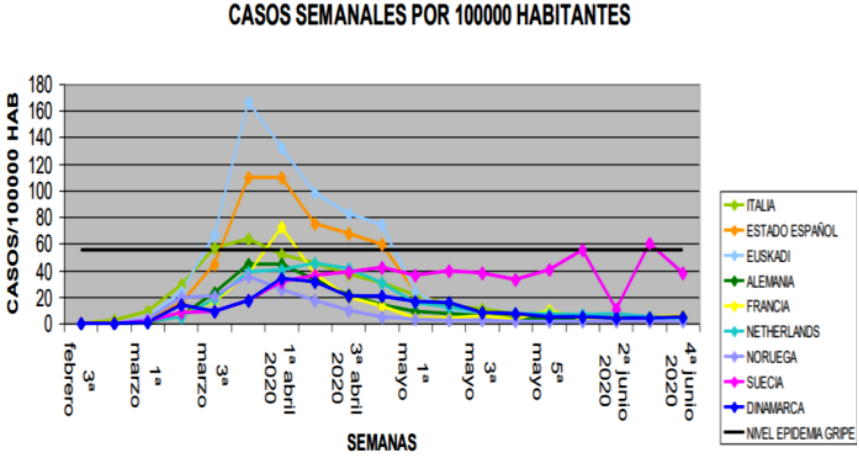
With the data collected from different countries, it is observed that the states with a stricter confinement and of a longer duration, such as Belgium, Spain, Basque Country (Euskadi) and the United Kingdom (Reino Unido), have the highest mortality rate per 100,000 inhabitants in Europe, compared to countries with more flexible confinement, shorter duration and even without confinement.

Mortality per 100,000 Population



With the data in the following graphs, it is observed that the countries with the highest number of cases are those that have had a more strict confinement, and with a longer duration compared to those with more flexible and much more flexible confinements with a shorter duration in time, and even with a country like Sweden that has not carried out any confinement.

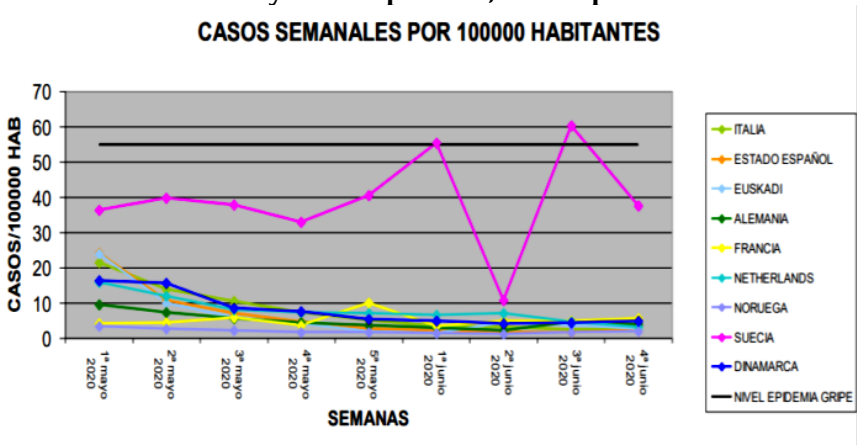
Weekly Cases per 100,000 Population



Light Green – Italy
Orange – Spanish State
Light Blue - Basque Country
Dark Green – Germany
Yellow – France
Blue – Netherlands
Grey – Norway
Pink – Sweden
Dark Blue – Denmark
Black - Flu Pandemic Level 55

This graphic shows how all the countries have been, since the first week of May, **well below the value that is considered an epidemic in influenza** (weekly cases per 100,000 inhabitants for an epidemic greater than 55), observing that even Sweden that has chosen through a totally different strategy, even if it presents values somewhat higher than the other countries, these data have been maintained throughout these 2 and a half months as if it were a seasonal flu.

Weekly Cases per 100,000 Population



Light Green – Italy
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Black - Flu Pandemic Level 55

The Five Uncertainties of the Covid-19 (Coronavirus) PCR Test

Uncertainties are generated by the PCR technique and especially the rapid tests currently used, and false positives:

1. As a first uncertainty, it is known that with this technique a positive does not mean that it is viable or not, that is, that it has the capacity to infect or not, since for this we would have to go to confirmation by means of cell cultures.

2. As a second uncertainty, it is not clear for sure if SARS-CoV-2 has been isolated correctly, the RNA virus can be confused with extracellular vesicles or exosomes that contain proteins and RNA, which can be confused with a virus having been it was necessary that this isolation had been adjusted to the postulates of Koch, which, according to the same WHO, did not come to pass. The only evidence that has been presented is nucleotide sequencing based on genomic libraries.

3. As a third uncertainty, the PCR tests make a sequencing of a genetic material that has to previously transform RNA to DNA and then read the nucleotide sequence and match what is supposed to belong to the virus, but the problem is that the PCR only analyzes about 200 nucleotides while the genomic sequence of the virus has about 30,000, therefore the fragment to compare is very small.

4. As a fourth uncertainty, SARS-CoV-2 shares 80% of its genome with SARS-CoV-1 and, therefore, this is the one that is detected and not 2, in addition to being able to coincide with other coronaviruses.

5. As a fifth uncertainty, the PCR test is complicated from the point of view that a small fragment is amplified millions of times, so that any fragment of RNA that could be in the blood or in a cell sample would be amplified, hence there could be many false positives, so it can be deduced that of all the positive cases that are detected at least 50% are false positives.

The empirical data of the Rt-PCR have many deficiencies, such as a test that specifically links SARS-CoV-2 with COVID-19, since where significant samples have been made, we find 80% asymptomatic and 17% of "mild symptomatic", that is, with nonspecific symptoms such as cough or low fever (**remember that coronaviruses are frequently present in the mucous membranes of people with colds or colds**).

It is also necessary to take into account the evolution of the percentage of positives with respect to the total tests carried out, **which did not follow a pandemic progression during the crisis months in Europe (March to May).**

Taking into account all these uncertainties of the test, and knowing that biologists are the professionals who really control the PCR technique, it must be said that at the time of de-escalation, a technique with so many false positives cannot be used as the main tool to take measurements socio-political type with direct influence on the country's economy.

Asymptomatics

The use of the term asymptomatic with that of presymptomatic can be misleading.

The first is in total normal health, so it does not have the disease and, therefore, it is not contagious.

The second has some typical symptoms of itching in the nose or throat, still without the symptoms of coughing or sneezing, as with the flu, which in a short time would become symptomatic.

That is, the first is not contagious, the second is very difficult to infect, conditions of personal relationship would have to be given rather intimately, and the third is difficult to infect outside and easier indoors with conditions of little air renewal.

In a study of the infectivity of asymptomatic carriers of SARS-CoV-2 it was concluded that the spread of asymptomatic patients was not a cause for concern, nor was the infectivity of SARS-CoV-2 demonstrated by asymptomatic in a contact test with 455 subjects with the result that none of them was infected.

Likewise, the WHO confirms that it is rare for an asymptomatic person to transmit the virus to a secondary person.

Masks

What is important to know is that to become infected you need a viral load on the one hand and, on the other, exposure time and these two factors in the open air are highly unlikely.

In studies carried out by the WHO on the prevention of the spread of the flu virus through masks, they concluded that the use of these did not prevent the spread of the influenza virus (flu), and therefore at no time during the flu season has required the population to use it.

Therefore, since there have been no studies on the prevention of masks with respect to SARS-CoV-2, the only scientifically valid for its viral similarity is what was investigated at the time for influenza where no evidence was found that contagion with masks was prevented, as confirmed by the WHO on its website.

The masks also present some problems, such as self-contamination by touching and reusing the already contaminated mask, a slight decrease in oxygen since when we breathe in the air we breathe it has 21% oxygen and with the mask there is a loss of close to 2%, that is, we start breathing in inspiration with a small deficit, as there is a lower introduction of oxygen in inspiration (slight hypoxia), but the main problem in my view is with expiration since when we expire we expel about 4% of CO2, and with the mask part of we reintroduce this CO2 into the lungs, since it must also be taken into account that the density of CO2 is greater than that of O2, so it will escape more easily.

If a person breathing under normal conditions takes about 15 inspirations-expirations per minute, people who have to use the mask for several hours in a row would be introducing amounts of CO2 and hence the possible headaches that can suffer especially those people who are forced by work situation to wear them for many hours.

This also explains why people with respiratory problems are exempt from using it.

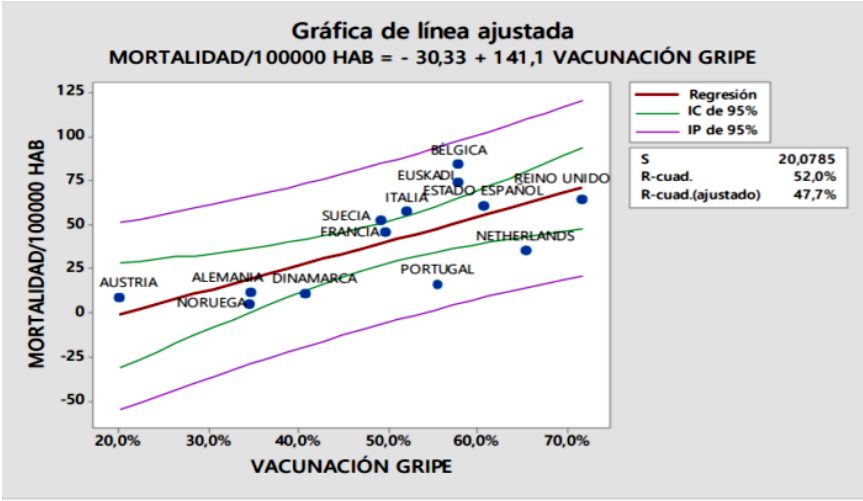
Likewise, and demonstrated in studies with microbiological cultures of the masks, bacterial growths

(staphylococci, streptococci, gram, bacilli, fungi) have been observed, so it cannot be ruled out that the masks could cause dermatitis and fungal problems.

It should also be noted that the use of the mask generates fear and suspicion that we are all walking biological weapons, which entails a significant socialization problem.

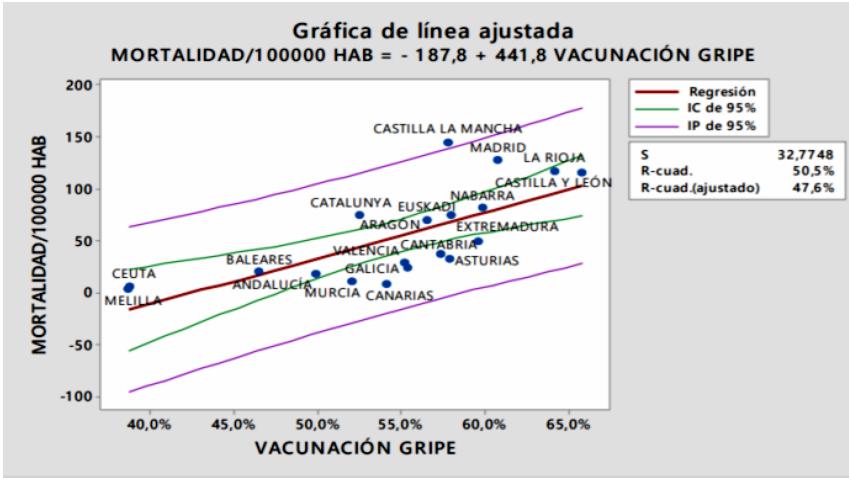
Influenza Vaccination and Mortality Rate

Conducting a statistical study regarding influenza vaccination and mortality rate per 100,000 inhabitants, it is seen that the states where the highest vaccination of the flu in people over 65, such as Belgium, Spain and the United Kingdom, are the most mortality rate per 100,000 inhabitants of Europe.



Flu Vaccination % per countries in the EU and the amount of deaths in relationship to the percentage of Vaccination.

If we carry out this statistical study with the Autonomous Communities of the Spanish State, we appreciate practically the same as in regards to the European countries.



Percentage of Flu Vaccination with percentage of deaths

In principle, it must be taken into account that the coronavirus has always been part, in a small proportion, of the strains that make up the influenza virus, and on the other hand, this year's vaccine has included the influenza Strain A.

When analyzing the previous graphs, we see that the highest number of infections has occurred in 2 main sectors, the Elderly, and Health Professionals.

Being even clearer with the deceased, since the majority belong to the populations at risk and the elderly age 64, coinciding precisely with the spectrum of the population that has been vaccinated against the flu, health professionals, the elderly and especially people who are in residences.

If we see the graphs of mortality versus% vaccination> 65 years, we observe that the countries with the highest% of influenza vaccination> 65 years, such as the United Kingdom, the Spanish State, Basque Country and Belgium, with the% vaccination between 60% and 70%. They are those with the highest mortality rate per 100,000 inhabitants, between 60 and 80 per 100,000 inhabitants, the exception being the netherlands, which, with high percentages of vaccination, have medium-low mortality levels.

The explanation that could be given is that the Netherlands is one of the few countries that has legislated and permitted euthanasia, so it is assumed that the average age of the population will be lower and will be closer to what is considered a pyramid of population.

On the other hand, it is clearly appreciated that countries such as Austria, Norway, Germany and Denmark, whose vaccination levels for ages> 65 years are of the order of 20% to 40%, have mortality rates between 5 and 10 per 100,000 inhabitants.

Taking into account the observation of these graphs, it can be seen that in Countries or Autonomous Communities where there is a higher percentage of Vaccinated for influenza in the age range> 65 years, there has been a higher mortality rate per 100,000 inhabitants, and that the composition of this year's flu Vaccine had the A (H1N1), A (H3N2) and B strains, which is why it could be deduced that this year's flu Vaccine has not been highly effective and even it has been shown to be counterproductive, being able to have caused a mutagenic problem in the Vaccine itself or due to some chemical interference in the Vaccine itself.

In general, the flu Vaccine, with its low efficacy, is not a definitive remedy to avoid complications and even death.

Relationship of COVID-19 to Flu

It must be borne in mind that if a Pandemic has been declared by the WHO, perhaps every year it should have been declared with the Flu.

Since in the world there are between **6,000,000 and 8,000,000 cases of influenza infections**, and **nearly 650,000 deaths, that is 9.3% fatality, and COVID-19, to date, 17,900,000 have been counted, with 680,000 deaths, that is 3.8% fatality, therefore lower than the Flu.**

If we focus on those who died from COVID-19, in the case of the Basque Country, to date **1,626 deaths (August 2020)** have been counted, most of them with **resistant Pneumonia**, while **those who died from these resistant Pneumonia in the Flu Season amount to 3,005 deaths (2018 data**). - Dr Jon

Ander Etxebarria Garate, Dean of the Official College of Biologists of the Basque Country, in "Reflections of the Dean of the College of Biologists of the Basque Country on the Measures Adopted in the Crisis of COVID-19", 5 August 2020.

The Lockdown Farce

*"Coronavirus: **Lifting lockdowns could see virus 'reignite', WHO warns."** - in "BBC", 22 April 2020.*

"WHO Director-General Tedros Adhanom Ghebreyesus said countries needed to ensure they had adequate measures to control the spread of the COVID-19 respiratory disease like tracking systems and quarantine provision.

WHO epidemiologist Maria Van Kerkhove supported his concerns.

"If lockdown measures are lifted too quickly, the virus can take off", Van Kerkhove told the briefing." - in "WHO warns against rushed end to coronavirus lockdowns", Reuters, 6 May 2020.

*"Reflecting on events since the WHO declared a global health emergency 6 months ago – when fewer than 8,000 cases and 170 deaths had been reported – she added that **the economic, health and social costs of lockdown have been "massive".** "Lockdowns are not something that WHO recommended." - Dr Maria Van Kerkhove, who helps lead the WHO's pandemic response." - in "Telegraph", 1 August 2020.*

The World Health Organization Director-General Tedros Adhanom on Friday said that lockdowns were not lasting solutions to the COVID-9 pandemic.

"Lockdowns are not a long-term solution for any country." - "Lockdowns not lasting solutions to COVID-19 pandemic: WHO chief", CGTN, 21 August 2020.

"The issue with lung cancer is that the median survival at diagnosis is just under 6 months, so, over the lockdown period we will have lost an awful lot of people". - Professor David Baldwin, MD, FRCP chairman of the Clinical Expert Group (CEG) on Lung Cancer, Consultant Respiratory Physician Nottingham University Hospitals, Honorary Professor of Medicine, in "Early diagnosis of lung cancer in the time of covid-19", Medical Updarte Online, 16 September 2020.

World Economic Forum

"In July 2020, Schwab (WEF) published a 195-page book, **"COVID-19: The Great Reset," in which he challenged industry leaders and decision makers to "make good use of the pandemic by not letting the crisis go to waste."**

TIME magazine (owner Marc Benioff is a World Economic Forum WEF board member) recently partnered with the WEF to cover The Great Reset and to provide a "look at how the **COVID-19 pandemic provides a unique opportunity to transform the way we live."**

The Great Reset is meant to be all-encompassing.

Its partner organizations include the biggest players in:

1. Data Collection,
2. Telecommunications,
3. Weapons Manufacturing,
4. Finance,
5. Pharmaceuticals,
6. Biotechnology, and the
7. Food Industry.

The WEF's plans for the "reset" of food and agriculture include projects and strategic partnerships that favour genetically modified organisms, lab-made proteins and pharmaceuticals and industrial chemicals as sustainable solutions to food and health issues.

WEF has promoted and partnered with an organization called EAT Forum (eatforum.org).

EAT Forum describes itself as a "Davos for food" that plans to "add value to business and industry" and "set the political agenda."

EAT was co-founded by Wellcome Trust, an organization established with funds from GlaxoSmithKline and which still has strategic partnerships with the drugmaker.

EAT network interacts closely with some of the biggest imitation meat companies, including Impossible Foods Inc. and other biotech companies, which aim to replace wholesome nutritious foods with genetically modified lab creations.

Impossible Foods Inc. was initially co-funded by Google, Jeff Bezos and Bill Gates." - in "World Economic Forum's 'Great Reset' Plan for Big Food Benefits Industry, Not People", The Defender, 9 November 2020.

EAT Forum

"Board of Trustees

EAT is governed and managed by a board of trustees. Each core partner is entitled to appoint 2 members of the board.

Additionally, there are 3 independent members of the board, selected by the core partners.

The board meets formally 4 times each year, as well as between the regular meetings as needed to conduct the organization's business.

Dr Gunhild A. Stordalen
Founder & Executive Chair EAT

Professor Johan Rockström
Director Potsdam Institute for Climate Impact Research (PIK)

Dr Lee Howell
Head of Global Programming, **Member of the Managing Board World Economic Forum**

Dr Modi Mwatsama
Senior Science Lead for Food Systems, Nutrition and **Health Wellcome Trust**

Advisory Board

EAT's advisory board is made up of representatives from **academic partner institutions and world-renowned experts from the food service industry, politics, international development, finance, civil society and media.**

The breadth of the group illustrates EAT's vision of cross-sectoral collaboration. It provides strategic advice to EAT's management on the organization's research projects, activities and long-term strategy.

This includes defining research priorities, ensuring the scientific quality of the food forums, advising on new partnerships and increasing public awareness.

It is chaired by Professor Johan Rockström and meets formally twice a year.

H.E Mariam Bint Mohammed Almheiri
Minister of State for Food Security UAE

Michiel Bakker
Director of Global Workplace Services Programs Google

Dr. Kirsten Dunlop
Chief Executive Officer EIT Climate-KIC

Richard Horton
Editor in Chief The Lancet

Jennifer Morgan
Executive Director Greenpeace International

Professor Johan Rockström
Director Potsdam Institute for **Climate Impact** Research (PIK)

Giuseppe Sala
Mayor of Milan, Chair of the Milan Urban Food Policy Pact

Dr Juergen Voegele
Vice President for Sustainable Development World Bank

Professor Walter Willett
Professor of Epidemiology and Nutrition Harvard T.H. Chan School of Public Health

Mark Wilson
Independent Director BlackRock Inc." - in "Eat Forum", 16 November 2020.

> ***"BlackRock is the world's largest asset manager, with $7.4 Trillion in assets under management*** *as of end-Q4 2019. BlackRock operates globally with 70 offices in 30 countries and clients in 100 countries. Due to its power, and the sheer size and scope of its financial assets and activities,* ***BlackRock has been called the world's largest shadow bank. Along with Vanguard and State Street, BlackRock is considered one of the Big Three index funds that dominate corporate America."*** *- in Wikipedia*

Bill Gates Revealed as Largest Private Farmland Owner in US

"Microsoft founder Bill Gates and his wife have amassed the largest portfolio of private farmland in the US, according to The Land Report.

The Gates' own an estimated 242,000 acres of farmland as part of a broader 269,000 acre land portfolio across 19 states.

Bill & Melinda Gates Foundation donated almost $20 million to the International Rice Research Institute between 2007 and 2010, in part to support its development of fortified rice varieties.

The Gates have also invested in agrifoodtech startups, either through their private foundation or via other investment vehicles, including crop protection companies

AgBiome and Enko Chem, dairy data platform Stellapps, and 'lab-grown' meat maker Memphis Meats.

Cascade Investment is a shareholder in plant-based protein companies Beyond Meat and Impossible Foods." - in "Bill & Melinda Gates revealed as largest private farmland owners in US", 14 January 2021.

The Portfolio includes Farmland in:	
Arkansas 47,927 acre	Michigan 2,167 acre
Arizona 25,750 acre	Mississippi 16,963 acre
California 4,905 acre	Nebraska 20,588 acre
Colorado 2,270 acre	New Mexico 1 acre
Florida 14,828 acre	North Carolina 874 acre
Idaho 9,233 acre	Ohio 8,915 acre
Illinois 17,940 acre	Washington 16,097 acre
Iowa 522 acre	Wisconsin 1,188 acre
Louisiana 69,071 acres	Wyoming 975 acre

"When Ebbers owned this Louisiana farm, it was known as Angelina Plantation. And its headquarters was in — you guessed it — Monterey, Louisiana. That was the missing piece of the puzzle, I had been searching for as I read the Tri-City Herald story. In a former life, Angelina Agriculture, the purchaser that paid $171 million for 100 Circles in 2018, was, in fact, Bernie Ebbers's Angelina Plantation. The day before he went to prison, Ebbers sold Angelina for $32 million. The farm was subsequently sold to AgCoA, ***which was acquired by the Canada Pension Plan Investment Board. In 2017, Angelina Plantation changed hands one more time and became one of the principal farmland assets in the Gateses' Cascade Investment's portfolio."*** *- in* ***"Bill Gates: America's Top Farmland Owner",*** *The Land Report, 11 January 2021.*

The Destructive Impact of Billionaires

"Bill Gates is actually continuing the work of Monsanto. When Bill Gates pours money into Africa for "feeding the poor" in Africa and preventing famine, what is he doing?

He is pushing the failed Green Revolution, he is pushing chemicals, he is pushing GMOs, he is pushing patents.

We stopped Mark Zuckerberg for trying to get into India for agriculture, was a big mobilization of people.

I grow up in India where democracy works, and therefore **when I see the imposition of digital transactions, and criminalizing cash transactions of cash between poor people I basically see this as a dictatorship. I call it, the digital dictatorship.**

Now that we have the data, that is showing that native seeds, have more nutrition, produce more food, they have no costs, because you don't need to use chemicals, and that local biodiversity is the way to feeding the world.

In spite of all that evidence, Bill Gates is still imposing and forcing GMO's, which is a failed enterprise.

And he is not [just] imposing GMO's, he is taking and imposing what has been rejected by governments.

My government throw the genetically modified (GM) aubergine from Monsanto out of India, Bill Gates resurrects it in Bangladesh.

We rejected the golden rice to solve the problem of blindness, he finances it to continue through the Philippines.

So, he is taking all the failed projects with the wrong thinking that life is like a word program, that it can be cut, copy and pasted. When it is an amazing complexity of self organization, and scientists call it Autopoiesis, self organization writing, your own poetry, that is what life does.

He is absolutely ignoring all of this new knowledge, that new science is giving us, and imposing a failed technology with a huge cost to the planet, only so that there can be monopolies, and farmers are not free to have their seeds." - Vandana Shiva, in "Protecting the Planet, The Destructive Impact of Billionaires", FRANCE 24, 23 October 2019.

Breastfeeding Isn't Natural and It Makes Moms Anti-vaxxers

In one of Medical Trade more extraordinary statements, **the American Academy of Pediatrics (AAP), is telling health professionals to stop describing breastfeeding as "Natural"; it could lead parents down the path of alternatives to medicine, home-schooling and becoming anti-vaccination.**

The label gives the impression that breastfeeding is healthier and better, say Jessica Martucci and Anne Barnhill, of the Medical Ethics Department at **the University of Pennsylvanian, who have launched a campaign to stop the positive use of the word "natural".**

"Studies have shown that anti-vaccination sentiments tends to overlap with reliance on and interest in complementary and alternative medicine, scepticism of institutional authority and interest in health knowledge, autonomy and healthy living practices.

Whatever the ethics of appealing to the natural in breastfeeding promotion, it raises practical concerns.

The "natural" option does not align consistently with public health goals.

If doing what is "natural" is "best" in the case of breastfeeding, how can we expect mothers to ignore that powerful and deeply persuasive world-view when making choices about vaccination?" - in "Unintended Consequences of Invoking the "Natural" in Breastfeeding Promotion", Pediatrics, March 2016.

"American Academy of Pediatrics

Date: October 2011,

Purpose: to organize and facilitate immunization education and advocacy efforts among pediatricians in the U.S. and throughout the world to advance the eradication of polio and other **Vaccine-preventable diseases.**

Amount: US $1,419,200

Topic: Global Health and Development Public Awareness and Analysis" - in "How We Work Grant", **Bill & Melinda Gates Foundation, 2011.**

"**American Academy of Pediatrics**

Date: October 2014

Purpose: **train and support birth attendants** in areas of high neonatal mortality to implement evidence based and low-cost interventions

Amount: US $1,000,000

Topic: Maternal, Neonatal and Child Health

Regions Served: GLOBAL|AFRICA|ASIA" - in "How We Work Grant", **Bill & Melinda Gates Foundation, 2014.**

"The American Academy of Pediatrics has hired Dr Janna Patterson, MD, to lead its global health and life support initiatives. ***Dr Patterson comes to the Academy from the Bill & Melinda Gates Foundation.*** *As senior vice president of Global Child Health and Life Support, Dr Patterson will be responsible for advancing AAP efforts to improve global pediatric care and critical educational products and programs." - in "AAP names senior vice president of Global Child Health and Life Support", 11 January 2018.*

"Bill Gates backs artificial breast milk *to nurture green living. Has poured millions of dollars into a start-up that hopes to develop artificial breast milk." - in "The Times", 19 June 2020.*

"A new and better breast milk alternative has arrived, and it claims to be helpful for the environment as well. The US firm, BIOMILQ, is artificially producing human breast milk from cultured human mammary epithelial cells to be commercially available to consumers. ***The start-up company has received US $3.5 Million from an investment fund that is co-founded by Bill Gates, Jeff Bezos, Mark Zuckerberg."*** *- in "Bill Gates, Zuckerberg, Other Billionaires Invest in Environmentally-Friendly Artificial Breast Milk Cultured From Human Mammary", The Science Times, 20 June 2020.*

MHRA Awarded £1.3 Million For Collaboration with Gates Foundation and the World Health Organisation

"We're delighted to be working with the WHO, and the Gates Foundation on this very important initiative, **which will see the launch of some new medicines to treat some serious public health threats.**

The launch of these new medicines requires robust regulatory systems and processes to be in place, and we're delighted to be able to help with the development and deployment of these new systems." - **Dr Ian Hudson, MD, Chief Executive Officer at MHRA, 7 December 2017.**

The Medicines and Healthcare products Regulatory Agency (MHRA) is an executive agency of the Department of Health and Social Care in the United Kingdom.

Susan Michie

"Susan Fiona Dorinthea Michie is a British psychologist and political activist. She is professor of health psychology at University College London.

In 1993, Michie moved to the Psychology and Genetics Research Group, King's College London where she conducted research into the process and outcome of genetic counselling, public and professional attitudes towards genetic testing, informed choice and decision making about prenatal screening and genetic testing, and the psychological impact of predictive genetic testing.

In 2002, Michie joined the Psychology Department of University College London (UCL), where she is Professor of Health Psychology.

She is director of UCL's Centre for Behaviour Change and of its Health Psychology Research Group.

Her current research includes developing methodologies for designing and evaluating theory-based interventions to

change behaviour, and advancing scientific knowledge about, and applications of, behaviour change interventions.

She leads the Human Behaviour-Change Project funded by the **Wellcome Trust**.

In 2020, Michie is a member of the Covid-19 Behavioural Science Advisory Group and the Scientific Pandemic Influenza Group on Behaviours, a sub-group of the **Government's Scientific Advisory Group for Emergencies (SAGE)**.

Also sits on the **Independent SAGE committee**.

And frequently contributes to national news media during the Covid-19 pandemic as an expert in behaviour change. And is a member of the **Communist Party of Britain.**" - in Wikipedia

Susan Hopkins

"Dr Susan Hopkins, Faculty of Medicine, Department of Infectious Disease Honorary Clinical Senior Lecturer.

Susan is the Public Health England theme lead for the Innovations in Behaviour Change theme of the HPRU in HCAI and AMR at Imperial College.

She is a Healthcare Epidemiologist Consultant in Infectious Diseases and Microbiology at Public Health England.

She is Chair of the Overview Committee of the English Surveillance Programme for Antimicrobial Utilisation and Resistance (ESPAUR).

She is a member of many national expert groups and Chairs the Royal College of Physicians working group on HCAI and sits on the PHE's HCAI & AMR Programme Board and on the MHRA Expert Advisory Group on Anti-Infectives". - in "Imperial College London.

"Open Data Institute (ODI) are leading a pharma sector initiative which aims to get global pharma and public antibiotic surveillance data openly published.

Wellcome Trust are funding and jointly leading this project.

To contact all the major pharma organisations, documenting all sources of human antibiotic surveillance data and building a register and metadata of these data sources.

Lists of contacts and organisations will be provided.

An ODI data scientist would help build the metadata set to be collected.

Dr Susan Hopkins Clinical Director of Infection, Royal Free London NHS Foundation Trust Lead Healthcare Epidemiologist, AMR Programme, Public Health England." - in "Commonwealth Pharmacists Association", 2017.

Susan Desmond-Hellmann Elected to Pfizer's Board of Directors

"Pfizer announced the election of Dr. Susan Desmond-Hellmann to its Board of Directors, effective immediately.

Dr. Desmond-Hellmann, was also appointed to the Governance & Sustainability Committee and the Science and Technology Committee of Pfizer's Board.

Dr. Desmond-Hellmann served as **Chief Executive Officer of the Bill & Melinda Gates Foundation from 2014 until 2020**, where she oversaw the creation of the Gates Medical Research Institute, as well as the launch of the Economic Mobility and Opportunity investment strategy in the U.S. She remains a Senior Advisor and Board member of the Gates Medical Research Institute.

From 1995 through 2009, Dr. Desmond-Hellmann was employed at Genentech.

Prior to joining Genentech, Dr. Desmond-Hellmann was Associate Director, Clinical Cancer Research at Bristol-Myers Squibb Pharmaceutical Research Institute.

She served as a Director of Facebook Inc. from 2013 to 2019 and Procter & Gamble from 2010 to 2017." - in "Pfizer", 2 April 2020.

Former Gates Foundation Counsellor at Pfizer

"The former Gates Foundation counsellor joined Pfizer during the pandemic.

Once there, he pulled the strings so that the American will look at BioNTech.

Pfizer and BioNTech announced their candidate vaccine against the coronavirus.

If we focus on the first vaccine, we will be surprised that there is a world known person behind its manufacture. This guy is Bill Gates.

The foundation is behind the alliance of the American pharmaceutical company (Pfizer) and the German biotechnology company (BioNTech)." - Paula Naveira, in "Bill Gates's influence on the Pfizer vaccine",AS, 17 November 2020.

"Desmond-Hellmann served as an associate adjunct professor of epidemiology and biostatistics At UCSF.

She joined the UCSF medical faculty at the time of the HIV/AIDS epidemic in San Francisco, and therefore worked on Kaposi's sarcoma.

Beginning in 1989 both she and her husband, an infectious disease doctor, spent two years as visiting faculty at the **Uganda Cancer Institute**, studying and treating patients with **infectious diseases** and Kaposi's sarcoma in a project **funded by the Rockefeller Foundation**.

Returning to clinical research, Desmond-Hellmann became associate director of clinical cancer research at **Bristol-Myers Squibb** Pharmaceutical Research Institute.

While there, she was the project team leader for Taxol.

In 1995 she joined **Genentech** as a clinical scientist; she was named chief medical officer the following year, and in 1999 became executive vice president of development and product operations.

From 2005 to 2008, Desmond-Hellmann served a 3 year term as a member of the **American Association for Cancer Research** board of directors, and from 2001 to 2009, she

served on the executive committee of the board of directors of the Biotechnology Industry Organization.

She served on the corporate board of Affymetrix from 2004 to 2009 and on the board of Procter & Gamble in 2012–13, and in 2013 **was appointed to the board of Facebook** where she served until October 2019.

In June 2010, one day after being questioned by The New York Times, Desmond-Hellmann sold her stock in the Altria Group, which owns Phillip Morris USA and other tobacco companies.

In January 2012 Desmond-Hellmann proposed to change the relationship between UCSF, a health sciences university, and the University of California as a whole.

She proposed creating partnerships between UCSF and private pharmaceutical corporations and other sources of funding, in order to increase its revenues and solve its projected financial difficulties.

In 2011, Desmond-Hellmann co-chaired a National Academy of Sciences committee that recommended creating a Google Maps-like data network aimed at developing more diagnostics and treatments tailored to individual patients — a concept known as "precision medicine."

The so-called "knowledge network" would integrate the wealth of data emerging on the molecular basis of disease with information on environmental factors and patients' electronic medical records and would allow scientists to share emerging research findings faster, thereby accelerating the development of tailored treatments.

On December 17, 2013, **The Bill & Melinda Gates Foundation** announced that it had selected Desmond-Hellmann as its next chief executive officer." - in Wikipedia

£18 Billion "Cash for Cronies" Scandal

"A review by Britain's spending watchdog **the National Audit Office (NAO) of 8,600 contracts has revealed that officials had signed agreements for hundreds of thousands of facemasks which turned out to be unusable** – wasting hundreds of millions of pounds.

As coronavirus swept across Britain, a £12.3 Billion "Wild West" opportunity emerged for any firms able to provide the NHS with protective equipment.

The NAO said it will launch an urgent investigation into **one extraordinary deal for surgical gloves and gowns with a Florida-based jewellery designer where a Spanish businessman who served as a middleman was paid an astonishing £21 Million in UK taxpayers cash."** - in "Daily Mail", 18 November 2020.

Canadian Government Won't say Who Got $240 Billion of Dollars in Aid

"CBC News investigation examining the unprecedented $240 Billion the federal government handed out during the first 8 months of the pandemic.

The CBC News analysis has tracked $105.66 Billion in federal payments to individuals; $118.37 Billion that has gone to businesses, non-profits and charitable organizations; and a further $16.18 Billion in transfers to provinces, territories, municipalities and government agencies.

The scale of the federal government intervention is unmatched in Canadian history.

And since the pandemic began, the Receiver General of Canada has issued 10,358,070 cheques and 78,390,950 direct deposit payments.

But in most cases, the federal government refuses to provide details that may serve to identify who has received these funds - even when it's a business.

"I hope it's not deliberate, when we go out and tell people we can't follow the money, the trust is broken." - Kevin Page." - in "Ottawa has spent $240B fighting COVID-19 in just 8 months. A CBC investigation follows the money", CBC,

> *"**Pfizer** has been promised $1.95 Billion to manufacture 100 million doses of its vaccine, **Moderna** has received the same to develop, test and manufacture an equal number of doses. **Johnson & Johnson**, and teams from **AstraZeneca** and **Oxford University** and **Sanofi** and **GlaxoSmithKline**, also **have received more than $1 Billion each from U.S. taxpayers for their candidate vaccines.**" - in "USA Today", 30 November 2020.*

Americans Need to be Prepared For the Possibility that they Get Unwell After Coronavirus Vaccine

> ***"Volunteers in vaccine trials have reported they frequently feel flu-like effects after getting vaccinated."** - in "No walk in the park': CDC says some may get flu-like side effects from COVID-19 vaccine", CNNWire, 24 November 2020.*

Lessons of the Influenza Epidemic Epidemiology and Clinical Aspects

"The maximum number of deaths occurred in the week ending 9 November. An examination of individual towns suggests that **the maxima occurred earlier in the seaports**.

Dr Harold Whittingham and Dr Carrie Sims, for instance, in our issue of 28 December 1918, drew attention to the clinical differences of the summer and autumn outbreaks, and inferred that the causal organisms must have differed.

The observation is, of course, a very familiar one in the history of epidemic diseases, and has been made with especial frequency relatively to scarlet fever; it would appear to be consonant with our experience of scarlet fever to infer that the variation is not so much of the causal organism as of secondary invaders responsible for sequelae of the primary disease.

Dr Whittingham and Dr Sims also refer to **the "distinct tendency when an epidemic disease is raging to assign all maladies to the one common origin".**" - in "The Lancet", 11 January 1919.

> ***"There are in truth varied constitutions of the years, not dependent upon heat or cold, dryness or moisture, but rather upon some hidden and inexplicable change in the very bowels of the earth, whence the air is contaminated by such effluviae; which predispose and determine towards this or that disease the bodies of mankind, so long as the dominion of the particular constitution endures, which constitution, its term having run, yields and gives place to another. Each of these general constitutions is characterised by a special fever peculiar to itself and not otherwise seen; such fevers we term stationary fevers."*** *- Sydenham in "Observationum Medicarum, lib. i., cap. 2, par. 5.*

Epidemic Encephalo-Myelitis and Influenza

"It seems worth while, at the risk of being wearisome, to draw attention to the increasing volume of testimony that points to the essential unity of epidemic encephalomyelitis (in the epidemiological sense at least) with epidemic influenza.

In this connexion the recent paper by Dr Smith Jeliffe, and the remarks of Dr Beates as well as the observations of Sir Thomas Horder concerning the present prevalence of poliomyelitis, are of very great importance.

Professor Chartier has discussed, with delicate irony, the claims of "encephalitis lethargica" to be considered an autonomous affection, and hints, not obscurely, that it is really "a symptomatic variety of a general infection such as influenza." - La Presse Medicale, 23 December 1918.

In a paper read by me before the Section (of the Royal Society of Medicine) for the Study of the History of Medicine, I gave many historical records of epidemics of encephalitis, encephalo-myelitis, and poliomyelitis, definitely associated with epidemics of influenza.

But though Brorstrom in 1910, first showed the relation between poliomyelitis and influenza it is Dr Hamer who, above all others, has insisted on the importance of recognising the epidemiological association between these variousepidemic prevalences generally.

As Lombard, of Geneva, wrote many years ago:

> ***"The flu is often preceded; by an eminently nervous constitution, the main characteristics of which are to cause trouble in the functions of the brain and the encephalic nerves." - Gaz. Med., 1833, 729, and 1837, 214.***

In 1837, too, the "apoplectic" forms of encephalitis on which Dr Farquhar Buzzard has justly laid so much stress were observed by Récamier and others, while Gintrac, of Bordeaux, described in the clearest manner "epidemic stupor" in children; all this occurring, in Malcorps words, amongst the "nerve prodromes" of the epidemic influenza of that year. Surely then, as Chartier says, if "encephalitis lethargica" is to take place as an autonomous affection, "it would be important to clearly define the limits and the differential characteristics of this disease." - Dr F. G. Crookshank, MD in "The Lancet", 11 January 1919.

A Case of Aspirin Poisonings

"In view of the promiscuous way in which aspirin, often self prescribed, is taken by the general public, the following case is of considerable interest to the profession.

Patient, sergeant, USA, aged 24, was admitted to the Thetford Military Hospital on 25 Oct. 1918, with the history of having been taken ill 2 days previously with influenza.

He was a powerfully built man and gave no history of previous gastric or intestinal trouble.

He stated that he had been taking aspirin capsules of his own in addition to 18 5-gr. tablets given to him by the medical orderly. Instead of keeping to the prescribed dose, he had taken them all, together with a number of capsules in the course of 6 hours. He did this in order to get fit quickly, as he was under instructions for France.

On admission patient was markedly ansemic, temperature 101.4 F., pulse 120. During the day he vomited undigested milk, with no trace of blood.

On 26 Oct. the anaemia was more profound.

Pulse 150-weak and irregular.

The vomiting continued at intervals.

On the following morning, at 5 AM, a large quantity of blood was passed by the bowel and he rapidly became unconscious. No thought of an exploratory laparotomy could be entertained. He died a few hours later.

Post-mortem. - There was no peritonitis, and no free fluid in the abdominal cavity. The last 5 feet of the ileum was acutely congested, and the caecum and colon were loaded with blood clots.

The line of demarcation between healthy and congested bowel was very definite.

On opening the small intestine it was found to be uniformly inflamed. The mucous coat had apparently disappeared, leaving the submucous coat and blood-vessels exposed and eroded.

Bleeding from this large area had evidently been the cause of death.

The other organs were in a healthy condition.

Remarks: Aceto-salicylic acid (acetylsalicylic acid - aspirin) is known to pass unchanged through the stomach and upper portion of the small intestine, and is then converted into free salicylic acid. It is probable that this man took nearly 200 gr. of the drug into an empty alimentary canal, and that the salicylic acid formed was responsible for the removal of the whole lining membrane of the bowel in the area described. The mucous membrane of the caecum and colon appeared to be unaffected. An inquest was held and a verdict of **"Death by misadventure through an overdose of aspirin"** was returned." - Dr F. W. Lewis, MRCS, LRCP, "The Lancet", 11 January 1919.

Profiteering From the Pandemic

"**The COVID-19 pandemic is being exacerbated by campaigns against public health measures, such as face masks, social distancing, and lockdowns.** There are significant COVID-19 scam websites selling fake cures and preventative measures.

Other websites simply keep COVID disinformation in circulation.

Major social media platforms often flag such content for moderation or remove it altogether from their platforms.

Using a curated list of websites, we examine how these firms continue to enable contentious content through the back-end.

It is important for Facebook, Instagram, and YouTube to take down problematic content." - in "Profiting from the Pandemic Moderating COVID-19 Lockdown Protest, Scam, and Health Disinformation Websites", The Project on Computational Propaganda, Oxford University November 2020.

"The disclosure features novel lipids and compositions involving the same. ***Nanoparticle*** *compositions include a novel lipid as well as additional lipids such as phospholipids, structural lipids, and PEG lipids.*
Nanoparticle *compositions further including therapeutic and/or prophylactics such as RNA are useful in the delivery of therapeutic and/or prophylactics to* ***mammalian cells or organs*** *to, for example, regulate polypeptide , protein , or gene expression." - Moderna, United States Patent No. US 9,868,692 B2, 16 January 2018.*

1. Please read the ***Nanoparticle*** *chapter.*
2. ***Mammalian Cells or Organs****, please search in the press for fertility side effects of Covid19 Vaccine.*

Hypocrisy

"They pledged to donate rights to their Covid vaccine. A few weeks later, Oxford - urged on by the Bill & Melinda Gates Foundation - reversed course. It signed an exclusive vaccine deal with AstraZeneca that gave the Pharmaceutical giant sole rights." *- in* ***"They Pledged to Donate Rights to Their COVID Vaccine, Then Sold Them to Pharma"****, KHN, 25 August 2020.*

Oxford University Farce

"**COVID-19: The multi-billion pound business of the Oxford Vaccine. A leading researcher on the vaccine insisted it was made not-for-profit during the pandemic, but could earn millions after.**

The **Oxford University-AstraZeneca Vaccine** is a collaboration between a pharmaceutical giant and an ancient

institution aiming to become as adept at monetising its discoveries as it is at making them.

It is a combination that could net the university and some of its leading researchers a share of more than £74 Million. Should the disease recede and the vaccine become an annual defence against COVID-19 sold at a profit, Professor Gilbert, her close colleagues, the university, and a range of private and corporate investors - including Google's parent company Alphabet - all stand to benefit. Before COVID, the rights to develop and manufacture the vaccine were owned by Vaccitech - a commercial spin-off founded in 2015 by Professor Gilbert and her colleague Professor Adrian Hill, a geneticist and the director of the Jenner Institute." - Paul Kelso, business correspondent, in "COVID-19: The multi-billion pound business of the Oxford vaccine", Sky News, 23 Nov. 2020.

Please read the full article: *news.sky.com/story/covid-19-the-multi-billion-pound-business-of-the-oxford-vaccine-12134833*

Germany - Severe Cerebral Venous Thrombosis

"A specific form of Severe Cerebral Venous Thrombosis associated with platelet deficiency (Thrombocytopenia) and bleeding has been identified in 7 cases (as of 15 March 2021) in temporal association with vaccination with COVID-19 Vaccine AstraZeneca. It is a very serious disease that is also difficult to treat. Of the 7 affected individuals, **3 individuals had died.** The affected individuals had ages ranging from about 20 to 50 years, **6 of the affected persons had a particular form of Cerebral Venous Thrombosis, called Sinus Vein Thrombosis.**

All 6 individuals were younger to middle-aged women. Another case with cerebral haemorrhage in platelet deficiency and thrombosis was medically very comparable.

All cases occurred between 4 and 16 days after vaccination with COVID-19 Vaccine AstraZeneca. This presented as a comparable pattern. The number of these cases after vaccination with COVID-19 AstraZeneca is statistically significantly higher than the number of cerebral venous thromboses that normally occur in the unvaccinated population." - in "Suspension Vaccination AstraZeneca", Paul-Ehrlich-Institut, Agency of the German Federal Ministry of Health, 15 March 2021.

Italy - Manslaughter Investigation Following Death Hours After Inoculation

"The prosecutor of Biella, Italy has ordered the seizure of nearly 400,000 Oxford/AstraZeneca Vaccines and opened a manslaughter investigation following the death of a 57-year-old man hours after being inoculated." - in **"Italian prosecutor seizes batch of AstraZeneca Covid-19 jabs 'as a precaution,' launches manslaughter investigation after death"**, RT, 15 March 2021.

Italy - No Sign of Link Between Death and Vaccination was Found

"Sandro Tognatti, a 57 year old clarinet teacher who passed away on Sunday less than 24 hours after having the first dose of the AstraZeneca COVID-19 Vaccine, seems to have died due to a sudden heart problem, according to the initial findings of an autopsy, sources said on Tuesday.

No sign of a link between the death and the vaccination was found." - in "AstraZeneca: teacher died of heart problem – autopsy, Case led Piedmont to suspend use of batch of vaccines at weekend", ANSA, 16 March 2021.

South Korea - Investigates Deaths of 2 who Received COVID-19 Vaccine

"South Korean authorities are investigating the deaths of two people, both with pre-existing conditions, who **died within days of receiving AstraZeneca's COVID-19 vaccine."** - in "South Korea - Investigates Deaths of 2 who Received AstraZeneca COVID-19 vaccine", Reuters, 3 March 2021.

Denmark - Woman Die After AstraZeneca Shot

"A 60-year old Danish woman who died of a blood clot after receiving AstraZeneca's COVID-19 Vaccine.

Norway said that 3 people, all under the age of 50, who had received the AstraZeneca vaccine were being treated in hospital for bleeding, blood clots and a low count of blood platelets, which were labeled "unusual symptoms" by health authorities." - in "Woman who died after AstraZeneca shot had 'highly unusual' symptoms, officials say", Global News, Canada, 15 March 2021.

Norway -After Another Health Worker Dies

"A health worker in Norway has died of a brain haemorrhage after receiving the AstraZeneca anti-Covid vaccine. This is the second such fatality within a few days in the Nordic country." - in "Norway can't 'confirm nor exclude' AstraZeneca jab connection after another health worker dies", The Local, Norway, 15 March 2021.

Spain - Death of Marbella Teacher Following AstraZeneca Vaccine

"A teacher in Marbella, Spain had no previous illnesses, went to the emergency room with a headache just a few hours after being vaccinated on 3 March.

She went to the Emergency Room a second time, but it was not until the third time, about 10 days after the vaccine, when she was given a second CT scan, that a massive brain haemorrhage was detected." - in **"Investigation into death of Marbella teacher following AstraZeneca vaccine"**, Euro Weekly, 17 March 2021.

Austria - Suspended AstraZeneca's COVID-19 Vaccine After Death of One Person and Illness in Another After Shots

"One 49 old person died, as a result of severe coagulation disorders, while another person 35 year old developed a pulmonary embolism." - in "Austria suspends AstraZeneca COVID-19 vaccine batch after death", Reuters, 7 March 2021.

Italy - Probe in 3 Deaths After AstraZeneca Covid-19 Vaccine

"AstraZeneca Italia CEO is 1 of 4 people placed under investigation as a formality in the death of **Navy Sub-Lieutenant who died 1 day after having his first COVID jab.**

In all, **3 people including a Police Officer and a Carbiniere have died after getting the vaccine in Italy."** - in "AstraZeneca CEO probed in sailor's death, **No evidence of increased blood clot risk says company**", ANSA, 12 March 2021.

Thrombocytopenia Following Pfizer and Moderna Covid-19 Vaccine

"Cases of apparent secondary immune Thrombocytopenia (ITP) after SARS-CoV-2 vaccination with both the Pfizer and Moderna versions, 20 case reports of patients with Thrombocytopenia Following Vaccination, 9 received the Pfizer vaccine and 11 received the Moderna vaccine.

All 20 patients were hospitalized and most patients presented with petechiae, bruising or mucosal bleeding (gingival, vaginal, epistaxis) with onset of symptoms between 1–23 days (median 5 days) post vaccination.

In summary, we cannot exclude the possibility that the Pfizer and Moderna vaccines have the potential to trigger de novo ITP (including clinically undiagnosed cases).

Thrombocytopenia Post Vaccination is higher than that based on available case reports." - in "Thrombocytopenia following Pfizer and Moderna SARS-CoV-2 vaccination", American Journal of Haematology, **19 February 2021**.

Disseminated Intravascular Coagulation Following AstraZeneca Covid-19 Vaccine

"Symptoms seen in at least 13 patients, all between ages 20 and 50 and previously healthy, in at least 5 countries are more frequent than would be expected by chance.

The patients, at least **7 of whom have died, suffer from widespread blood clots, low platelet counts, and internal bleeding - not typical strokes or blood clots.**

The symptoms remind Disseminated Intravascular Coagulation (DIC), in which blood clots form throughout the body, depleting its platelet supply. When the clots cause blood vessels to burst, the body is less able stop the internal bleeding, which can damage the brain or other organs." - in "'It's a very special picture.' Why Vaccine safety experts put the brakes on AstraZeneca's COVID-19 vaccine", Science, 17 March 2021.

Potemkin Parliament, Pseudo-Legislature

"The most telling aspect of today's debate is the focus on specifics rather than on principle, on trends in data and details of subsidy rather than of the eager pursuit of freedom, **of continuing comfort with the state making choices for us, rather than a clamour by us for the freedom to be responsible for ourselves.**

As Oxford University ranks the stringency of the UK response; the 4th most restrictive in the world after Cuba, Eritrea and Ireland this absence is telling.

One year ago, few of us would have suggested that the state could ban you from leaving your home, from leaving the country, from getting married, from touching a loved one in their final moments, to stop a child receiving education, or to keep an elderly person living alone from the comfort of a neighbourly chat over a cup of tea.

Do we fully appreciate the scale of what we have done.

This has been a year of ambiguous choices when each of us in parliament has had to wrestle with our conscience to render judgments with many unknowns.

Yet each of us rightly, or wrongly has allowed essential freedoms to lapse, and thus been party to **the creation of a new illiberal precedent that may imperil the meaning of liberty for decades to come.** We should each reflect on our judgments, to determine how we can repair our common heritage of freedom. For the house to reflect whether it has provided effective legislative scrutiny, whether casting members away gave too much allowance for executive decree, whether the experiment of remote technology has substituted a pretence for the substance of scrutiny parading a Potemkin Parliament (façade), as the real thing.

For government ministers to reflect where the speed of response became an excuse rather than a genuine requirement for presumptive executive action.

Whether the drift toward law making without the sharing of adequate data, questioning or accountability with parliament became a lazy path routinely chosen for convenience rather than need.

For the opposition to consider why their response to the greatest power grab by the state has to demand more state more restriction and more control a series of cynical tactical moves designed to wrong foot government in mid crisis at best setting out a vision of even greater repression and control whilst heightening public fears and worry.

For myself and my colleagues on these back benches to reflect whether a more vigorous defence of our liberties was called for, and if so why we did not heed that call for our citizens we should ask to what purpose we remove those liberties a year ago and again today for the withholding of these liberties yet further, **for the decision has not been so much one of medical necessity but rather of a presumed political necessity.**

So we should reflect candidly and fearlessly, whether the accumulated costs, in diminished livelihoods, in debts, in school closures, in misdiagnosis, in loneliness and in lives lost as a result of these measures have been worth the reduction in covered deaths, and the avoidance of an annual rate of death for our population that was commonplace and went unremarked barely two decades ago." - Richard Fuller MP, in "Do we fully appreciate the scale of what we have done?", Covid Debate, House of Commons, UK, 23 February 2021.

The World's Largest Philanthropic Foundations

Foundation	Annual Expenditures
Bill & Melinda Gates Foundation	USD $3.9 Billion
Wellcome Trust	USD $1.1 Billion

- in "Global Policy Forum", 2016.

Private-Sector Billionaires Setting Global Agenda

"Microsoft founder Bill Gates and other super-rich donors are channelling billions of dollars into international development cooperation.

Their financial stakes give them a great deal of influence - without democratic legitimacy.

This impressive record of financial contributions goes hand-in-hand with equally impressive political influence.

In short, Bill and Melinda Gates are regularly asked for advice on health, reproductive rights and climate policy, although they are not experts in any of these areas.

The World Health Organisation (WHO) main source of funding is voluntary contributions provided by member states. Yet the organisation is stuck in a chronic financial crisis, since governments' payments regularly fall short.

The foundation favours public-private partnerships.

PPPs, the argument goes, are effective because they reduce the overall cost of medical treatment.

The problem is that this argument has been proven wrong.

A vaccine alone does not make someone healthy.

Hunger, thirst, poverty and social inequality also play a significant role in poor health.

> ***The Gates Foundation research and funding favour pharmaceutical multinationals like GlaxoSmithKline, Novartis, Roche, Sanofi, Gilead and Pfizer. The foundation and its founders hold shares in many of these companies, which leads to a clear conflict of interest. The corporations profit from the Gates Foundation's focus on pharmaceutical strategies, and the resulting corporate profits put dividends back into the donors' pockets. "I'll scratch your back if you scratch mine" has proven to be a clever business model, and the philanthropy label gives it a positive spin.***

The Gates Foundation has also been criticised for being a major shareholder in corporations, whose products promote cardio-vascular disease, diabetes, obesity and other chronic illnesses.

According to its 2015 tax returns, the foundation holds Coca Cola shares worth $ 538 Million.

It also owns stock in the food-industry giants Unilever, Kraft-Heinz, Mondelez and Tyson Foods as well as alcoholic-beverage producers Anheuser-Busch and Pernod.

The situation is similar in global agriculture.

The Gates Foundation tends to see a lack of technology and modern farming skills as the primary drivers of hunger and malnutrition.

This approach to fighting hunger is not new and goes back to another philanthropist – John D. Rockefeller in the 1960s.

Since 2006, the Gates and Rockefeller foundations have joined forces to promote what they call the "Green Revolution in Africa" to the tune of $3 Billion so far.

The idea is to use **hybrid seeds**, **biotechnology**, **synthetic fertilisers** and **genetic engineering** to increase agricultural output.

Around 96 % of all funding is channelled to American or European NGOs that implement the measures.

Critics rightfully accuse philanthropists of using their development approaches to open up African markets to large American and European corporations and NGOs, all too often generating profits for the donor institutions themselves." - Barbara Unmüssig, President of the Heinrich Böll Foundation, in "The Gates Foundation, Private-sector billionaires setting global agenda", D+C Development and Cooperation, 19 November 2017.

Gates & Rockefeller Using Their Influence To Set Agenda

"Using their immense wealth and influence with political and scientific elites, organisations like the Bill and Melinda Gates Foundation, the Rockefeller Foundation and others are promoting solutions to global problems *that may undermine the UN and other international organisations, says the report by the independent Global Policy Forum, which monitors the work of UN bodies and global policymaking." - John Vidal, in "**Are Gates and Rockefeller using their influence to set agenda in poor states?",** Global Development, The Guardian, 15 January 2016.*

The Gates Foundation has Purchased Shares in 9 Big Pharmaceutical Companies

"An investment valued at nearly $205 Million. As an investor in **Merck & Co., Pfizer Inc**., **Johnson & Johnson** and others, the Gates foundation has a financial interest in common with makers of AIDS drugs, d**iagnostic tools, vaccines and other drugs.**

Mr. Gates stance on intellectual property is as important to Microsoft's software business as it is to drugmakers. Last year, **Microsoft** named Raymond Gilmartin, **chief executive of Merck,** to its board." - in "Gates Foundation Buys Stakes in Drug Makers", The Wall Street Journal, 17 May 2002.

Chairman Gates Has Already Built Some Ties With The Drugs Industry

"The Foundation has ploughed:

$76.9 Million Merck Shares
$37.3 Million Pfizer Shares
$29.7 Million Johnson & Johnson Shares

- in "Gates' Charity Shifts Policy", The Guardian, 18 May 2002.

"The Times found that the Gates Foundation has holdings in many companies that have failed tests of social responsibility because of environmental lapses, employment discrimination, disregard for worker rights, or unethical practices. In addition, The Times found ***the Gates Foundation endowment had major holdings in, pharmaceutical companies*** *that price drugs beyond the reach of AIDS patients. As of this September 2007,* ***the Gates Foundation held $169 Million in Abbott stock.*** *In 2005,* ***the foundation held nearly $1.5 Billion worth of stock in drug companies*** *whose practices have been widely criticized as restricting the flow of key medicines to poor people in developing nations." - in "Los Angeles Times", 7 January 2007.*

Matt Hancock and The Think Tank that wants NHS "abolished"

"After becoming an MP in 2010 Mr Hancock has received regular donations of between £2,000 and £4,000 from millionaire currency manager and Conservative Party donor Neil Record.

Mr Record heads the board of free market group the Institute of Economic Affairs (IEA), a vocal critic of the current NHS model." - in "**New health secretary Matt Hancock received £32,000 in donations from chair of think tank that wants NHS 'abolished'**", The Independent, 12 July 2018.

3 Weeks to Flatten the Wave

2 March 2020

"Government sign £119 Million Covid Advertising deal with OMD Group (subsidiary of US Omnicom)." *- in "Telegraph", 25 October 2020.*

Until the 22 of March 2020

"Covid-19 reverse psychology: Did ***Johnson play the left by "pretending" he didn't want a lockdown so it could get public support?"*** *- in "RT", 28 October 2020.*

22 March 2020

"A paper written by the Scientific Pandemic Influenza Group on Behaviours (SPI-B), 22 March 2020, stated:

"A substantial number of people still do not feel sufficiently personally threatened. It could be that they are reassured by the low death rate in their demographic group, although levels of concern may be rising… the perceived level of personal threat needs to be increased among those who are complacent, using hard-hitting emotional messaging. Use media to increase sense of personal threat."

The British people have been subjected to an unevaluated psychological experiment without being told that is what's happening." - in "State of Fear: How ministers 'used covert tactics' to keep scared public at home", *Telegraph, 2 April 2021.*

23 March 2020

"I know the damage that this disruption is doing and will do to people's lives, to their businesses and to their jobs. ***We will look again in three weeks,*** *and relax them if the evidence shows we are able to." - Boris Johnson, Downing Street, 24 March 2020.*

April 2020

"The factory in Leiden to produce doses of the Oxford/AstraZeneca vaccine after ***Matt Hancock, Health Secretary, approved a major investment (£21 Million), in April 2020."*** *- in "British taxpayers funded EU factory at heart of vaccine row", The Telegraph, 1 April 2021.*

5 January 2021

"Chris Whitty warns Covid lockdown measures may be needed next winter as virus 'won't disappear by spring'." *- in "Evening Standard", 5 January 2021.*

2 April 2021

"Chris Whitty England chief medical officer warns virus measures needed for another 2 years to combat threat of variants." *- in "Sky News", 2 April 2021.*

9 March 2021

"Whitty warns of further Covid surges to come." *- in "BBC News", 9 March 2021.*

"Nobody Is Safe" Hancock Reminds the Covid Threat Hasn't Gone Away

*"**We're putting more research money into tackling** and understanding **long Covid** because **it appears to be several different syndromes. This is a very strange, very dangerous virus** and it's yet another reason for everybody to be cautious. **Nobody is safe from this virus until we can make everybody safe."** - Matt Hancock, in "Sky News", 1 April 2021.*

Matt Hancock Holds Shares In Sister's Firm That Won NHS Contracts

"In March 2021, Hancock declared that he had acquired more than 15% of the shares of a company called Topwood Ltd.

However, the register failed to mention that **his sister Emily Gilruth was director of the firm, and owned a larger portion of the shares."** - in "Hancock and sister received shares in firm that won lucrative NHS contract ", City AM, 16 April 2021.

Lower Deaths in 2020 than in 2019

"For the 124 trusts included in the SHMI from 1 August 2019 to 31 July 2020.

Key Facts:

- 13 trusts had a higher than expected number of deaths. Of these 13 trusts, 4 also had a higher than expected number of deaths for the same period in the previous year.

- **97 trusts had a number of deaths within the expected range.**

- 14 trusts had a lower than expected number of deaths. Of these 14 trusts, 11 also had a lower than expected number of deaths for the same period in the previous year from 1 August 2019 to 31 July 2020." - in "Summary Hospital-level Mortality Indicator (SHMI) - Deaths associated with hospitalisation, England, August 2019 - July 2020", NHS, 10 December 2020.

Only 50 Individuals Under Age of 40 Without Underlying Conditions died from Covid-19 Since the Start of the Pandemic

"**Just 388 people aged under 60 with no underlying health conditions have died of Covid-19 in England's hospitals since the start of the pandemic**, NHS data has showed.

The figures show that 1,979 previously healthy people died in hospitals in England after testing positive for Covid-19 between 2 April and 23 December 2020.

Just 338 of these people were aged 40 to 59, **with another 44 aged between 20 and 39, and just 6 under the age of 19.**" - in "388 people aged under 60 with NO underlying health conditions' have died of Covid in England's hospitals", Daily Mail, 27 December 2020.

Florida - Death After Covid-19 Vaccine

"Florida-based physician dies 16 days after getting first shot. A 56-year-old obstetrician and gynecologist in Miami Beach developed an extremely serious form of a condition known as acute immune thrombocytopenia, which prevented his blood from clotting properly." - in "Pfizer Investigates Post-Vaccine Death for Possible Connection", Bloomberg, 12 January 2021.

> ***"Chinese health experts called on Norway and other countries to suspend the use of mRNA-based COVID-19 Vaccines produced by companies such as Pfizer, due to the Vaccines' safety uncertainties following the deaths of 23 elderly Norwegian people who received the Vaccine."*** *- in "Global Times", 15 January 2021.*

Indiana - Deaths After Covid-19 Vaccine

"Three people who received COVID-19 vaccinations have since passed away, state health officials said Thursday." - in "State says no evidence COVID-19 vaccine led to deaths of 3 Hoosiers", WTHR, 21 January 2021.

California - Death After Covid-19 Vaccine

"Agencies at the federal, state and local, are investigating the death of a person who was given the coronavirus vaccine several hours before their death on the 21 January 2021, according to Placer County Sheriff's Office." - in ABC10, 21 January 2021.

> ***"Earlier, batches of the Moderna Vaccines were pulled from use after fewer than 10 people who received shots at a San Diego Vaccination site needed medical care,*** *possibly due to severe allergic reactions." - in "California resident dies hours after receiving the COVID-19 Vaccine", 24 January 2021.*

"We know that the severe allergic reactions that occur following immunization, the vast majority of those occur 15-30 minutes following immunization, the severe allergic reaction, anaphylaxis, that we worry about." said Dr. Dean Blumberg, MD.

A recommendation from Dr. Anthony Fauci also states that people should not get vaccinated within 90 days of being sick with the virus." - in "Northern California man dies hours after getting coronavirus Vaccine ", Your Central Valley, 24 January 2021.

What is the point of getting the Covid-19 Vaccine?

If you are not supposed to use it in the first 3 Months!

Health Experts Urge Confidence in Vaccine After Superstar's Death

"When Hank Aaron and other African American leaders invited reporters to watch them receive COVID-19 immunization shots on 5 January 2021, the baseball legend said he did so to help spread the word to millions that the vaccine is safe.

Now, just over 2 weeks later on the 22 January 2021, news breaking of the baseball great's death.

A cause of death was not announced, but the Braves said **Aaron died peacefully in his sleep.**" - in "Atlanta Journal Constitution", 23 January 2021.

Norway - Deaths After Covid-19 Vaccine

"Norway expressed increasing concern about the safety of the Pfizer Inc. vaccine on elderly people with serious underlying health conditions **after raising an estimate of the number who died after receiving inoculations to 29**.

Until Friday, the vaccine produced by Pfizer and BioNTech SE was the only one available in Norway, and "**all deaths are thus linked to this vaccine**", the Norwegian Medicines Agency said in a written response to Bloomberg on Saturday." - in "Norway Raises Concern Over Vaccine Jabs for the Elderly", Bloomberg, 16 January 2021.

Germany - Deaths After Covid-19 Vaccine

"In Germany, where more than 800,000 people have received their first of 2 doses of the the Pfizer-BioNTech Vaccine, **the Paul Ehrlich Institute has investigated at least 7 cases of elderly people dying shortly after Vaccination."** - in "What to Know About Vaccine-Linked Deaths, Allergies", Bloomber, 18 January 2021.

France - Deaths After Covid-19 Vaccine

"Investigations are continuing in France after 5 people died days after having the Covid-19 Vaccine.

All 5 people who died were aged 75 or over, were elderly care home residents, and had existing underlying conditions. No clear link between the Vaccinations and the deaths has been formally established.

Three deaths were recorded by the health alert unit le centre régional de pharmaco-vigilance in Nancy, one by the centre in Tours, and one from Montpellier.

All 5 had been given the Pfizer/BioNTech jab." - in "Covid France: Five deaths after Vaccine, no link proven", The Connexion, 20 January 2021.

> ***"In Europe, there have been 71 deaths reported following a Covid-19 vaccination - including from across the UK, Germany, Norway, and Denmark."*** *- in "The Connexion", 20 January 2021.*

India - Deaths After Covid-19 Vaccine

"Rajwanti, posted as Lady Health Visitor at Bhangrola Primary Health Care centre, died 6 days after she took the vaccine. A 56-year-old woman health worker, who was administered the COVID-19 vaccine on 16 January 2021, **died in her sleep** here on Friday 22 January 2021.

Her husband Lal Singh Saroha told media persons that Rajwanti **went to sleep at night on Thursday after meals, but did not respond when he tried to wake her up in the morning."** - in "Death of Delhi health worker not due to COVID-19 vaccine: official ", The Hindu, 23 January 2021.

Another Health Worker Dies After Taking Covid-19 Vaccine, Gurugram official says 'not related to vaccination

"**Earlier, the states of Karnataka, Uttar Pradesh and Telangana have reported multiple deaths of healthcare workers after they were administered the Covid-19 vaccines.**

After similar cases in Karnataka, Uttar Pradesh and Telangana, another health worker has died after taking the first shot of the Covid-19 vaccine, this time in Haryana's Gurugram.

Other Cases Across India

Telangana

A healthcare worker in Telangana died after receiving the vaccine shot on 20 January 2021 after he complained of chest pain.

According to Dr G Srinivas Rao, director of the state Public Health and Family Welfare department, the healthcare worker received the jab on 19 January 2021 around 11.30 am at the Kuntala Primary Health Centre.

Within 3 hours, the person started having chest pain and was rushed to the Nirmal district hospital, but was declared brought dead.

On 21 January 2021, **2 senior doctors, including a Head of Department, at the Osmania General Hospital in Telangana collapsed within minutes after receiving the vaccine.** They were kept under observation for 2 hours. "They are fine. They were anxious and their BP had gone up," Dr B Nagender, superintendent of the hospital, told the Times of India.

Karnataka

On 18 January, a healthcare staff at a Karnataka hospital died 2 days after being administered the first dose of the vaccine.

Nagaraju, a 43-year-old Group D staff at a government hospital in Ballari district. He died after suffering a massive heart attack on Monday.

Uttar Pradesh

On 17 January, a 46-year-old healthcare staff at a district hospital in Uttar Pradesh's Moradabad **died a day after taking the first shot of the vaccine.** On 16 January 2021, the man began feeling uneasy immediately after taking the vaccine. After completing his duty at night, he complained of breathlessness, uneasiness in chest and cough.

The doctors at the district hospital pronounced him brought dead." - in "Times Now", 22 January 2021.

"It is imperative for the state to transparently probe these deaths and put out all details," said Dr Kakkilaya. He said Health Minister K. Sudhakar's ***statements that the deaths are not related to the vaccine is farcical since he spoke even before the autopsy report was out.*** *"The irony is that the government does not have enough data to establish anything," Dr Srinivas Kakkilaya, MD said." - in "Karnataka doctors demand clarity on post-vaccine deaths", The Times of India, 22 January 2021.*

Health Care Worker Dies After Second Dose of Covid Vaccine, Orange County, California

"Tim Zook, 60, an X-ray technologist at South Coast Global Medical Center in Santa Ana, **died after receiving his second dose of the COVID-19 Vaccine.**

"But when someone gets symptoms 2 ½ hours after a Vaccine, that's a reaction. What else could have happened?
We would like the public to know what happened to Tim, so he didn't die in vain." *- Rochelle Zook*

The Vaccine Adverse Event Reporting System - which officials caution is a "passive surveillance system" and represents unverified **reports of health events that occur after Vaccination - has gathered more than 130 reports of death after Vaccine administration thus far in 2021**."- in "Health care worker dies after second dose of COVID vaccine, investigations underway", Orange County Register, 26 January 2021.

First Covid19 Vaccines in England

"**Health Secretary Matt Hancock said care home residents will be included in the first rollout of the Vaccine**, starting from 4 January 2021.

First in line are over 80s and those who work in care homes or the NHS, meaning all of these people will need to be Vaccinated before the jab can be offered to other priority groups." - in "How does the Oxford vaccine work?", The Daily Mail, 30 December 2020.

95% of Care Homes in England have been Vaccinated

"Some 95% of care homes in England have been able to get all their residents Vaccinated, according to a poll by the National Care Forum". - in "95% of care homes in England have had all residents Vaccinated, reveals NCF poll", carehome.co.uk, 27 January 2021.

Care Home Deaths After Vaccination

"16 Covid deaths have been confirmed at 2 Invergordon care homes.

This is in addition to the 3 deaths previously confirmed at Fodderty care home in Dingwall.

Residents at Meallmore had already received their first dose of the vaccine, with contact tracing undertaken." - in "16 deaths confirmed at two Invergordon care homes as 35 cases are linked to outbreak at Inverness facility", The Press and Journal, 28 January 2021.

Spain - 7 Deaths After Covid-19 Vaccine

"On the 13 January all residents, including staff, were Vaccinated with the Pfizer Vaccine, and within 6 days the first symptoms began to appear in 10 of the residents.

In addition, on the 18 of January, **5 days after the staff at the residency who were also Vaccinated, sick leave began.**

At least 7 people have died from Covid-19 at the Lagartera Residence for the Elderly (Toledo) **after receiving the first dose of the Vaccine.**

On the 13 January they received the 1st dose of the Pfizer Vaccine, and they were scheduled to receive the 2nd dose on the 3 February.

The residence has remained free of Covid during the first two waves and this is the first moment in which it has been affected."- in "At least Seven died from a Covid-19 outbreak at the residence in Lagartera (Toledo)", En Castilla la Mancha, 31 January 2021.

Valencia - Death After Second Doses of Covid19 Vaccine

"A resident of the nursing home in the Castellón town of Viver died on the 25 January after receiving the 2 doses of the Coronavirus Vaccine.

The deceased was injected with the first shot of the Pfizer Vaccine on 29 December and later became infected with coronavirus, and was administered the second dose on 19 January." - in "A man dies in Valencia after receiving the two doses of the coronavirus Vaccine", ABC, 26 January 2021.

Sweden - Bans AstraZeneca Vaccine For Over-65s

"Sweden will not recommend the Oxford/AstraZeneca coronavirus Vaccine for use in over-65s, the country's health ministry has announced.

The Swedish Public Health Agency said there was insufficient data on whether the firm's Covid jab is effective in older age groups.

The decision comes after a similar French President Emmanuel Macron claimed the Oxford-produced jab is "almost ineffective" for the age bracket.

Germany has also advised against giving the Vaccine to those over 65."- in "EU Vaccine revolt: Now Sweden bans AstraZeneca vaccine for over-65s – UK decision snubbed", Express, 2 February 2021.

We Were Told It Would Lead To Nearly 100,000

"When Sweden decided not to lockdown in March 2020. ***We were told it would lead to nearly 100,000 deaths by 1 July 2020. The actual total ended up being 5,490.*** *Infections and deaths were falling from mid-April 2020, pretty much at the same time as in most other European countries with strict lockdowns."- in "Sweden is flattening the curve, too", Spiked, 8 February 2021.*

Madagascar Population 28 Million

"469 deaths from Covid-19." - in "COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) , Johns Hopkins University, **8 April 2021.**

Madagascar Refuses Covid-19 Vaccine

"Madagascar has affirmed its decision not to participate in the Covax global initiative for the access to Covid-19 Vaccine.

The government spokesperson confirmed the island will resort to its traditions tonic that its own scientist discovered earlier this year.

The tonic, based on the plant Artemisia Annua which has anti-malarial properties." - in "AfricaNews", 27 November 2020.

Tanzania Population 60 Million

"21 deaths from Covid19." - in "COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University, 8 April 2021.

Tanzania Says No Plans in Place to Accept COVID-19 Vaccines

"Tanzania's health ministry says it has no plans in place to accept COVID-19 Vaccines.

The health minister insisted Tanzania is safe.

Chief government chemist Fidelice Mafumiko also **suggested the use of herbal medicine to cure COVID-19.**

President John Magufuli, who has long asserted that God has eliminated COVID-19 in Tanzania, last week asserted that Vaccines for it are "inappropriate".

The US Centers for Disease Control and Prevention in its latest travel warning on Tanzania says the country's level of COVID-19 is "very high." It gave no details but urged against all travel to the East African nation." - in "CTV News", 2 February 2021.

Africa CDC Launched 2017

"Africa Centres for Disease Control and Prevention (Africa CDC) is a public health agency of the African Union to support the public health initiatives of member states and strengthen the capacity of their health institutions **to deal with disease threats**.

It was established in January 2016 and officially launched in January 2017." - in "Wikipedia".

Africa CDC Our Partners

"Africa Field Epidemiology Network
Bill & Melinda Gates Foundation
Centres for Disease Control and Prevention CDC
Chinese Centre for Disease Control and Prevention CDC
CEPI New Vaccines for a Safer World
Infection Control Africa Network
Public Health England PHE
The London School of Hygiene & Tropical Medicine
WHO World Health Organization" - in "Africa CDC", web portal, 2 February 2021.

The Death of the Former Governor of the Central Bank of Tanzania

"Prof Benno Ndulu, a former Central Bank Governor, and Zanzibar politician and First Vice President Seif Hamad are among prominent Tanzanians who have died in February 2021." - in "Death robs Tanzania of 10 prominent person", The East African, 23 February 2021.

The Death of The President of Tanzania

Mr Magufuli was last seen in public on 27 February 2021.

On the 17 of March 2021 the Samia Suluhu Hassan announced that the John Pombe Joseph Magufuli, President of Tanzania had died.

New President of Tanzania Makes Covid-19 U-Turn

"Tanzania's new president announced plans to appoint a panel of experts to advise her on how best to curb the spread of the coronavirus, reversing her predecessor's denialism of the pandemic.

"We cannot isolate ourself as an island." - President Samia Suluhu Hassan. " - in **"Tanzania's New Leader Signals U-Turn on Coronavirus Policy"**, Bloomberg, 6 April 2021.

Webpage of the World Economic Forum:
www.weforum.org/people/samia-suluhu-hassan

COVID-19 in Tanzania

"Level 4: Very High Level of COVID-19 in Tanzania

Key Information for Travelers to Tanzania

1. Travelers should avoid all travel to Tanzania.

2. Because of the current situation in Tanzania **even fully vaccinated travelers may be at risk for getting and spreading COVID-19 variants,** and should avoid all travel to Tanzania.

3. If you must travel to Tanzania, get fully vaccinated before travel. All travelers should wear a mask, stay 6 feet from others, avoid crowds, and wash their hands." - in "Travelers Health", CDC, 2 April 2021.

Reports of Deaths and Mortality Following COVID-19 Vaccination

COVID-19 **Vaccination began in the USA** on Monday morning **14 December 2021**.

Vaccine Adverse Event Reporting System (VAERS), national data from all U.S. states and territories.

"Reports of deaths (due to any cause) following Covid-19 Vaccination to VAERS (N = 196).

Reports of deaths in long-term care facility (LTCF) residents following Covid-19 Vaccination to VAERS (N = 129).

VAERS received 129 reports of deaths following COVID-19 Vaccination in LTCF residents through 18 January 2021.

Reports of deaths in LTCF residents following COVID-19 Vaccination to VAERS with death certificates available (N = 18).

Reported VAERS Sudden Cardiac Death count Following COVID Vaccination: 18 deaths.

Reports of deaths following COVID-19 Vaccination to VAERS in community dwelling adults aged <65 years (N = 28).

Reports of deaths following COVID-19 Vaccination to VAERS in community dwelling adults aged <65 years with death certificate or autopsy report available (N = 11)." - in "COVID-19 Vaccine safety update", Advisory Committee on Immunization Practices (ACIP), **27 January 2021**.

Covid19 Vaccine Reports in USA

692 - Miscarriages
1,671 - Thrombocytopenia / Low Platelet
1,538 - Anaphylaxis
2,323 - Heart Attacks
1,868 - Paralysis of the Muscles in the Face (Bell's Palsy)
4,874 – Disabled
6,157 – Life Threatening
5,993 - Deaths
16,275 - Severe Allergic Reaction
20,737 - Hospitalizations
65,623 - Office Visits
47,837 - Urgent Care

VAERS is the Vaccine Adverse Event Reporting System.

It is a voluntary reporting system that **has been estimated to account for only 1% of Vaccine injuries**. OpenVAERS is built from the HHS data available for download at vaers.hhs.gov in "Vaers Covid Case Reported", OpenVaers, 11 June 2021.

New York Man Dies 25 Minutes After Getting COVID-19 Vaccine

"This week, some 35,000 Minnesotans 65 and older will receive a dose of the coronavirus vaccine. About 100 will likely be dead within a month, statistics suggest. ***But not because of the Vaccine. Because people die, especially older people."*** *- in "Statistics show thousands of Minnesotans will die after getting the COVID vaccine - but not because of it", Twin Cities,7 February 2021.*

"Man in his 70s collapses and dies just 25 minutes after receiving COVID-19 Vaccine in NYC." *- in "The Daily Mail", 8 February 2021*

At Least 36 People Developed Life-Threatening Blood Disorder Thrombocytopenia After Receiving COVID-19 Vaccine

"At least 36 cases of Thrombocytopenia after COVID-19 vaccination have been reported in the US." *- in "At least 36 people develop blood disorder and a doctor DIES after receiving Pfizer or Moderna COVID vaccines", The Daily Mail, 9 February 2021.*

COVID-19 mRNA Pfizer- BioNTech Vaccine Analysis Report Run Date: 28-Mar-2021 Data Lock Date: 21-Mar-2021 Earliest Reaction Date: 03-Apr-1990 MedDRA Version: MedDRA 23.1 All UK spontaneous reports received between 9/12/20 and 21/03/21 for mRNA Pfizer/BioNTech vaccine analysis	
TOTAL FATAL OUTCOME	**283**

COVID-19 AstraZeneca Vaccine Analysis Report Run Date: 28-Mar-2021 Data Lock Date: 21-Mar-2021 19:00:03 All UK spontaneous reports received between 4/01/21 and 21/03/21 for COVID-19 Vaccine Oxford University/AstraZeneca	
TOTAL FATAL OUTCOME	**421**

Source:
https://assets.publishing.service.gov.uk

Reported Deaths from Covid Vaccine in UK as of 21 March 2021

Total Reported **Deaths 704**

*"**Benefits firmly outweigh the risks' - Boris Johnson** says he will get Oxford-AstraZeneca jab on Friday." - in "The Telegraph", 18 March 2021.*

Vaccine Side Effect Worry Grows

*"It's been one step forward, two back for AstraZeneca's COVID-19 vaccine. **Evidence continues to accumulate that an unusual clotting disorder seen in dozens of European recipients is a real, albeit rare, side effect. A preprint has detailed a proposed mechanism, and multiple scientific groups have said the worry is legitimate and must be seriously weighed against the vaccine's COVID-19 protection. This week, Canada and Germany joined Iceland, Sweden, Finland, and France in recommending against the vaccine's use."** - in "Side effect worry grows for AstraZeneca vaccine", Science, 2 April 2021.*

*"**Under-30s in UK will not be given AstraZeneca Covid vaccine due to risk of blood clots. Trial of the Oxford/AstraZeneca vaccine in children has been paused while the Medicines and Healthcare products Regulatory Agency investigates reports on the vaccine use in younger people following reports of cerebral venous sinus thrombosis."** - in "ITV News", 7 March 2021.*

COVID-19 mRNA Pfizer- BioNTech Vaccine Analysis	
Medicines and Healthcare products Regulatory Agency (MHRA) United Kingdom, Data **16 April 2021** Deaths: 334 mRNA Pfizer/BioNTech vaccine analysis	
TOTAL FATAL OUTCOME	**334**

COVID-19 AstraZeneca Vaccine Analysis	
Medicines and Healthcare products Regulatory Agency (MHRA) United Kingdom, Data **16 April 2021** Adverse Vaccine Reactions: 58,495 Deaths: 627 COVID-19 Vaccine Oxford University/AstraZeneca	
TOTAL FATAL OUTCOME	**627**

The following data is being given so that the reader can calculate the amount of side-effects and ***Fatal Outcomes (deaths), are being caused by these Covid-19 Vaccines.***

COVID-19 mRNA Pfizer- BioNTech Vaccine Analysis	
Medicines and Healthcare products Regulatory Agency (MHRA) United Kingdom, Data **26 April 2021** Deaths: 347 mRNA Pfizer/BioNTech vaccine analysis	
TOTAL FATAL OUTCOME	**347**

COVID-19 AstraZeneca Vaccine Analysis	
Medicines and Healthcare products Regulatory Agency (MHRA) United Kingdom, Data **26 April 2021** Deaths: 685 COVID-19 Vaccine Oxford University/AstraZeneca	
TOTAL FATAL OUTCOME	**685**

A Note on the Moderna Covid-19 Vaccine Side-Effects Report

There is also the Moderna Covid-19 Vaccine side-effects report, but unlike the other Vaccines the report for the Moderna Vaccine the MHRA site requires registration and sign in.

Then the data shown is presented in a manner that takes time to make sense of it.

This is in itself very suspicious.

Time permitting the data from the Moderna Covid-19 side-effects will be placed in this book.

All Vaccine Adverse Effects EudraVigilance

16 April 2021

Covid-19 Vaccine	Deaths
Pfizer	2129
Moderna	994
AstraZeneca (Vaxzevria)	707
Johnson & Johnson	8
Deaths in Total	**3838**

- in "EudraVigilance – European Database of Suspected Adverse Drug Reaction Reports", European Medicines Agency, 16 April 2021.

MHRA Yellow Card Covid-19 Vaccines Adverse Reactions Data

Covid-19 Vaccine	Total Fatalities
AstraZeneca	722
Pfizer	364
Unspecified	14
Moderna	2
Total of Deaths	**1102**

- in Yellow Card Covid-19 Adverse Reactions Data, Medicines and Healthcare products Regulatory Agency (MHRA), United Kingdom, 29 April 2021.

Vaccine Researcher Doubts the AstraZeneca Vaccine Will be Used in Norway Again

"**Unless they manage to find a factor that explains the blood clot cases, I doubt we'll begin using this vaccine again in Norway",** Dr Gunnveig Grødeland, Senior Researcher and Group leader, University of Oslo, in TV2, Norway." - in "Science Norway", 23 March 2021.

Does Private Health Insurance Covers Effects from Covid Vaccine

"I confirm that side effects from the Covid-19 vaccine are not covered under our exclusion for: Complications from excluded or restricted conditions/treatment and experimental treatment exclusion." *- BUPA, International Healthcare Company, letter to costumer enquiry, 23 March 2021." - in "UK Column News", 29 March 2021.*

Sweden Has Avoided Covid-19 Lockdown: Has It Worked?

"Sweden had the 23rd lowest annual excess deaths out of 30 European countries; lower than the UK 15.1%, France 10.4%, and Spain 18.9%.

Sweden also has a lower number of coronavirus deaths per million than those countries, all of which have gone under strict lockdowns during the pandemic.

The resistance to lockdown, is based on the idea that they are "unsustainable", and **Sweden's strategy takes into account not just economic factors, but all aspects of public life.**

"You have to keep society open not only for economic reasons, but also for critical public functions to to function, like hospitals, schools and so on." - Nils Karlson, economist and political scientist who jointly wrote: **Sweden's Coronavirus Strategy Will Soon Be the World's, Herd Immunity Is the Only Realistic Option, 12 May 2020.**" - in "ABC News", 28 February 2021.

> ***"China placed 50 million people under quarantine in Hubei Province in January. Since then, many liberal democracies have taken aggressive authoritarian measures of their own to fight the novel coronavirus.***
> ***Rather than declare a lockdown or a state of emergency, Sweden asked its citizens to practice social distancing on a mostly voluntary basis."*** *- Nils Karlson, Charlotta Stern, Daniel B. Klein, in* ***"Sweden's Coronavirus Strategy Will Soon Be the World's",*** *Foreign Affairs,* ***12 May 2020.***

UK Government Signed £119 Million Covid Advertising Deal 3 Weeks Before Lockdown

"Government struck £119 Million Covid Advertising deal with OMD Group (subsidiary of US Omnicom), **weeks before first lockdown, on the 2 March 2020 (Although the UK did not go into lockdown until 23 March 2020).**

The Government is under mounting pressure to disclose details of billions of pounds handed over to private companies for contracts related to its pandemic response." - in "Telegraph", 25 October 2020.

"Covid-19 reverse psychology:
Did Johnson play the left by "pretending" he didn't want a lockdown so it could get public support?
The phrase "smoking gun" is oft-overused, but it is surely appropriate in relation to the report that ***the UK government struck a deal worth £119 Million with an American advertising company, OMD Group, urging people to "Stay Home, Stay Safe" a full 3 weeks before Boris Johnson ordered a lockdown."*** *- in "RT", 28 October 2020.*

UK Government Forced to Remove Covid Ad

"Government to discontinue Covid ad accusing joggers or those exercising and dog-walkers of being "highly likely" to have the virus.

After the regulator said there was no evidence to support the claim.

The Cabinet Office has also agreed not to repeat the claim made in the 30-second radio ad – which also warns that "people will die" if individuals "bend the rules" – after being contacted by the Advertising Standards Authority (ASA)." - in "The Telegraph", 21 January 2021.

In Times of Epidemic

"I directed attention more particularly to the derangements of nutrition and to those disorders which result from infringement of, what may be termed, the elementary laws of health.

We saw that, for the nutrition of the body as a whole, and indeed of each one of its individual organs and parts, certain requirements are necessary.

These are:

1. Sufficient supply of Nutritive material - blood-plasma;
2. Sufficient supply of Oxygen;
3. Satisfactory Removal of Waste-Products;
4. Healthy condition of the Nervous System;
5. Sufficient amount of Rest and Sleep.

In times of epidemic, every member of the community should look carefully after his own health, and should endeavour to keep it in the highest possible state of efficiency.

In particular, the diet should be plain and simple; articles of food, such as unripe or rotten fruits, which are likely to cause intestinal irritation, should be rigidly avoided.

Anything which produces gastro-intestinal irritation and diarrhoea is a most powerful predisposing cause of the disease.

All depressing causes, such as over-fatigue, exposure to cold, excesses of all kinds, anything in short which exhausts the nervous energy, or lowers the vitality and resisting power of the system, should be carefully avoided; for they undoubtedly predispose to the disease.

Amongst the predisposing causes there is none more potent than fear." - Dr Burom Bramwell, MD, FRCP in "A Lecture on the Exciting Causes of Disease", British Medical Journal, 9 January 1886.

A Safe Drug That Is Exceedingly Cheap

"Ivermectin is a safe drug that is exceedingly cheap.

Is truly remarkable, this was a gift to us, Ivermectin has high activity against COVID-19." - Professor Dr Paul Marik, MD, FCCM, FCCP, founder of the alliance and a professor and chief of the division of pulmonary and critical care medicine at Eastern Virginia Medical School, in "Press Conference", 8 December 2020.

Ivermectin: is an FDA approved anti-parasitic drug that has been available for approximately 40 years and previously earned researchers a Nobel Prize.

Hydroxychloroquine, Ivermectin, Vitamin D and Zinc

"My name is Dr Ramin Oskoui, I am a board certified cardiologist, and internist who practice who is licensed to practice in DC, Maryland, and Virginia.

I have treated several dozen of Covid19 patients since the outbreak of the pandemic my remarks are directed in part to the differing roles and responsibilities of scientific researchers and government agencies and practising physicians in the health care crisis.

Why then, with a disease we had never seen before in late March 2020, are practising physicians being condemned, ridiculed or shamed, in some cases for doing what practising physicians have always done; using their professional skills and expertise to make the best practical life-saving use of the existing scientific research.

The FDA, encourages the use of FDA approved drugs, approved for one disease to be responsibly and ethically used in the field for other ailments not yet researched or approved.

In fact, that is how many cures or treatments get discovered. Drugs or treatments invented and tested for one disease or ailment are applied in a novel way, or for an elementary disease they have not yet been approved for, or tested with.

The Health Policy Establishment's criticism of the front-line doctors was over the top and it was unfounded.

For example drugs like Hydroxychloroquine, Ivermectin, which are FDA approved for certain uses, have extensive safeguards even for non-approved uses.

They were both approved decades ago and have an established record of efficacy, and a comprehensive information on possible side effects.

Earlier this year (2020) we faced a health crisis like any other crisis with an unknown and unproven enemy we cannot rely exclusively on the tried and true.

But it was worse than that, affirmative steps to keep physicians and patients ignorant were taken.

Indeed censorship of scientific research, indeed medical McCarthyism became the norm.

In terms of the data I provided the clerk of this committee of numerous clinical trials on many of these drugs, not limited but including:

1. Hydroxychloroquine.
2. Ivermectin.
3. Vitamin D.
4. Zinc.

And a few other medications, and those trials are there.

But the fact that we have had 3rd world countries, 2nd world countries, that have been more innovative, and have outperformed us in terms of survival. I think is something that warrants questioning.

And one has to wonder, if our bloated Research Academic Bureaucracy has been more of a hindrance, than a help during this healthcare crisis." - Dr Ramin Oskoui, MD, in "Early Outpatient Treatment: An Essential Part of a COVID-19 Solution", Senate Committee on Homeland Security and Governmental Affairs, 8 December 2020.

The Effectiveness of Ivermectin

"I am part of a group of doctors led by Professor Dr Paul Marik, MD, who came together early on in the pandemic.

And we all have sought, is to review the world's literature on every facet of this disease trying to develop effective protocols.

I was here in May 2020 and I recommended that it was critical that we use Corticosteroids in this disease when all of the national and international healthcare organizations said we cannot use those that turned out to be a life-saving recommendation.

I am here again today with a new recommendation in the last 9 months, in our review of all of the literature as a group, again we are some of the most highly published physicians in our speciality.

We have tried to figure out how to identify a repurposed and available drug to treat this illness.

We have now come to the conclusion after 9 months, and, I am severely troubled by the fact that the National Institute of Health (NIH), the FDA and the CDC, I do not

know of any task force that was assigned or compiled to review repurposed drugs.

In an attempt to treat this disease everything has been about novel and or expensive pharmaceutically engineered drugs like: Tocilizumab, Remdesivir, Monoclonal Antibodies and Vaccines.

We have hundred years of medicine development, we know we are expert in all the medicines we use and I do not know of a task force that has been focused on repurposed drugs.

I want to talk about, that we have a solution to this crisis there is a drug that is proving to be of miraculous impact, and when I say miracle, I do not use that term lightly, and I don't want to be sensationalized when I say that is a scientific recommendation based on mountains of data that has emerged in the last 3 months.

The NIH their recommendation on Ivermectin which is to not use it outside of controlled trials is from 27 August we are now in December.

This is 3 to 4 months later, mountains of data have emerged from all from many centres and countries around the world showing the miraculous effectiveness of Ivermectin. It basically obliterates transmission of this virus if you take it you will not get sick.

I want to briefly summarize it number one we have evidence that Ivermectin is effective not only in prophylaxis in the prevention, if you take it you will not get sick. We just came across a trial from Argentina, they prophylaxis 800 healthcare workers, not one got sick.

If you take it you will not get sick.

It has immense and potent antiviral activity, we know that from the first study in Monash, it has made the bench to the bedside prophylaxis.

We now have 4 large randomized control trials totalling over 1,500 patients. Each trial showing that as a prophylaxis agent it is immensely effective you will not get sick you will be protected from getting ill if you take it in early outpatient treatment.

We have 3 randomized control trials and multiple observation as well as case series showing that if you take Ivermectin, the need for hospitalization and death will decrease.

The most profound evidence we have is in the hospitalized patients, we have 4 randomized control trials 3 multiple observation trials, all showing the same thing.

You will not die, or, you will die at much lower rates statistically significant large magnitude results.

If you take Ivermectin, it is proving to be a wonder drug, it has already won the Nobel prize in medicine in 2015 for its impacts on global health in the eradication of parasitic diseases.

It is proving to be an immensely powerful anti-inflammatory agent.

It is critical for its use in this disease we again stand by our manuscript it is a scientific major.

We have a thousand patients in the hospital right now, dying, **I am a lung specialist,** I am an ICU specialist I have cared for more dying Covid19 patients, than anyone can imagine.

They are dying because they can't breathe, they are on high flow oxygen delivery devices they are on non-invasive ventilators, and or they are sedated and paralysed, and attached to mechanical ventilators that breathe for them.

And I watch them every day, they die, by the time they get to me in the ICU they're already dying they are almost impossible to recover.

Early treatment is key, we need to offload the hospitals, we are tired I can't keep doing this, if you look at the manuscript, and if I have to go back to work next week any further deaths are going to be needless deaths.

And I cannot be traumatized by that.

I cannot keep caring for patients, when I know that they could have been saved, with earlier treatment and that drug, that will treat them and prevent the hospitalization is Ivermectin.

What I am trying to message today is in our manuscript, we now have 11 randomized controlled trials, every one of those controlled trials show that in the Ivermectin treated group, lives are saved, there's less need for hospitalization, there's less transmission, less case counts.

It is a fundamentally and powerfully effective therapy against Covid19.

We have the data, let me say the amount of patients in those 11 randomized control trials total nearly 4,000, with over half treated with Ivermectin.

Let's remind ourselves that the treatment of Covid19, fundamentally changed after the recovery trial was announced in June 2020 that was a trial of 6,000 patients, 2,000 were treated with steroids, and it showed the dramatic and life-saving properties of Corticosteroids.

Almost overnight the treatment of Covid19 changed, as a result of that trial.

That was the recovery trial. I am presenting a paper today, with more patients treated with Ivermectin, with larger magnitudes of benefit than the recovery trial. I will maintain, that Ivermectin should be the standard of care of this disease, based on these data.

It's not my opinion, it's the data we have the data.

The data shows the ability of the drug Ivermectin to

prevent COVID-19, to keep those with early symptoms from progressing to the hyper-inflammatory phase of the disease, and even to help critically ill patients recover.

I almost can't describe what this data shows; people need to read the manuscript.

We have 4 randomized control trials in prophylaxis, each and every one highly statistically significant patients, or people, even healthy citizens on Ivermectin do not get Covid19.

Every single randomized controlled trial shows, that in the households that were on Ivermectin, drastically reduced rates of transmission.

The households did not get sick, you can protect people from this disease with Ivermectin, that's just the prophylaxis trials.

These are from multiple centres, and countries around the world almost every single one.

We have 4 large randomized controlled trials in the hospital, all statistically significant reductions mortality." - Dr Pierre Kory, MD, in "Early Outpatient Treatment: An Essential Part of a COVID-19 Solution", Senate Committee on Homeland Security and Governmental Affairs, 8 December 2020.

I Don't think We Should Ever Shake Hand Ever Again

"I don't think we should ever shake hand ever again, to be honest with you. Not only would it be good to prevent coronavirus disease – it probably would decrease the incidence of influenza in this country." - Dr Anthony Fauci, MD, Director of the National Institute of Allergy and Infectious Diseases (NIAID) since 1984, in "The Journal Podcast", 7 April 2020.

Recipient	Status	Purpose of Grant	Amount
National Institute of Parasitic Disease, Chinese CDC No 207 Ruijin Second Road Luwan District Shanghai, 31, China 200025	Gov: Foreign Government	Global Health and Development Public Awareness and Analysis	$200,000
National Institute of Parasitic Disease, Chinese CDC No 207 Ruijin Second Road Luwan District Shanghai, 31, China 200025	Gov: Foreign Government	Global Health and Development Public Awareness and Analysis	$600,190

- source: Bill and Melinda Gates Tax Form 990-PF, Extended to 15 November 2019.

National Institute for Nutrition and Health, Chinese CDC No 29 Nanwei Road Xicheng District Beijing, 11, China 100050	Gov: Foreign Government	Global Health and Development Public Awareness and Analysis	$50,000
National Institute of Parasitic Disease, Chinese CDC No 207 Ruijin Second Road Luwan District Shanghai, 31, China 200025	Gov: Foreign Government	Global Health and Development Public Awareness and Analysis Malaria	$1,755,045

- source: Bill and Melinda Gates Tax Form 990-PF, Extended to 16 November 2020.

Please note: **The 2018 Bill and Melinda Gates Tax Form 990-PF makes for an eye opening reading**, just look at CDC on it.

Microsoft 365 Rolled Out to 1.2 Million NHS Staff

Microsoft has signed a "landmark" agreement with the UK's National Health Service to make Microsoft 365 available to some 1.2 Million healthcare staff in England.

The deal, which NHSX CEO Matthew Gould said represented savings "of hundreds of millions of pounds", will see Microsoft's cloud platform rolled out to NHS hospital trusts, clinical commissioning groups (CCGs) and data teams to improve security and connectivity between organizations.

"**Announcing the deal, Matt Hancock, Secretary of State** said:

> *"Adopting the most up to date digital tools and operating systems are crucial for a modern day NHS - allowing staff to work as efficiently as possible which will deliver even better care for patients.* ***We have seen incredible, innovative uses of technology throughout the NHS during the covid-19 pandemic and this new deal with Microsoft*** *will pave the way for that to continue by ensuring we get the basics right."*

Sarah Wilkinson, CEO at NHS Digital said:

> ***"I'm delighted that we have been able to conclude these negotiations with Microsoft successfully. This deal will allow the NHS to derive productivity and collaboration benefits from the use of numerous Microsoft products*** *and will strengthen cyber security across the system.* ***I would also like to thank Microsoft for allowing NHS Digital to deploy***

numerous licences at no cost in recent months in response to the pandemic. They have been a superb partner throughout this crisis and we look forward to extending this partnership in the years ahead".

Cindy Rose, CEO, Microsoft UK said:

"Microsoft is proud to support the NHS any way we can, especially in these challenging times. Since COVID-19, the NHS has rapidly accelerated its adoption of digital tools to enable clinicians and support staff to perform their life-saving work more effectively."

The timing of the agreement coincides with the licence renewal period of a number of NHS organisations in England." - in "Landmark IT deal will provide access to digital tools and save hundreds of millions of pounds for the NHS", NHS Digital, 15 June 2020.

NHS Property Services (Private Company)

"**NHS Property Services is a private company** that provides property and facilities management services to **10% of the NHS estate.**

Formed in 2013, NHS Property Services is tasked with both modernising and generating income from NHS property. **NHS Property Services was formed in 2013 following the merger of property services departments from 161 NHS Primary Care Trusts across England.**

Today, the NHS Property Services portfolio consists of 3,500 buildings worth over £3 Billion.

With investment in frontline patient care as the primary objective for NHS Property Services, a change in mind-set was necessary, and executing a robust digital transformation strategy was vital to improve services and accelerate business growth.

To execute at pace and ensure solutions were designed to be future-proof, **NHS Property Services adopted a cloud approach using the Microsoft Azure platform**, using the QuickConnect Integration-Platform-As-A-Service (iPaaS) accelerator to design, develop, implement and manage the solution." - in "NHS Property Services Generates New Revenue Streams more Efficiently with Quickconnect NHS Property Services", Reply, February 2021.

Microsoft, Salesforce, Oracle To Develop a Digital Covid Vaccination Passport

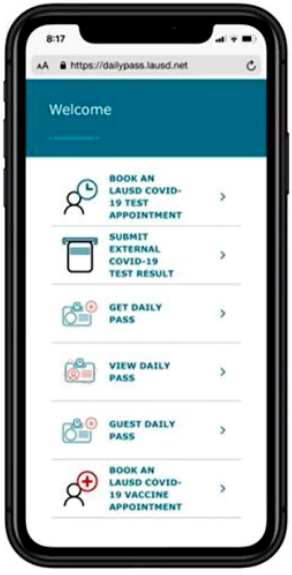
"**Some of the country's biggest tech firms and health care organizations have joined together to help facilitate that return to "normal"**. The group, called the **Vaccine Credential Initiative**, wants to ensure that everyone has access to a secure, digital record of their Covid-19 vaccination - like a digital vaccine passport." - in CNN, 17 January 2021.

"Airlines, workplaces and sports stadiums may soon require people to show their coronavirus vaccination status on their smartphones before they can enter.

"For some period of time, most all of us are going to have to demonstrate either negative Covid-19 testing or an up-to-date vaccination status to go about the normal routines of our lives. **Whether it's getting on an airplane and going to a different country, whether it's going to work, to school, to the grocery store, to live concerts or sporting events.**" - Dr. Brad Perkins, the chief medical officer at the Commons Project Foundation, an organization in Geneva that is a member of the vaccine credential initiative." - in "The New York Times", 14 January 2021.

"This initiative is developing in tandem with other digital passport projects, including the CommonPass from The Commons Project Foundation, **in partnership with the World Economic Forum. To safely return to travel, work, school, and life.** Open standards and interoperability are at the heart of **Vaccine Credential Initiative (VCI's) efforts** and we look forward **to supporting the World Health Organization and other global stakeholders.**" - in "PhocusWire", 18 January 2021.

"On 28 December 2020, Spain's Health Minister Salvador Illa said the country will create a registry to show who has refused to be vaccinated and that the database could be shared across Europe." *- in "Microsoft, Salesforce and Oracle back plan to develop a digital Covid vaccination passport", CNBC, 14 January 2021.*



DAILY PASS

- Helps students, families and staff with daily health check and access to COVID tests and vaccinations
- State-of-the-art technology developed by Microsoft
- LA Unified is the first school district and, likely the largest employer, in the nation to implement this solution

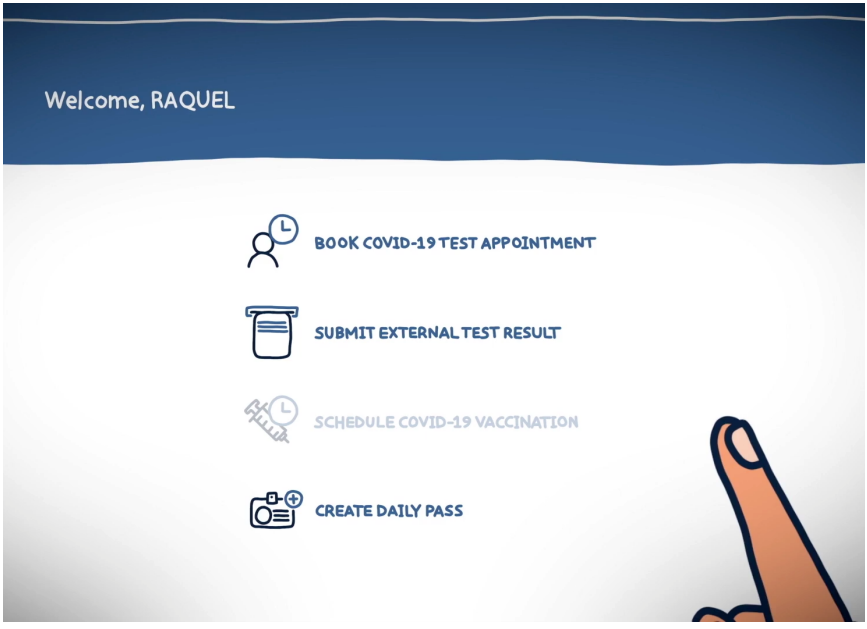
Microsoft

Access the Daily Pass, Los Angeles Unified School District

"Los Angeles Unified has launched a one-stop shop web app built specifically for the District to ensure that we get students, faculty and administrators back to schools and district offices as safely as possible. In addition to completing a daily health check through the app, users will be able to book COVID-19 tests and receive test results and messages.

This innovative tool was developed in partnership with Microsoft to bring our students back into the classrooms with the following easy steps:

1. Students, parents and visitors will access the Daily Pass on any computer, tablet or mobile device at dailypass.lausd.net.
2. Answer the daily health check questions (not more than a two-minute process!)
3. If the individual has recently tested negative for COVID-19 and completes the online health check, a QR code will be generated for that day and specific site location
4. School staff members dedicated to be "Welcomers" will be at every site to scan the QR code and take your temperature at the entrance." - in "Introducing the Daily Pass", Los Angeles Unified School District, February 2021.



For what Profits a Man if he Gains the Whole World but Loses his Own Soul

"For the world at large normalcy only returns when we have largely vaccinated the entire global population.

This is the biggest event that people will experience in their entire lives.

We will have standby Diagnostics, we will have deep antiviral libraries, we will have antibody scale-up, we will have vaccine platforms, we will have early warning systems, we will do germ games.

The cost of doing all those things, well, is very small compared to what we are going through here.

And so now people realize **there really is a meaningful probability every 20 years or so, with lots of world travel that one of these will come along, and so the citizens expect the government to make it a priority.**

You know, won't cost as much as the defence budget, say, but it will be a a meaningful investment some of those investments. Will help medical work in other areas, you know, a vaccine platform." - Bill Gates in "Coronavirus: Bill Gates speaks to the FT about how to tackle the pandemic", Financial Times, 9 April 2020.

The 20 Years Pandemic Cycle

"Getting a drug to market costs an average of £1 Billion and is the product of 10 to 12 years of Research and Development (R&D).

"Pharmaceutical companies are commercial entities. The development of drugs is a risky, expensive business. It takes enormous time and energy to implement.

Without patent rights, which give a monopoly for 20 years, vaccines and other drugs wouldn't be developed." - in "Have COVID-19 vaccines changed intellectual property for good?", Raconteur, 26 January 2021.

When Will Life Return Back to Normal?

"Even trough early 2022, ***unless we help other countries get rid of this disease, and we get high rates of Vaccination in our country the risk of reintroduction will be there. Something between 12 to 18 months we have a chance if we manage it well to get back to normal." - Bill Gates*** *in "Tapper asks Gates when he thinks we'll be* ***back to "normal", CNN, 13 December 2020.***

"The Bill and Melinda Gates Foundation annual letter, has

now just come out.

You both write about **how this pandemic, in your view will be as defining as World War II.**

What are the key steps to take right now?

We have to do 2 things at once; **we have to bring this epidemic to the to an end, primarily by getting the Vaccine out in large numbers to the entire world.**

And we have to make sure that we are ready.

Because there will be another pandemic.

We made mistakes before the epidemic, and not investing more. And then during the epidemic we also made mistakes.

There is one category we did well, which was getting Research & Development money out to the vaccine companies.

The USA was the biggest at that, and so at least, in that one area we have set a model for the world." - in **"Bill Gates** Warns The "Next Pandemic" Is Coming After Covid-19 - And How To Stop It", MSNBC, 28 January 2021.

The Lockdowns Are Hurting People, These Are Not Victimless Crimes

"The lockdowns will go down as one of the worst decisions ever made in the history.

The lockdowns they are a luxury of the rich.

If you have money you can survive a lockdown.

If you don't, you have to fight and barely get by.

Every metric we have for a declining society is up.

Every metric, because of these lockdowns 150 Million more people worldwide, will go into extreme poverty, because we decided to shut off global supply chains, shut off the movement of people, goods and services, 15,000 scientists signed the Great Barrington Declaration, that said:

The lockdowns are the greatest threat to human health.

The lockdowns are hurting people these are not victimless crimes, 1 out of 4 of young people contemplated suicide in our country the last 90 days, anti-depressant medication is up 600% in our country, 40% of US adults reported struggling with mental health, US Army suicides have increased 30% during the pandemic compared to 2019.

How about small businesses Yelp says that 60% of their restaurants on their Aplication will never reopen. Who owns small businesses, who owns these restaurants, all of you out here.

What happened to the ruling class in this country Jeff Bezos (amazon.com) is richer than he ever has been, the wealthy and the rich, god bless them, are well, it is the collectivist class that has been calling the shots in this country, that hurt the little guy through these lockdowns.

And they say; well it's to stop the spread; that's a lie.

52% of my generation is now living at home with their parents, up from 37% last year.

The average student loan debt is $31,000 dollars per borrower, that then goes graduates college with very little to any skills.

We shut down the country the last 9 months, and what are we playing with right now in western society, if we do not fully reopen our economies, and fully reopen our schools.

Will be irreparable damage to the backbone of our republic, that will only give license to a socialist demagogue to get power." - Charlie Kirk, in "Watch This Before You Consider Another Lockdown", Turning Point USA, 1 January 2021.

Power On a Level Without Precedent In Human History

"The Nation found close to $250 Million in charitable grants from the Gates Foundation to companies in which the foundation holds corporate stocks and bonds: Merck, Novartis, GlaxoSmithKline, *Vodafone, Sanofi, Ericsson, LG, Medtronic, Teva, and numerous start-ups- with the grants directed at projects like developing new drugs and health monitoring systems and creating mobile banking services. A foundation [that] stands to benefit from financially. By Bill and Melinda Gates's estimations, they have seen an 11% tax savings on their $36 Billion in charitable donations through 2018, resulting in around $4 Billion in avoided taxes." - Tim Schwab, in "Bill Gates Gives to the Rich (Including Himself), 17 March 2020.*

"The Nation uncovered "$2 Billion in tax-deductible charitable donations [Bill and Melinda Gates Foundation] to private companies, including some of the largest businesses in the world, as GlaxoSmithKline, Unilever, IBM, and NBC Universal Media". It queried the ethics of "a foundation giving a charitable grant to a company that it partly owns - and stands to benefit from financially - [which] would seem like an obvious conflict of interest". It also points out that the foundation's protection of patents which make life-saving drugs prohibitively expensive rebounds on the vulnerable people the foundation is allegedly trying to help." - Breda O'Brien, in "Time to question our tech billionaire overlords", The Irish Times, 13 February 2021.

We Have to Prepare for the Next One

"We'll have to prepare for the next one, that you know, I'd say we'll get attention this time." *- in "A Special Edition of Path Forward with Bill and Melinda Gates", U.S. Chamber of Commerce Foundation, 23 June 2020.*

Are We Ready for the Next Pandemic?

"The next epidemic could originate on a super contagious and deadly strain of the flu.

Epidemiologists say a fast-moving airborne pathogen could kill more than 30 Million people in less than a year.

And even if the next pandemic isn't on the scale of the 1918 flu, we would be wise to consider the social and economic turmoil that might ensue if something like Ebola made its way into a lot of major urban centers.

The good news is that with advances in biotechnology, new vaccines and drugs can help prevent epidemics from spreading out of control.

First and most importantly, **we have to build an arsenal of new weapons - vaccines, drugs, and diagnostics. The cost of ensuring adequate pandemic preparedness worldwide is estimated at $3.4 Billion a year.**

Imagine if I told you that somewhere in this world, there's a weapon that exists - or that could emerge - **capable of bringing economies to a standstill, and throwing nations into chaos.**

I'm optimistic that a decade from now, we can be much better prepared for a lethal epidemic - **if we're willing to put a fraction of what we spend on defence budgets and new weapons systems into epidemic readiness.**"- Bill Gates, in "Munich Security Conference", 17 February 2017.

*"I mentioned **SARS epidemic in Hong Kong**. And that's where the SARS virus, which is a **corona virus** is a whole family a new family that we know and it **probably comes from bats**. Here this is from the annual report of the **World Economic Forum**, they publish every year a very interesting report, is called the Global Risks Report." - Dr Peter Piot, MD in "Are We Ready for the Next Pandemic?", 29 June 2018.*

*"I think the chances that the next pandemic will be caused by a novel virus are quite good", says Kevin Olival, a disease ecologist from the EcoHealth Alliance. One not-so-surprising finding was that **the next pandemic will probably emerge from bats.**" - Future, BBC, 14 November 2018.*

"During the past 2 decades, 3 zoonotic coronaviruses have been identified as the cause of large-scale disease outbreaks-Severe Acute Respiratory Syndrome (SARS).

It is highly likely that future SARS, or MERS, like coronavirus outbreaks will originate from bats, and there is an increased probability that this will occur in China." - Yi Fan, Kai Zhao, **Zheng-Li Shi**, Peng Zhou, CAS Key Laboratory of Special Pathogens and Biosafety, Wuhan Institute of Virology, Chinese Academy of Sciences, Wuhan, in "Bat Coronaviruses in China", Viruses, 2 March 2019.

***"Most people we know today, died from complications from Pneumonia, from Bacterial Pneumonia."** - Dr Peter Piot, MD in "Are We Ready for the Next Pandemic?", 29 June 2018.*

Opinion Global Development

"**It's time for Africa to rein in Tanzania's anti-vaxxer president.** John Magufuli cavalier disregard of Covid's impact in the great lakes region is fuelling conspiracies and endangering lives." - in **"The Guardian", Global Development is funded by support provided, in part, by the Bill and Melinda Gates Foundation, The only restriction to the Guardian's coverage on this site is where the Bill & Melinda Gates Foundation is prohibited under US law from directly funding or earmarking funds to: (a) influence the outcome of any domestic or foreign election for public office; or (b) support lobbying or other attempts to influence legislation (local, state, federal, or foreign)**, 8 February 2021.

I Am a British in Tanzania, No Covid Problem Here

"I left London for Tanzania 3 weeks ago. they can't afford Covid BS here. no masks, no social distancing and guess what.... no covid deaths...."- Petespirals, comment in "Masks: Necessary Protection OR Political Symbol?, Russell Brand", Azshow, 1 January 2021.

"Grow up says a man who hasn't even learnt to brush his hair. Covid is not here in Tanzania, does that mean the whole country is wrong and needs to grow up?

Thinking of some of his rude comments about certain people and countries I wonder who really needs to sort his maturity levels out.". - Petespirals, comment in "Covid sceptics - grow up! Boris slams Covid sceptics as hospitals reach capacity", UAshow, 11 January 2021.

> ***"I left London for Tanzania, no Covid at all here. Bullshit is a luxury they can't afford here."*** *- Petespirals, comment in "Something "very strange" is occurring amid Europe's Second Wave of Infections ", Kzpost, 16 January 2021.*

"**I am a brit in Tanzania. There is no covid problem here.**

My partner has a friend who works in the hospital.

The president is a strong man who rejects the Bull Shit from the rich countries trying to control his country.

He tested a mango and a goat which both were tested positive for Covid 19.

Its great here. Its free.

No masks, no social distancing, no fear.

Laughing happy people. For once there is a president who cares about his people." - Petespirals, comment in "Interference, Hugo Talks", Youtube, 8 February 2021.

> ***"Bill Gates Foundation plans to spend more than $300 Million in Tanzania*** *this year on public health and poverty reduction programs.* ***In an interview, the billionaire said aid was now being spent "in a smarter way" in some parts of the world."*** *- in "Gates foundation to spend over $300 million in Tanzania in 2017", Reuters, 13 Aug 2017.*

"**During the roundtable discussions, Bill Gates referred to the importance he places on his Foundation's work in Tanzania, talked about the potential for merchants to receive electronic payments,** and of how interoperability could reach across the region.

He also discussed how **he could support Tanzania in achieving joined-up systems for IDs and government payments.**

The second roundtable, hosted by the **Governor of the Bank of Tanzania, Professor Benno Ndulu (Ndulu also served on the board of the Bill and Melinda Gates).**

He was joined by Bill Gates and key policymakers from the Bank of Tanzania, government ministries." - in "Bill Gates in Dar es Salaam this week to support financial inclusion and the future of digital financial services in Tanzania", Financial Sector Deepening Trust, 2017.

Something "Very Strange" Is Occurring Amid Europe's Second Wave of Infections

"Something "very strange" is currently taking place in Europe amid its second wave of coronavirus infections, according to Sky News host Andrew Bolt.

He said in France there has been a huge second wave of infections, "bigger than the first one, but no increase in deaths. Which is strange".

The same in many other European countries.

In Britain there is a "big second wave of infections, but not a second wave of deaths". - in "Sky News Australia", 22 September 2020.

How to Lie With Statistics

"I picked up this short, easy-to-read book **How to Lie With Statistics, by Darrell Huff,** after seeing it on a Wall Street Journal list of good books for investors.

A useful introduction to the use of statistics, and a helpful refresher for anyone who is already well versed in it." - Bill Gates, in "Beach Reading (and more)", GatesNotes, 19 May 2015.

There Are Three Kinds of Lies: Lies, Damned Lies, and Statistics

"Now, however, as this has been rightly emphasized innumerable times is, the statistical method a double-edged sword.

With caution, it gives the most useful results, with inadequate results consideration of all possible sources of error leads them to the most erroneous losses!

I just got a good story from an Englishman who shares his view of lies as follows defined:

"There are three kinds of lies: lies, damned lies, and statistics."

What misleading conclusions one can come to on a statistical basis, can has just been shown in the question that concerns us here, in which of the sources of error unfortunately just too many, and as I immediately show will exist, partly with difficulty, partly unavoidable." - Professor Sir Felix Semon, FRCP, in "Archiv Fur Laryngologie und Rhinologie", 1897.

Covid-19 Global Deaths

3,258,680

- in "COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at **Johns Hopkins University", 7 May 2021.**

COVID-19 Has Caused 6.9 Million Deaths Globally, More Than Double what Official Reports Show

"A new analysis by the Institute for Health Metrics and Evaluation (IHME) at the University of Washington School of Medicine.

The 20 countries with the highest number of total COVID-19 Deaths, March 2020 to May 2021

Country	Total COVID-19 Deaths	Reported COVID-19 Deaths
United States of America	905,289	574,043
India	654,395	221,181
Mexico	617,127	217,694
Brazil	595,903	408,680

Russian Federation	593,610	109,334
United Kingdom	209,661	150,519
Italy	175,832	121,257
Iran	174,177	72,906
Egypt	170,041	13,529
South Africa	160,452	54,390
Poland	149,855	68,237
Peru	147,765	62,739
Ukraine	138,507	46,737
France	132,680	105,506
Spain	123,786	85,365
Germany	120,729	83,256
Indonesia	115,743	45,938
Japan	108,320	10,390
Romania	87,649	28,382
Kazakhstan	81,696	5,620

Our analysis estimates that by 3 May 2021, the total number of COVID-19 deaths was 6.93 Million, a figure that is more than two times higher than the reported number of deaths of 3.24 Million.

COVID-19 Acknowledgements:

We wish to warmly acknowledge the support of these and others who have made our COVID-19 estimation efforts possible:

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Microsoft AI for Health
National Institute on Minority Health and Health Disparities (NIMHD), **National Institutes of Health (NIH)**
National Science Foundation
Our World in Data

Premise
Qumulo
Real Time Medical Systems
Redapt
SafeGraph
The COVID Tracking Project
The Johns Hopkins University
The Kuwait Foundation for the Advancement of Sciences (KFAS)
The New York Times
UNESCO
University of Maryland
University of Miami Institute for Advanced Study of the Americas (Felicia Knaul, Michael Touchton, and Héctor Arreola-Ornela)
US Department of Health and Human Services
Wellcome Trust
World Health Organization
The many Ministries of Health and Public Health Departments across the world, collaborators, and partners for their tireless data collection efforts." - in "COVID-19 has caused 6.9 million deaths globally, more than double what official reports show", Institute for Health Metrics and Evaluation, University of Washington, 6 May 2021.

The Influence of Mass Protests in Hong Kong & its Effect on the Appearance of SARS Covid Virus Pandemics

The casual effects of the appearance during the Flu Season in Hong Kong, coinciding with mass protests.

It is, a remarkable, and peculiar phenomenon that has evaded political and Medical Trade science brains since 2002.

On the 1st July 1997, Hong Kong has been placed under Chinese Party control.

The People of Hong Kong staged their first protests.

> *"The Hong Kong 1 July protests is an annual protest rally originally held by the Civil Human Rights Front from the day of handover in 1997 on the HKSAR establishment day. However, it was not until 2003 that the march drew large public attention by opposing the legislation of Basic Law Article 23. The 2003 protest, with 500,000 marchers, was the second-largest protest seen in Hong Kong since the 1997 handover." - in "Wikipedia"*

"Two strains of the virus have caused outbreaks of severe respiratory diseases in humans: severe acute respiratory syndrome coronavirus (SARS-CoV or SARS-CoV-1), which caused the 2002–2004 outbreak of severe acute respiratory syndrome (SARS), and severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which is causing the current pandemic of COVID-19.

Signs and Symptoms

SARS produces flu-like symptoms and may include fever, muscle pain, lethargy, cough, sore throat, and other nonspecific symptoms.

The only symptom common to all patients appears to be a fever above 38 °C (100 °F).

SARS may eventually lead to shortness of breath and Pneumonia." - in "Wikipedia"

SARS Covid "Viruses" Unknown to History Before 2002

"**19 February 2002**

Hong Kong's chief executive, Tung Chee-hwa, secures a 2nd 5 year term in office without facing an election challenge or getting a single vote from the public.

24 June 2002

Tung Chee-hwa announces a new cabinet of ministers to help him run the territory. The appointments mark the biggest shake-up in the territory's government since it ceased to be a colony. In its 2002 annual report, the Hong Kong Journalists Association says that freedom of expression has deteriorated in the last 5 years.

30 June 2002

Events begin in Hong Kong to mark 5 years since the territory was handed back from British to Chinese sovereignty. There are street parades and demonstrations by democratic activists opposed to a 2nd term for Hong Kong's chief executive, Tung Chee-hwa." - in "Timeline: Hong Kong", The Guardian, 1 July 2002.

Protests	Pandemics 2002-2003	Deaths
The 2003 protest, with 500,000 marchers, was the second-largest protest seen in Hong Kong since the 1997 handover.	(16 National Congress of the Chinese Communist Party 8-14 November 2002) On 16 November 2002, an outbreak of severe acute respiratory syndrome (SARS) began in China's Guangdong province, bordering Hong Kong	China 349 HK 299 USA 0 UK 0

The Italian Factor - Deja-vu

"Italian physician Carlo Urbani was the first to identify SARS as probably a new and dangerously contagious viral disease.

In 1987 Urbani went to Ethiopia for 1 month. In 1989 he was primary aid in the infectious diseases department of Macerata, Italy.

After years working in the epidemic medicine field, in 1993 he became an external consultant of the World Health Organization WHO.

Urbani was called into The French Hospital of Hanoi, Vietnam, in late February 2003 to look at an American patient, businessman Johnny Chen, who had fallen ill with what doctors thought was **a bad case of influenza.**

Urbani immediately notified the WHO, triggering a response to the epidemic (principally isolation and quarantine measures) that would end it within 5 months. He also persuaded the Vietnamese Health Ministry to begin isolating patients and screening travellers, thus slowing the early pace of the epidemic.

On 17 March, an international network of 11 laboratories was established to determine the cause of SARS and develop potential treatments.

On 29 March, Urbani died in Bangkok of a heart attack." - in "Wikipedia"

Tedros (L) Urbani (R)

Urbani (L) Tedros (R)

On 27 March 2003, Arthur K. C. Li, head of the Hong Kong Education and Manpower Bureau, announced cancellation of all classes in educational institutions.

On 30 March, Hong Kong authorities quarantined estate E of the Amoy Gardens housing estate.

Protests **2019–20 Hong Kong protests**	**Pandemic** **2019-2020**
"In 2019, the anti-extradition bill protest on 16 June broke the record of largest protest in Hong Kong with nearly 2 million marchers. The 1 July march in the same year with 550,000 marchers, was the largest 1 July march. In 2020, despite a police ban citing gathering limits during the COVID-19 pandemic, and a dramatically altered legal situation due to the national security law that had come into force only the previous evening, marches with a total of tens of thousands of participants." in "Wikipedia"	HK 191 Deaths

After Its Arrival SARS Vanishes

> ***"Not a single case of the severe acute respiratory syndrome has been reported this year 2005 or in late 2004.*** *It is the first winter without a case since the initial outbreak in late 2002. In addition, the epidemic strain of SARS that caused at least 774 deaths worldwide by June 2003 has not been seen outside of a laboratory since then." - Jim Yardley in "After Its Epidemic Arrival, SARS Vanishes", The New York Times, 15 May 2005.*

We Could Live With Covid-19 "Like we do Flu", says Hancock

"UK Health Secretary Matt Hancock said he hoped that **Coronavirus will become "another illness that we have to live with"; like flu.**

> ***"I hope that Covid-19 will become a treatable disease by the end of the year. If Covid-19 ends up Like Flu,*** *so we live our normal lives,* ***and we mitigate through vaccines and treatments****, then we can get on with everything again." - Matt Hancock told The Daily Telegraph*

- in "Coronavirus could become a "treatable disease" by the end of the year, says Matt Hancock", Sky News, 13 February 2021.

Covid-19 Also Cured Influenza And Other Respiratory Disease

"They said that Covid is crowding out the Flu, so Covid, is basically muscled in on the Flu's territory, and only Covid can do that." *- Patrick Henningsen, in UK Column, 26 March 2021.*

"The key point here is this fall in cases, fallen deaths the result of vaccination? Or is it the result of, well the end of the normal winter respiratory illness season. The vaccines were deployed at a very key moment, just in time to for the claim*s to be possible that the vaccination caused the fall in mortality and so on." - Mike Robinson, in "Coronavirus Act Enthusiastically Renewed in Parliament", UK Column, 26 March 2021.*

"Health Secretary Matt Hancock: "We know the vaccine is safe" and its success explains why deaths in the UK are "falling so fast." Hancock said it explains why deaths in the UK are "falling so fast", down a third in the past week." *- in "Manchester Evening News", 17 March 2021.*

Moderna to Create Dual COVID-19 / Flu Vaccine

"In the year that has been the novel coronavirus, the flu has taken a backseat, with cases at historic low.

Moderna, the maker of the second COVID-19 vaccine to see emergency use approval in the US, is now looking to create a dual vaccine against the flu, and the novel virus, the company's chief executive recently said.

"A high efficacy seasonal flu Vaccine, and a Covid Vaccine for you at your pharmacy, on an annual basis." *- Stephane Bancel, Moderna CEO*

- in "Moderna to create dual COVID-19, flu Vaccine, CEO says", Fox News, 24 March 2021.

Please note that in the United Kingdom there where only 7 cases of Flu in Hospital, since Christmas 2020 to 26 of March 2021.

> ***"Bill Gates said before the Massachusetts Medical Society, stressing the importance of U.S. funding for advanced research on new therapeutics, including a universal flu vaccine, which would protect against all or most strains of influenza, also announced a $12 Million Grand Challenge in partnership with the family of Google Inc. co-founder Larry Page to accelerate the development of a universal flu vaccine."***
> *- in "The Washington Post", 27 April 2018.*

UK Will Treat Covid Like Seasonal Flu, says Whitty

"It is clear we are going to have to manage it, rather like we manage the flu. We need to work out some balance which actually keeps it at a low level, minimises deaths as best we can, but in a way that the population tolerates, **through medical countermeasures, like vaccines and in due course drugs.**" - in "No more lockdowns: UK will treat Covid like seasonal flu, says Chris Whitty", City AM, 1 April 2021.

Ireland Analysis of Underlying Cause of Death Data, including COVID-19

January - October 2020

Total registered deaths[1] **by sex and age group**

Sex	
Male	11,361
Female	11,055
Age group	
Under 25	162
25-49	707
50-64	2,300
65-79	7,023
80 and over	12,224
Total deaths registered	22,416

[1]Includes deaths which occurred in 2020 only.

"Key Findings

- A total of 22,416 deaths occurred between 1 January 2020 and 31 October 2020 and were registered with the **General Registrar's Office** (GRO) and subsequently notified to the **Central Statistics Office** (CSO)
- Cancer (7,269) and Diseases of the circulatory system (5,886) were the leading **Underlying Cause of Death** (UCOD) for all deaths registered in the first 10 months of 2020, accounting for 13,155 deaths or 58.7% of deaths

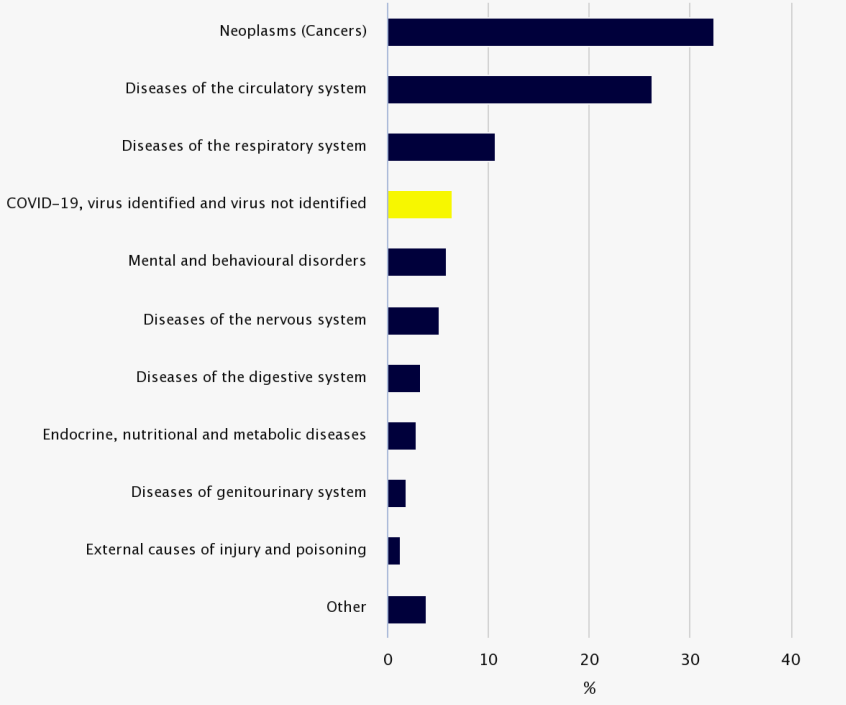
COVID-19 Related Deaths

- COVID-19 was the 4th UCOD and accounts for 1,462 deaths or just over 6.5% of total deaths in the year to date
- COVID-19 was:
    - 5th highest UCOD in the 65 – 79 and the 80 and Over Age categories
    - 6th highest for 50 – 64 age group
    - 8th highest in 25 – 49 age group
    - Not in the top 10 UCOD for the under 25 age group

Other Causes of Death

- Cancer was the highest UCOD in Ireland for both males and females, accounting for 3,897 male deaths and 3,372 female deaths
- Cancer and Diseases of the circulatory system were either the first or second highest UCOD for all deaths currently registered in each of the 25 and over age groups
- Congenital malformations, deformations & chromosomal abnormalities were the highest UCOD in the under 25 age category accounting for 48 deaths (29.6%)
- In the 80 or over age category, Mental & behavioural disorders accounted for 1,062 deaths (8.7%), which includes conditions such as dementia

Figure 1: Percentage breakdown of top ten registered causes of death, January er 2020



Introduction

- The analysis included in this Frontier Series Output is based on deaths that have occurred between 1 January 2020 and 31 October 2020 and have been registered with the General Registrar's Office and subsequently notified to the Central Statistics Office (CSO).
- On receipt of the data, one of the key tasks for the CSO is to assign the Underlying Cause of Death (UCOD). The UCOD refers to the disease or injury that initiated the train of morbid events leading directly to death or the circumstances of the accident or violence that produced the injury.

- All deaths, including COVID-19 deaths, are treated in the same way i.e. each record is assigned an UCOD based on the narrative details reported on the death certificate, in line with the World Health Organisation (WHO) International Statistical Classification of Diseases and Related Health Problems (ICD-10) classification. (The hierarchy in which the causes are written on the death certificate impacts on the assignment of the UCOD.)
- There are a number of important points to consider:
- It is important to note that there will be a number of deaths where COVID-19 will not be assigned as the UCOD and therefore, the COVID-19 deaths in this analysis, will vary from those put into the public domain by the Department of Health.
- It is also worth noting that the tables in this analysis report COVID-19 related deaths in the category **"COVID-19, virus identified and virus not identified"** i.e. COVID-19, where there was a confirmed laboratory test or where there was a clinical or epidemiological diagnosis but the laboratory testing was inconclusive or not available.
- A COVID-19 death is defined, for surveillance purposes, as a death resulting from a clinically compatible illness in a probable or confirmed COVID-19 case, unless there is a clear alternative cause of death that cannot be related to COVID-19 (e.g. trauma). There should be no period of complete recovery between the illness and death. Additional information on the approach to coding COVID-19 as the UCOD is included in the Background Notes below.
- Legally, in Ireland, a death can be registered up to 3

months after the date of occurrence and therefore not all deaths that took place between 1 January 2020 and 31 October 2020 are included in this. The CSO estimates that approximately 2,500 to 3,500 deaths remain to be registered covering the period of analysis in this output. However, the number of deaths yet to be registered are of a scale that they are unlikely to significantly impact the ranking of the categories included in this analysis - with the exception of deaths assigned an UCOD of *External causes of injury and poisoning* which are likely to be underrepresented in this release.

- Deaths assigned an UCOD of *External causes of injury and poisoning* (including deaths from road traffic accidents and deaths from intentional self-harm), are likely to be underrepresented in this analysis as such deaths are very frequently reported to the Coroner's Office for further investigation. This can then result in such deaths being registered late (more than 3 months after the date of occurrence) and therefore have not yet been reported to the CSO.

Underlying Cause of Death by Sex

- An analysis of the top 10 Underlying Causes of Death (UCOD) by sex shows that:
- *Cancer (Neoplasms)* was the highest UCOD in Ireland for both males and females, accounting for 3,897 male deaths and 3,372 female deaths. Total deaths from *Cancer* were 7,269, accounting for just over 32.4% of all deaths in the first 10 months of the year
- *Diseases of the circulatory system* were the second highest UCOD for both males and females. This cause

of death accounted for 5,886 deaths or just under 26.3% of all deaths in the first 10 months of the year

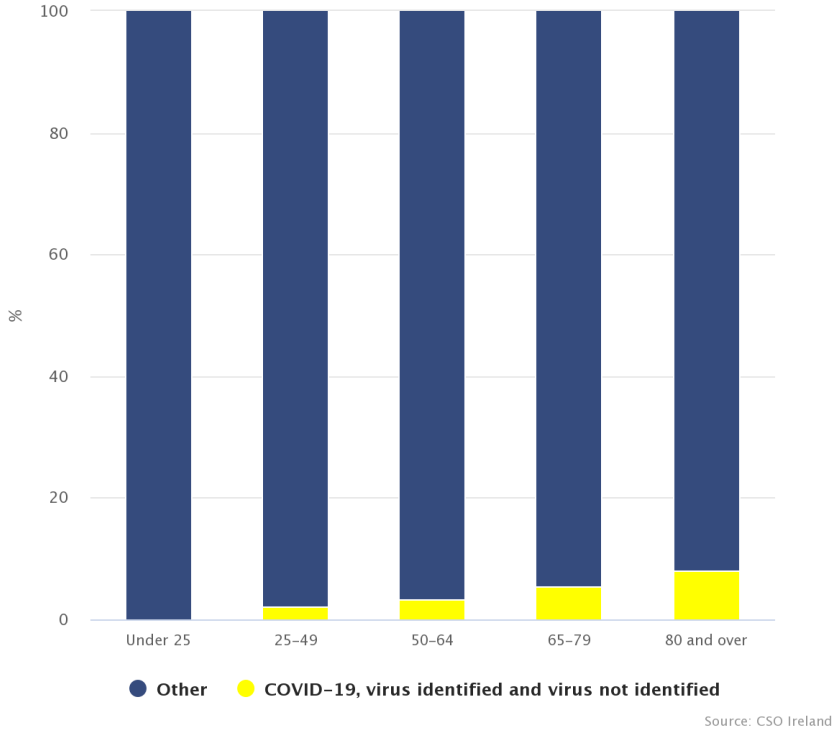
- *COVID-19, virus identified and virus not identified*, was the 4th highest cause of death for males (732 deaths) and the fifth highest cause of death for females (730 deaths). In total, *COVID-19, virus identified and virus not identified*, accounted for 1,462 deaths or just over 6.5% of all deaths in the year to date

Table 1 Top 10 registered causes of death **by sex, January - October 2020**

Underlying cause of death	Male	Female	Total persons
Neoplasms (Cancers)	3,897	3,372	7,269
Diseases of the circulatory system	3,003	2,883	5,886
Diseases of the respiratory system	1,148	1,242	2,390
COVID-19, virus identified and virus not identified	**732**	**730**	**1,462**
Mental and behavioural disorders	506	784	1,290
Diseases of the nervous system	568	575	1,143
Diseases of the digestive system	350	386	736
Endocrine, nutritional and metabolic diseases	366	293	659
Diseases of genitourinary system	223	202	425
External causes of injury and poisoning	167	128	295
Other	401	460	861
All causes	11,361	11,055	22,416

Underlying Cause of Death by age group

Figure 2: Share of deaths with Underlying Cause of Death (UCOD) of COVID- by age group, January – October 2020



80 years and Over Age Category

- A total of 12,224 deaths occurred for persons aged 80 and above between 1 January 2020 and 31 October 2020 and have been registered with the General Registrar's Office and subsequently notified to the CSO
- *Diseases of the circulatory system* were the highest UCOD for people in this age category and accounts for 3,856 deaths, or just over 31.5%, for the period covered in this analysis

- *Cancer* was the 2nd highest UCOD accounting for 2,555 deaths (20.9%), followed by *Diseases of the respiratory system* (1,507 deaths or 12.3%) and *Mental & behavioural disorders* (1,062 deaths or 8.7%), which includes conditions such as dementia
- *COVID-19, virus identified and virus not identified*, is the 5th highest UCOD for persons aged 80 and over and accounted for 992 deaths or just over 8.1% of all deaths in this age category

Table 2a Top 10 registered causes of death **for persons aged 80 and over, January - October 2020**

Underlying cause of death	Number registered
Diseases of the circulatory system	3,856
Neoplasms (Cancers)	2,555
Diseases of the respiratory system	1,507
Mental and behavioural disorders	1,062
COVID-19, virus identified and virus not identified	**992**
Diseases of the nervous system	637
Endocrine, nutritional and metabolic diseases	394
Diseases of the digestive system	326
Diseases of genitourinary system	317
External causes of injury and poisoning	151
Other	427
All causes	12,224

65 to 79 Age Category

- A total of 7,023 deaths occurred for persons aged 65 to 79 between 1 January 2020 and 31 October 2020, and have been registered with the General Registrar's Office and subsequently notified to the CSO
- *Cancer* was the highest UCOD accounting for 3,066 deaths or almost 43.7% of this age category

- *Diseases of the circulatory system* were the 2nd highest UCOD for people in this age category and accounts for 1,480 deaths (21.1%) over the period covered in this analysis
- The 3rd highest UCOD for persons aged 65-79 was *Diseases of the respiratory system* (755 deaths or 10.8%)
- *COVID-19, virus identified and virus not identified* is the 5th highest UCOD for this age category and accounts for 379 deaths or 5.4%

Table 2b Top 10 registered causes of death **for persons aged 65-79, January - October 2020**

Underlying cause of death	**Number registered**
Neoplasms (Cancers)	3,066
Diseases of the circulatory system	1,480
Diseases of the respiratory system	755
Diseases of the nervous system	388
COVID-19, virus identified and virus not identified	**379**
Diseases of the digestive system	237
Mental and behavioural disorders	205
Endocrine, nutritional and metabolic diseases	185
Diseases of genitourinary system	91
External causes of injury and poisoning	60
Other	177
All causes	7,023

50 to 64 Age Category

- A total of 2,300 deaths occurred for persons aged 50 to 64 over the period of analysis and *Cancer* was the highest UCOD in this age category accounting for 1,281 deaths or 55.7% of all deaths
- *Diseases of the circulatory system* was the 2nd

highest UCOD and accounts for 420 deaths (18.3%)

- *COVID-19, virus identified and virus not identified*, is the 6th highest UCOD for persons aged 50 to 64 and accounts for 76 deaths (3.3% of all deaths in this age category)

Table 2c Top 10 registered causes of death **for persons aged 50-64, January - October 2020**

Underlying cause of death	**Number registered**
Neoplasms (Cancers)	1,281
Diseases of the circulatory system	420
Diseases of the digestive system	118
Diseases of the respiratory system	109
Diseases of the nervous system	77
COVID-19, virus identified and virus not identified	**76**
Endocrine, nutritional and metabolic diseases	60
External causes of injury and poisoning	35
Congenital malformations, deformations and chromosomal abnormalities	32
Symptoms, signs, abnormal findings, ill-defined causes	22
Other	70
All causes	2,300

25 to 49 Age Category

- A total of 707 deaths occurred for persons aged 25 to 49 over the period of analysis and *Cancer* was again the highest UCOD in this age category accounting for 340 deaths (48.1%)
- *Diseases of the circulatory system* is the 2nd highest UCOD and accounts for 124 deaths or 17.5%
- *COVID-19, virus identified and virus not identified*

was the 8th highest UCOD for this age category and accounts for 15 deaths or 2.1% of all deaths

Table 2d Top 10 registered causes of death **for persons aged 25-49, January - October 2020**

Underlying cause of death	**Number registered**
Neoplasms (Cancers)	340
Diseases of the circulatory system	124
Diseases of the digestive system	53
Diseases of the nervous system	38
Symptoms, signs, abnormal findings, ill-defined causes	37
External causes of injury and poisoning	34
Endocrine, nutritional and metabolic diseases	16
COVID-19, virus identified and virus not identified	**15**
Congenital malformations, deformations and chromosomal abnormalities	14
Diseases of the respiratory system	13
Other	23
All causes	707

Under 25 Age Category

- A total of 162 deaths occurred for persons aged under 25 over the period of analysis
- *Congenital malformations, deformations & chromosomal abnormalities* was the highest UCOD, accounting for 48 deaths (29.6%) followed by *Certain conditions originating in the perinatal period*, accounting for 38 deaths or 23.5%
- *COVID-19, virus identified and virus not identified*, was not in the top 10 ranked UCOD for this age category
- *Deaths due to external causes of injury and*

poisoning (this includes deaths from road traffic accidents and deaths from intentional self-harm) are likely to be underrepresented in this analysis. This UCOD is likely, based on data for previous years, to be the highest UCOD for persons aged under 25 once additional registrations and late registrations are received for the period

Table 2e Top 10 registered causes of death **for persons aged under 25, January - October 2020**

Underlying cause of death	**Number registered**
Congenital malformations, deformations and chromosomal abnormalities	48
Certain conditions originating in the perinatal period	38
Neoplasms (Cancers)	27
External causes of injury and poisoning	15
Symptoms, signs, abnormal findings, ill-defined causes	9
Diseases of the circulatory system	6
Diseases of the respiratory system	6
Endocrine, nutritional and metabolic diseases	4
Diseases of the nervous system	3
Diseases of the digestive system	2
Other	4
All causes	162

Background Notes

Methodology & Coding

The figures in this Frontier Series Output are based on deaths that have occurred **between 1 Jan 2020 and end October 2020**, been registered with the General Registrar's Office and subsequently notified to the Central Statistics Office (CSO). It should also be noted that these figures are provisional. The Underlying Cause of Death is classified according to the World Health Organisation's International Classification of Diseases, Version 10 (ICD-10)

All deaths currently registered in the period have been included in the statistics and some cases have been assigned a provisional cause of death pending the outcome of further enquiries.

Final data is published in annual reports and is based on the date the death occurred.

From the 1 January 2018 the CSO is using new automated software called IRIS for selecting the underlying cause of death code. The coding system has been developed and is maintained by the IRIS core group to code mortality data and is the preferred coding tool for European countries.

Definition of death due to COVID-19

A COVID-19 death is defined, for surveillance purposes, as a death resulting from a clinically compatible illness in a probable or confirmed COVID-19 case, unless there is a clear alternative cause of death that cannot be related to COVID-19 disease (e.g. trauma). There should be no period of complete recovery between the illness and death.

Confirmed COVID-19 case

A person with laboratory confirmation of COVID-19 infection, irrespective of clinical signs and symptoms.

The Cause of Death is completed by the medical practitioner who attended the deceased and COVID-19 is reported on a death certificate as any other cause of death, and rules for selection of the single underlying cause are the

same as for influenza **(COVID-19 not due to anything else)**. Note that a death certificate has an implied hierarchy and there is an implied 'due to' between each line in Part 1 with the underlying cause of death written in the lowest used line in part 1 of the certificate. All contributing comorbidities (immune system problem, chronic diseases...) should be reported in part 2.

ICD-10 Cause of Death (Mortality) coding of COVID-19

The Mortality Codes the CSO uses are the following World Health Organisation's (WHO) ICD-10 codes to classify COVID-19.

New ICD-10 codes for COVID-19:

- **U07.1 COVID-19, virus identified**

Confirmed by laboratory testing irrespective of severity of clinical signs or symptoms.

- **U07.2 COVID-19, virus not identified**

Clinically-epidemiologically diagnosed COVID-19 but laboratory testing is inconclusive or not available (Probable COVID-19 or Suspected COVID-19).

COVID-19 should be recorded on the medical certificate of cause of death for ALL decedents where the disease caused, or is assumed to have caused, or contributed to death.

Although both categories, U07.1 (COVID-19, virus identified) and U07.2 (COVID-19, virus not identified) are suitable for cause of death coding, it is recognized that in many countries detail as to the laboratory confirmation of COVID-19 will NOT be reported on the death certificate. In the absence of this detail, it is recommended, for mortality purposes only, to code COVID-19 provisionally to U07.1 unless it is stated as "probable" or "suspected".

Persons with COVID-19 may die due to other conditions such as myocardial infarction. Such cases are not deaths due to COVID-19.

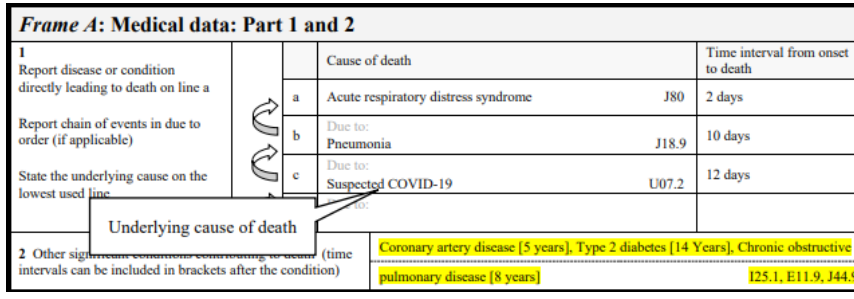
Additional WHO cause of death certification links

Cause of Death on the Death Certificate: Quick Reference Guide (Section 7.1.2).

International form of medical certificate of cause of death (Section 7.1.1).

Comorbidities

There is increasing evidence that people with existing chronic conditions or compromised immune systems due to disability are at higher risk of death due to COVID-19. Chronic conditions may be non-communicable diseases such as coronary artery disease, chronic obstructive pulmonary disease (COPD), and diabetes or disabilities. If the decedent had existing chronic conditions, such as these, they should be reported in Part 2 of the medical certificate of cause of death.



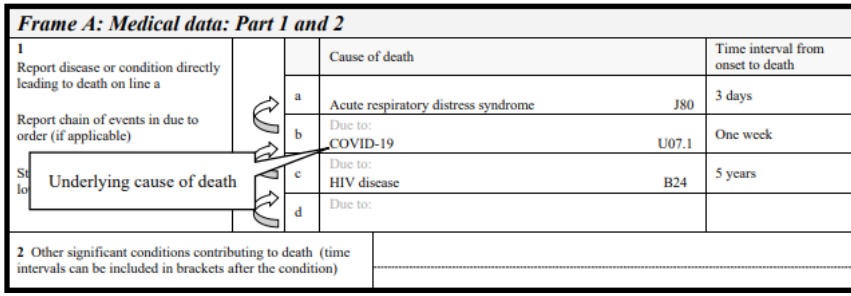
***Frame A*: Medical data: Part 1 and 2**

1		Cause of death		Time interval from onset to death
Report disease or condition directly leading to death on line a	a	Acute respiratory distress syndrome	J80	2 days
Report chain of events in due to order (if applicable)	b	Due to: Pneumonia	J18.9	10 days
State the underlying cause on the lowest used line	c	Due to: Suspected COVID-19	U07.2	12 days
	d	Due to:		

Underlying cause of death

2 Other significant conditions contributing to death (time intervals can be included in brackets after the condition): Coronary artery disease [5 years], Type 2 diabetes [14 Years], Chronic obstructive pulmonary disease [8 years] I25.1, E11.9, J44.9

Select COVID-19, specified as suspected (the case has virus not confirmed) as underlying cause of death.



Frame A: Medical data: Part 1 and 2

1		Cause of death		Time interval from onset to death
Report disease or condition directly leading to death on line a	a	Acute respiratory distress syndrome	J80	3 days
Report chain of events in due to order (if applicable)	b	Due to: COVID-19	U07.1	One week
St lo	c	Due to: HIV disease	B24	5 years
	d	Due to:		

Underlying cause of death

2 Other significant conditions contributing to death (time intervals can be included in brackets after the condition)

The certifier should have added the HIV disease as a comorbidity in Part 2 of the certificate, however the selection rules of ICD allow to identify COVID-19 as underlying cause of death. (COVID-19) is reported in a sequence ending with a terminal condition (Acute respiratory distress syndrome due to COVID-19).

The international rules and guidelines for selecting the underlying cause of death for statistical tabulation apply when COVID-19 is reported on a death certificate but, given the intense public health requirements for data, COVID-19 is not considered as due to, or as an obvious consequence of, anything else in analogy to the coding rules applied for INFLUENZA. Further to this, there is no provision in the classification to link COVID-19 to other causes or modify its coding in any way.

A set of additional categories has been agreed to be able to document or flag conditions that occur in the context of COVID-19." - in "Analysis of Underlying Cause of Death Data, including COVID-19",Central Statistics Office, Ireland, 24 November 2020.

Ireland & China Covid Death Rates

Country	Covid Deaths 2019 - 2021	Population
Ireland	4109	5 Million
China	4833	1.398 Billion

Source: COVID-19 Map - Johns Hopkins Coronavirus Resource Center, 20 February 2021.

Israel Analysing Data on Deaths After Covid-19 Vaccines

"During the vaccination action from mid-December until mid-February, 2,337 among all 5,351 COVID-19 deaths reported for Israel occurred, 43.7%.

Among these, since 19 January 2021, **1,271 COVID-19 deaths were reported for Israel.**

The table provided by the Ministry of Health on 10 February 2021 states **660 COVID-19 deaths among the vaccinated, 51.9% of the deaths for that period.**

Only 1.3 million Israeli, among 8 million (about 1 in 8, 12.5%), were vaccinated during that period.

Accordingly, **vaccination promotes deaths because 51.9% of deaths during that period are for the 12.5% vaccinated in that period.**

In addition the serious and critical cases during that period is more than the reported serious cases, the adverse effect of the vaccination process is most likely worse than what appears from the data at hand.

The deaths among those vaccinated should be added to the numerous AVC and cardiac events reported just after vaccination that are not included among COVID-19 deaths which about double the deaths among those vaccinated, whose numbers remain unknown.

At this point we state that vaccinations caused more deaths than the coronavirus would have during the same period.

Among those vaccinated and above 65, 0.2% of those vaccinated died during the 3-week period between doses, hence about 200 among 100,000 vaccinated.

This is to be compared to the 4.91 dead among 100,000 dying from COVID-19 without vaccination.

This should not be confused with the COVID-19, 0.279 deaths among 100,000 reported for those who completed the vaccination process, meaning 2 weeks after the second dose."- in "The uncovering of the vaccination data in Israel reveals a frightening picture", Nakim, 15 February 2021.

This article can not be debunked since it is based on real data that have been exposed but since its publication the Israeli ministry of health and the Pfizer/Moderna coalition keep trying to deceive the public with biased "scientific" Medical Trade propaganda article, like the New England Journal of Medicine, "BNT162b2 mRNA Covid-19 Vaccine in a Nationwide Mass Vaccination Setting", 24 February 2021, that intentionally focus on the Covid sickness 2 weeks after the 2nd shot, and hide the most important data that is the death numbers among the vaccinated people from covid and other adverse effects after the first shot.

"This study was approved by the CHS institutional review board. ***The study was exempt from the requirement for informed consent.*** *Study Design: We designed this observational study to emulate a target trial of the causal effect of the BNT162b2 vaccine on Covid-19 outcomes. Eligibility criteria included an age of 16 years or older, not having a previously documented positive SARS-CoV-2 polymerase-chain-reaction (PCR) test, and being a member of the health care organization during the previous 12 months."*

The fact that **Dr Ran Balicer the corresponding author of the New England Journal of Medicine (NEJM), works for the Israeli Health Department**, as head of the Klalit Research Institute, and **received grants from Pfizer** may explain it. As well as 7 other co-authors of the publication. We have debunked the NEJM study please read our article: "Exposing distortions in the NEJM scientific publication on the efficiency of Pfizer's vax", www.nakim.org/israel-forums/viewtopic.php?t=270873

COVID Vaccination Resulting in Significant Number of Deaths in German Nursing Home

"Attorneys and founding members of the German Corona Investigative Committee Reiner Fuellmich and Viviane Fischer reported, **7 out of 31 people living in the nursing home died after getting inj**ected with their first dose of Pfizer's COVID-19 vaccine.

After the second dose was administered, 1 died and 11 more got seriously sick.

This means that out of the 31 elderly people that got vaccinated in that nursing home, **25% of them shortly died while the lives of 36% were jeopardized."** - in "COVID Vaccination Resulting In Significant Number Of Deaths, Serious Injuries In German Nursing Home, Whistleblower Reveals", Christianity Daily, 5 March 2021.

South Korea Probing Deaths After COVID-19 Vaccinations

"South Korea is investigating 7 cases of people dying after receiving COVID-19 vaccine shots, local media reported.

Health authorities will look to ascertain a potential causal relationship between the vaccinations and the deaths, according to Yonhap News Agency, 3 more people who received doses of the AstraZeneca vaccine died in the country a day earlier." - in "South Korea probing deaths after COVID-19 vaccinations", AA, 5 February 2021.

The Role of Big Media: The Guardian, ABC, The New York Times, The Huffington Post, BBC & Etc.

> *"The foundation disclosed that it spent more than $365 Million in 2009 on policy and advocacy efforts. The largest portion was related to global health, but it did spend $41 Million on global development. T**hat spending, which takes many forms, is showing up more often in the world of media."** - in **"Guardian is Gates' latest advocate"**, Puget Business Journal, 14 September 2010.*

"The foundation's grants to media organizations such as ABC and The Guardian, one of Britain's leading newspapers, raise obvious conflict-of-interest questions:

How can reporting be unbiased when a major player holds the purse strings? Magazines and scientific journals get Gates money to publish research and articles.

Experts coached in Gates-funded programs write columns that appear in media outlets from The New York Times to The Huffington Post.

The foundation provided ABC $1.5 Million to fund overseas travel for reports on global health and development.

Cooper, a journalism professor, finds it "laughable" when media claim Gates money doesn't influence their coverage. Every grant comes with at least one string attached: the hope that the grant will be renewed." - in "Does Gates funding of media taint objectivity?", The Seattle Times, 23 February 2011.

"Prior to Wednesday's award, ***the BBC has received 4 Gates grants to support media training and programing, according to the foundation's web site. Those awards date back to 2005 and are worth $8 Million."*** *- in "Gates posts $20M media-linked grant", bizjournals, 3 March 2011.*

"The Gates Foundation has become a major force in both traditional and non-traditional media. A recent Seattle Times analysis found ***the foundation has spent nearly $70 Million on direct grants to media organizations."*** *- in "Gates Foundation gives $20M to BBC charity arm", The Seattle Times, 3 March 2011.*

The Vanishing Articles

"When the Seattle Times published (1) a lengthy profile of the Bill & Melinda Gates Foundation's grants to professional journalists on 19 February 2011, the foundation apparently never disclosed that it had already approved its largest award ever to a media organization." - in "Gates posts $20M media-linked grant", Puget Business Journal, 3 March 2011.

1 www.seattletimes.com/seattle-news//2014280379_gatesmedia.html

"The Seattle Times' Sandi Doughton 3 March 2011 weighed in with an article (2) that examines the Gates Foundation's contention that this is not a grant to a news organization but should be viewed more as a health advocacy grant that happens to use media.

Sandi writes: **"A new grant from the Bill & Melinda Gates Foundation illustrates the way lines have blurred**

between traditional media and new ways to communicate about health and development." - in "Gates Foundation has given BBC $20 million to "shape" stories on maternal, child health", KPLU, 3 March 2011.

2 www.seattletimes.com/seattle-news//2014393133_bbc04m.html

*"The **U.K. (MHRA)** was the first country to authorized the **Pfizer/BioNTech** COVID-19 vaccine and began distributing it to first-wave participants on 8 December 2020. The U.S. is likely not far behind on authorizing emergency use and beginning to distribute a that COVID-19 vaccine. On 10 December 2020, a U.S. Food and Drug Administration advisory panel held a hearing on the **Pfizer COVID-19 vaccine**. Alex Azar, U.S Department of Health and Human Services secretary, offered **ABC News** an optimistic look the vaccine authorization process." - in "Bill and Melinda Gates Foundation announces $250 million COVID vaccine commitment", ABC, 10 December 2020.*

Pfizer

> ***"Pharmaceutical company Pfizer has announced a partnership with the Bill & Melinda Gates Foundation, which has pledged $1 Billion to make contraceptives more accessible to women in developing countries."*** *- in "Pfizer, Gates Foundation, CIFF Partner to* ***Expand Birth Control Access"****, Philanthropy News Digest,* ***19 November 2014.***

"Purpose: to support development of a Group B streptococcus (GBS) vaccine for developing country access
Amount: **$17,252,854**
Topic: Pneumonia, Research and Learning Opportunities
Program: Global Health
Grantee Website: **www.pfizer.com**" - in "How We Work Grant", Gates Foundation, September 2016.

Member of Parliament in Indonesia Strongly Rejects Vaccination over Fears that it Represents Business Interests

"Ribka Tjiptaning, Indonesian Parliament Member of Commission IX DPR from PDIP, refused to participate in the COVID-19 vaccination program, at the Commission IX's Working Meeting with the Minister of Health, Budi Gunadi, on 12 January 2021. **Emphasized that the coercion of vaccines means human rights violations. Ribka also highlighted the price of rapid swab tests, and the Covid-19 pandemic is very vulnerable to becoming a business area.**" - in "Ribka Tjiptaning Tolak Vaksin Sinovac: Jangan Bisniskan COVID-19", VIVA, 13 January 2021.

Pfizer Demands Governments Sovereign Assets Such As Embassy Buildings And Military Bases As Guarantee Against The Cost of Any Legal Cases

"**Pfizer has been accused of "bullying" Latin American governments in Covid vaccine negotiations and has asked some countries to put up sovereign assets, such as embassy buildings and military bases, as a guarantee against the cost of any future legal cases.**

Officials from Argentina and the other Latin American country, said the **Pfizer company's negotiators demanded additional indemnity against any civil claims citizens might file if they experienced adverse effects after being inoculated.**

In Argentina and Brazil, Pfizer asked for sovereign assets to be put up as collateral for any future legal costs." - in "'Held to ransom': Pfizer demands governments gamble with state assets to secure vaccine deal", The Bureau of Investigative Journalism, 23 February 2021.

The Countries that Refused the Covid-19 Vaccine

As of the 7 March 2021, the following countries had refused injecting their citizens with Covid-19 Vaccines:

Country	Covid-19 Deaths (JHU Map, 7 March 2021)	Population
Eritrea	7	3 Million
Burundi	3	11 Million
Madagascar	300	27 Million
Tanzania	21	58 Million

The Vaccine Called Dengvaxia

"The U.S. Food and Drug Administration (FDA), just approved one of the most sought after vaccines in recent decades. **The vaccine, called Dengvaxia.**

The vaccine seemed to increase the risk of a deadly complication called plasma leakage syndrome, in which blood vessels start to leak the yellow fluid of the blood.

Despite these concerns, in July 2016, the World Health Organization (WHO) went ahead and recommended the vaccine for all children ages 9 to 16." - in "Rush To Produce, Sell Vaccine Put Kids In Philippines At Risk", NPR, 3 May 2019.

Dengue Vaccine WHO Position

"In accordance with its mandate to provide guidance to Member States on health policy matters, WHO issues a series of regularly updated position papers on vaccines and combinations of vaccines against diseases that have an international public health impact.

These papers are generally concerned with the use of vaccines in large-scale immunization programmes.

The papers have been reviewed by external experts and WHO staff, and are reviewed and endorsed by the WHO Strategic Advisory Group of Experts on Immunization (SAGE).

Dengue viruses are members of the genus Flavivirus, within the family Flaviviridae.

There are 4 dengue virus serotypes (DEN-1, DEN-2, DEN-3 and DEN-4).

Flaviviruses are lipid-enveloped, positive-sense, singlestranded RNA viruses. The structural premembrane (prM) and envelope (E) proteins are embedded in the lipid envelope and are displayed on the surface of virions.

> ***Vaccine efficacy varied by country, with efficacy ranging from 31.3% in Mexico to 79.0% in Malaysia.***

An increased risk of hospitalized dengue was identified in one age group (2–5 years) in the 3rd year of follow up post dose.

Solicited systemic reactions occurred in 66.5% of CYDTDV recipients, compared to 59% of placebo recipients.

There is a hypothetical risk of acute viscerotropic or neurotropic disease due to the YF 17D backbone.

WHO position

Countries should consider introduction of the dengue vaccine CYD-TDV.

Because of the association of CYD-TDV with increased risk of hospitalized and severe dengue illness in the 2–5 year age group, CYD-TDV is not recommended for use in children under 9 years of age, consistent with current labelling.

Some countries may experience the highest incidence of dengue illness among adults and **may consider vaccinating populations up to 45 years of age in routine programmes."**
- in "Dengue vaccine: WHO position paper – July 2016", Weekly Epidemiological Record, WHO, 26 July 2016.

CYD-TDV is a tetravalent, live attenuated, chimeric dengue vaccine in a yellow fever 17D backbone developed by Sanofi Pasteur.

Dengue Vaccine Deaths

"The Philippines launched the world's first public dengue vaccination programme in 2016.

Dengue fever, a flu-like illness.

The programme was stopped in November 2017 after Sanofi warned **the vaccine could make symptoms worse in people who contracted the disease for the first time after being vaccinated.**

Sanofi was asked to refund $62 Million USD spent on the programme. Although Sanofi agreed to refund half of the money to cover the remaining unused vaccines, it has refused to pay for the Vaccines that had already been used."
- "Sanofi sued over alleged dengue Vaccine Death", Pharmaceutical Technology, 6 February 2018.

Philippines Rejects Dengue Vaccine

"Manila banned the sale, import and distribution of the Dengvaxia vaccine following the deaths of several dozen children who were among more than 700,000 people given shots in 2016 and 2017 in a government immunization campaign." *- in "Philippines Rejects Dengue Vaccine as Outbreak Leaves Hundreds Dead",* ***VOA, 6 August 2019.***

Dengue Vaccine Fiasco Leads to Criminal Charges

"A prominent pediatrician and medical researcher in the Philippines has been indicted over the failed introduction of Dengvaxia, a vaccine against dengue that was yanked from the Philippine market in 2017 because of **safety issues.**

If convicted of accusations leveled at her by the national Department of Justice, the former Head of the Dengue Department of the **Research Institute for Tropical Medicine,** could face up to 48 years in prison." - in "Dengue vaccine fiasco leads to criminal charges for researcher in the Philippines", **Science, 24 April 2019.**

"In 2016, WHO recommended that the Dengue Vaccine CYD-TDV (Dengvaxia), the first dengue Vaccine, licensed for use in adults and children aged 9 years or older, be considered for use in highly endemic regions where at least 70% of 9-year-old children had previously been infected with dengue.

The Philippines was the first country to introduce Dengvaxia on a large scale in selected highly endemic regions, targeting about 1 Million children aged 9–10 years.

In November 2017, an excess risk of hospitalisation for dengue and severe dengue in Vaccinees who had not had a previous dengue infection at the time of Vaccination was reported."

- Annelies Wilder-Smith, serves as a consultant to **WHO,**

- Peter G Smith, reports personal fees from **Sanofi Pasteur** and Takeda, was member of the **WHO SAGE** Working Group on dengue Vaccines,

- Stefan Flasche, was member of the **WHO SAGE** Working Group on dengue Vaccines, in "Vaccine-attributable severe dengue in the Philippines", **The Lancet, 14 December 2019.**

£55 Billion; Test and Trace" and "Empty Hospitals"

> ***"Test and Trace service will get another £15 Billion in Government Cash.*** *The latest tranche of funding for 2021/22 comes on top of this year's spending allocation of £22 Billion - taking the* ***total cost of the controversial service to an enormous £37 Billion over 2 years.*** *The new cash injection will come from a special "Covid Reserve", worth £55 Billion,* ***£1.6 Billion will go on Vaccine procurement."*** *- in "Test and Trace bill to pass £37 billion after quiet Budget cash injection", The London Economic, 5 March 2021.*

Despite its title The NHS Test and Trace:

> ***"Test and Trace because as you know that is run by the Department of Health and Social Care rather than by the***

> ***NHS or NHS England per se."*** *- Sir Simon Stevens, NHS Chief Executive, in "Joint session of the Commons Health and Science and Technology Select Committees", House of Commons, 26 January 2021*

"Matt Hancock massively oversold this saying it was part of the NHS when it's not. It's costing a lot of money and it's unclear whether it is having more than a marginal impact on the pandemic.

If this is a permanent agency set up we need to know what it's going to look like when it starts delivering what is likely to be routine testing and tracing.

Or is this £37 Billion being spent on something that's a temporary fix?

Either way, the taxpayer deserves to know more about how effective it is, pound for pound.

For the eye watering sums of money spent even in the context of Covid, we need to know that this money isn't just nugatory spending that there is a legacy left as a result of this." - Meg Hillier, Member of Parliament UK, Chair Commons Public Accounts Committee, House of Commons 4 March 2021.

> ***"The NHS Test and Trace service in England failed to deliver its central promise to avoid a second national lockdown, and there is no clear evidence its "unimaginable" costs have been justified, MPs on an influential committee have concluded*** *(House of Commons Public Accounts Committee. Covid-19: Test, track, and trace, part 1. 10 March 2021).* ***In early February 2021, was employing around 2,500 Consultants on Average Daily Rate of £1,000, with others paid £6,624 a day."*** *- in "Covid-19: NHS Test and Trace made no difference to the pandemic, says report", BMJ, 10 March 2021.*

"4 of England's Nightingale hospitals are to close permanently later this month after costing taxpayers £500 Million. The hospitals were barely used. London's Nightingale hospital at the ExCel Conference centre saw only 54 patients." - in "Nightingale Hospitals to be closed after £500 Million cost", Independent, 9 March 2021.

> ***"Harrogate 500 Bed Hospital closed without treating a single patient."*** *- in "Nightingale Hospitals to be closed from April", 9 March 2021.*

UK Health Security Agency

"On the 1st of April, so next week we will formally **establish the new UK Health Security Agency. UKHSA**, will be this country's permanent standing capacity to plan prevent, and respond to external threats to health. UKHSA will bring together our capabilities in this area, from the scientific excellence embodied by the likes of **Dr Susan Hopkins, and her amazing colleagues in clinical public health**, to the extraordinary capability that **NHS Test and Trace** has built, which **Dido Harding** has led so effectively over the last 9 months, and the JBC with that analytical brilliance. **I want everybody at UKHSA, at all levels, to wake up every day with a zeal to plan for the next pandemic."** - Matt Hancock, Secretary of State for Health, in "Briefing by the Local Government Association", 24 March 2021.

Jenny Harries

"UKHSA Chief Executive, Dr Jenny Harries OBE, **has previously served on the Joint Committee for Vaccination and Immunisation,** and brings a wealth of public health knowledge and expertise gained from working in the NHS and local government at local, regional and national levels.

She played central roles in the UK's response to COVID, Ebola, Zika, monkeypox, MERS." - in Gov.UK, March 2021.

Ian Peters

"UKHSA Chair Ian Peters is currently Chair of Barts Health NHS Trust, **former Chief Executive of British Gas, Managing Director of NatWest Small Business Services, and chairman of several data-driven growth technology companies."** - in "Gov.UK", March 2021.

What Are We Aiming To Achieve: Health Security Capability Fit For The Future

"The UK has a global reputation for leadership in health protection science and research and for the quality of our health protection services. Since the outbreak of COVID-19, the country has been facing its greatest health protection challenge for decades. **Our response has been built on the world-class public health expertise of Public Health England (PHE). Scientists at PHE were among the first in the world to fully sequence the novel coronavirus viral genome**, and we have been able to use our national sequencing capability to detect cases and inform the most appropriate public health action.

This existing expertise combined with the new at-scale operational capacity of NHS Test and Trace and the new analytical capability of the Joint Biosecurity Centre – working with partners in national, and local government, the NHS and with citizens - has enabled England alone to carry out over 90 million COVID-19 tests, and contact over 9 million people to notify them to self-isolate.

The experience of COVID-19 has highlighted the agility and impact of our health security and protection system, but it has also shown us that **the challenges of protecting and securing our population's health are changing, as new types of threats emerge.**

Our health security and protection system must change too, in order to be fully fit for the future. **We need much deeper integration between health protection science and at-scale response capabilities, and we need to think radically about the capabilities and capacity we will need as a nation to protect our population from future threats**, bringing to bear the best of science, technology and innovation. **We need to consider how best to engage with citizens and drive behaviour change in the 21st century.**

To lead this mission, we are establishing a new UK Health Security Agency (UKHSA).

UKHSA will focus all its attention, on health hazards including infectious diseases, and will play a leading role in our global response to external health threats.

It will build upon the experiences from the last decade of public health protection, here and around the world, in particular in tackling COVID-19 over the past year.

UKHSA is being created to ensure that we bring together and enhance the existing expertise and new capabilities we have developed during the pandemic, so that we have an integrated organisation dedicated to protecting the public's

health. **It will be a key part of the country's critical national infrastructure and security infrastructure.**

It will also represent a core part of UK PLC, driving economic growth and resilience, protecting the country from the societal and economic shocks we have witnessed during the pandemic, and acting as an engine for the UK's life sciences sector and diagnostics industry.

UKHSA will act as a system leader for health security, providing intellectual, scientific and operational leadership at national and local level, as well as on the global stage. It will be close to policy making and able to exert influence over the system to ensure threats to health security are acted on and brought under control.

The change, from our initial working organisational name of the **National Institute for Health Protection to the UK Health Security Agency, gives a clearer sense of the critical role this new body will play in safeguarding all our health."** - in "**Securing our health: the UK Health Security Agency"**, Gov.UK, 24 March 2021

There Is So Much Conflicting Information Out There

"Let me start with the obvious there has been a whole heap of media hype a month ago KNBC, TV reported about travellers to the US from China being greeted by people in hazmat suits then you have the Australian Department of Health showing this apocalyptic video, about how trains are being sterilized, citizens are being heat censored.

And how countries are banning flights worldwide.

It reminds me of the movie "Getting Even" 1986.

Then we are bombarded by panic buying news stories at supermarkets.

Last week when the World Health Organization announced that coronavirus Covid-19 was officially a pandemic, I went to 2 separate meetings at my different workplaces, where we planned for how we are going to manage the influx of coronavirus patients. And to be honest it felt contrary to the facts.

I believe we will look back at coronavirus like this if it is actually what it is made out to be?

2019 Novel Coronavirus Compared to Other Major Viruses

Virus	Fatality Rate
Nipah	77.60%
Ebola	40.40%
MERS	34.40%
SARS	9.60%
Covid-19	**3.70%**

Source: John Hopkins, CDC, WHO, New England Journal of Medicine, Malaysian Journal of Pathology, CGTN, 12 March 2020.

You have to appreciate that it is physically impossible to test every person in the world who heads flu-like symptoms, or even a sniffly nose. So if it really is this contagious then there should be far more cases of corona virus than 137,000.

What does this mean?

The death rate is probably much lower than 3.7% I guess that eventually the rates will be similar to the actual influenza death rates.

You can see very anecdotal evidence of this:

"A doctor in Italy who is recovering from the virus at home told the Guardian she had only **mild symptoms. She lives with her parents and brother, all of whom tested negative.**

> ***"In the majority of cases, people heal.*** *Those who are most vulnerable:* ***the elderly or those with serious health problems. But we need to be objective – an increase in new cases doesn't mean an increase in serious cases."***

Said the doctor, who asked not to be named." - in "Italy's large elderly population bearing brunt of coronavirus", The Guardian, 3 March 2020.

Covid-19 Mortality Rate by Age

Age	Mortality Rate
10 to 39	0.20%
40 to 49	0.40%
50 to 59	1.30%
60 to 69	3.60%
70 to 79	**8.00%**
More than 80	**14.80%**

Source: Chinese Center for Disease Control and Prevention (CDC).

"Who is dying from Covid-19?
Not surprisingly, it is the elderly.
What strikes me, is how small the actual fatalities are in

some huge population countries.

In 2019 there were almost 40,000 deaths from car crashes in the USA. No state of emergency was declared.

All the computer modelling in the world cannot predict what's going to happen, and I simply don't believe if the corona virus will kill the anticipated doomsday hundreds of millions." - Dr Sam Bailey, MD in "How Lethal Is Covid-19 (Coronavirus)?", **17 March 2020.**

A Call to End Free Speech For the Duration of Pandemics: Jokes, Private Thoughts, and Private Opinions Not Allowed in Social Media

"The Ebola communication crisis of 2014 generated widespread fear and attention among Western news media, social media users.

Elevating perception of risk – fuel for public fears

The identification and transmission of Ebola in the US generated high levels of fear and concern amongst the public.

Results showing high frequency of risk perception elevating tweets align with previously published literature on social media content during the Ebola epidemic.

The high proportion of these messages, paired with inflammatory political statements and misinformation demonstrate how public health response efforts and public health messaging can be interpreted or distorted in ways that promote political and social discord.

Public private partnerships between social media

companies and public health agencies to promote public health messages is also an important component in combating misinformation, as observed in the partnership between the World Health Organization (WHO) and social media companies to combat the novel coronavirus disease 2019 (COVID-19) misinformation.

Conclusions

Results highlight the importance of anticipating politicization of disease outbreaks, and **the need for policy makers and social media companies to build partnerships and develop response frameworks in advance of an event.**

While each public health event is different, **our findings provide insight into the possible social media environment during a future epidemic and could help optimize potential public health communication strategies.**" - Tara Kirk Sell, Divya Hosangadi, Marc Trotochaud, in "Misinformation and the US Ebola communication crisis: analyzing the veracity and content of social media messages related to a fear-inducing infectious disease outbreak", BMC Public Health, **7 May 2020.**

Tara Kirk Sell, Johns Hopkins Center for Health Security, Department of Environmental Health and Engineering Johns Hopkins Bloomberg School of Public Health, Baltimore, USA

Divya Hosangadi, Johns Hopkins Center for Health Security, Department of Environmental Health and Engineering Johns Hopkins Bloomberg School of Public Health, Baltimore, USA

Marc Trotochaud, Department of Environmental Health and Engineering Johns Hopkins Bloomberg School of Public Health, Baltimore, USA

Funding: This research was funded by the **Open Philanthropy Project**.

Open Philanthropy Project

"Open Philanthropy makes grants, follows the results, and publishes their findings online. Its main funder is **Dustin Moskovitz.** The joint collaboration with GiveWell led to a spinoff called the Open Philanthropy Project, it has since become a separate organization, and continuously increases its annual giving, having made over $170 Million in grants in 2018. Moskovitz and Tuna are also the youngest couple to sign **Bill Gates** and Warren Buffett's Giving Pledge, which commits billionaires to giving away most of their wealth in the form of philanthropy.

Dustin Moskovitz

Dustin Aaron Moskovitz is an American Internet entrepreneur who **co-founded Facebook with Mark Zuckerberg.** In 2008, he left Facebook to **co-found Asana**.

In March 2011, Forbes reported Moskovitz to be the youngest self-made billionaire in history, on the basis of his **2.34% share in Facebook. For the 2016 United States presidential election, Moskovitz announced that he would donate $20 Million to support Hillary Clinton, the Democratic Party nominee. For the 2020 United States presidential election, Moskovitz donated $24 Million to support the Democratic Party nominee Joe Biden.**

ASANA

Asana (Software), is a web and mobile application designed to help teams organize, track, and manage their work. It was founded in 2008 by Facebook co-founder Dustin Moskovitz and ex-Google, ex-Facebook engineer Justin Rosenstein. In March 2017, Asana announced its integration with **Microsoft Teams. Asana's own listed contributions for the election cycle, which are almost all directly from Moskovitz, reach around $45 Million. This makes Asana the second largest contributor to Biden's presidential campaign after Bloomberg LP.**

Contributor	Total
Bloomberg LP	$ 93,847,353
Asana	$ 45,941,503
Alphabet Inc (Google)	$ 5,268,256

As of August 2019, Open Philanthropy has selected focus areas primarily from the following 4 categories:

1. U.S. policy. Focus areas: criminal justice reform, **farm animal welfare**, macroeconomic stabilization policy, immigration policy and **land use reform.**

2. Global catastrophic risks. Focus areas: **biosecurity and pandemic preparedness and potential risks** from advanced artificial intelligence.

3. Scientific research. Focus areas: human health and wellbeing, scientific innovation, **science supporting biosecurity and pandemic preparedness**, transformative basic science, science policy and infrastructure, and other scientific research areas.

4. Global Health and development. No focus areas yet identified." - in "Wikipedia".

Elevating Perception of Risk - Fuel for Public Fears

"The identification and transmission, generated high levels of fear and concern amongst the public. Results showing high frequency of risk perception during the epidemic. The high proportion of these messages, paired with inflammatory political statements and misinformation demonstrate how public health response efforts and public health messaging can be interpreted or distorted in ways that promote political and social discord."

This is part describes correctly the way and manner, that the Established Media and Governments around the word acted. A relentless non-stop propaganda of fear inducing pandemic modelling predictions.

"Some governments have taken control of national access to the internet. Others are censoring websites and social media content, and a small number have shut down internet access completely to prevent the spread of misinformation. Penalties have been put in place for spreading harmful falsehoods, including arrests." *- in "Event 201 Pandemic Exercise: Segment 4, Communications Discussion and Epilogue Video",* ***October 2019.***

Event 201 is a Pandemic tabletop exercise hosted by The Johns Hopkins Center for Health Security in partnership with the **World Economic Forum** and the **Bill and Melinda Gates Foundation on 18 October 2019**.

China Mandatory Vaccination Law Passed

"On 29 June 2019, the National People's Congress Standing Committee of the People's Republic of China (PRC) adopted the PRC Law on Vaccine Administration (Vaccine Law).

The Xinhua News Agency states that the Law provides for the "strictest" vaccine management with tough penalties in order to ensure the country's vaccine safety.

The Law mandates the launching of a National Vaccine Electronic Tracking Platform that integrates tracking information throughout the whole process of vaccine production, distribution, and use to ensure all vaccine products can be tracked and verified (art. 10).

According to the Law, China is to implement a state immunization program, and residents living within the territory of China are legally obligated to be vaccinated .

Local governments and parents or other guardians of children must ensure that children be vaccinated with the immunization program vaccines (art. 6).

The Law will take effect on 1 December 2019 (art. 100)." - Laney Zhang, in "China: Vaccine Law Passed", **27 August 2019.**

Confirmed: The Flu Ends The Year With Just 4 Cases Detected

"The Influenza Surveillance System in Spain **(SVGE)**, the National Epidemiology Center **(CNE)**, and the National Microbiology Center **(CNM)** of the Carlos III Health Institute **(ISCIII)**, have detected **until the 27 December, only 4 cases of influenza virus** in the 2020-2021 season **in all of Spain.**

Aragon reported 1 non-sentinel A (H1N1) pdm09 virus, and Castilla-La Mancha 3 of non-sentinel type B influenza." - in "Confirmed: The flu ends the year with just 4 cases detected, three of them in Castilla-La Mancha and one in Aragon", 20 Minutos, 30 December 2020.

Impact of Seasonal Flu in Spain 2017 to 2020

Season	**2017-18**	**2018-19**	**2019-20**	**2020-21**
Deaths	15000	6300	3900	

- in "Instituto de Salud Carlos III, infografías 2017-18 a 2019-20"; Asociación Española de Pediatría, 20 September 2020.

***"Influenza has been renamed COVID in large part."** - Dr Knut Wittkowski, Biometrician for more than 20 years Senior Research Associate, Rockefeller University, in "The missing flu riddle: Influenza has been renamed COVID", Just the News, 1 January 2021.*

The Flu Epidemic Keeps 60 Hospitals Saturated Throughout Spain in 2018

"Currently we are around 60 saturated hospitals throughout Spain. For yet another year, the flu campaign seems to be catching the health authorities on the wrong foot, who have not taken adequate measures; neither in terms of staff nor opening beds." - Mar Rocha, spokesperson for Nursing majority union SATSE, in "The flu epidemic keeps 60 hospitals saturated throughout Spain", Cadena Ser, 12 January 2018.

> ***"The flu is considered a seasonal illness since its highest incidence occurs in the fall and winter months.***
> ***In the case of Spain, the maximum incidence peaks become epidemic in the months of January and February."*** *- in "The cold arrives in Spain: also the flu?", El Tiempo, 4 November 2020.*

> ***"Do you know what the average age of death from Covid-19 is according to the Office for National Statistics is:***
> ***82 years and 3 months.***
>
> ***The average of death is normally:***
>
> ***81 years."***
>
> *- Rod Humphris, in "Mirror", 19 April 2021.*

Total Number of Deaths UK 2019 & 2020

Year	2019	2020	Difference
Deaths	604000	695800	**91800**

"There were over 695,800 deaths in the United Kingdom in 2020, compared with 604,000 in 2019." - in "Number of deaths in the United Kingdom from 1887 to 2020", Statista, 26 February 2021.

Total Number of Covid-19 Death Certificates Mentions in UK 2020

England	Scotland	Northern Ireland	Total
72178	5868	1480	**79526**

*"Within the period from 30 January to 31 December 2020, there have been **72,178** deaths in persons with laboratory-confirmed COVID-19, with the first death occurring on 2 March 2020." - in "COVID-19 confirmed deaths in England to 31 December 2020", Public Health England, 10 March 2021.*

"As of 4 December there had been **1,480 COVID-19-related deaths registered in Northern Ireland.**

As of 6 December, there have been **5,868 deaths involving COVID-19 registered in Scotland. The biggest increase was in those aged 85 to 89 years, with three-quarters (3/4) of deaths involving COVID-19 in people aged 75 years and over."** - in "Coronavirus (COVID-19): 2020 in charts", Office for National Statistics, 18 December 2020.

The International Monetary Fund

> ***"There is talk of the possibility of "donation" of $940 Million dollars, in concept of the so-called "rapid financing". The International Monetary Fund (IMF), asks us, to treat the coronavirus in the same way as in Italy****. The International Monetary Fund is still waiting for us to impose lockdown and curfew, here in Belarus. What a stupid thing!" - Alexander Lukashenko, Belarus President, in live TV Transmission, Belta, 2020.*

"Aleksandr Lukashenko's, on state Belarusian Telegraph Agency (BelTA), stated that the International Monetary Fund (IMF) offered him a bribe of $940 Million, as Covid Relief Aid, demanding that he impose extreme lockdown on his people, and force them to wear face masks, and impose very strict curfews.

IMF Spokesperson Gerry Rice replied that while **the IMF does require recipients to follow WHO guidelines to contain the virus."** - in "On COVID Inner City Press Asks IMF of Bribe Talk in Belarus Kenya Cameroon and Honduras", Inner City Press, 10 September 2020.

"In June 2020, Alexander Lukashenko said that the IMF continued to demand that Belarus introduce "quarantine, isolation, curfew" to receive a loan. He then stressed that the **additional lending conditionalities, which do not relate to the financial part, imposed on the country were unacceptable."** - in "IMF Refuses To Allocate $940 Million To Belarus Amid COVID-19 Pandemic", Belarus Feed, 10 September 2020.

World Bank - COVID-19 Strategic Preparedness and Response Project Until 2025

Expected Project Approval Date	Expected Project & Program Closing Date
2 of April 2020	31 of March 2025

"On 3 March 2020, the Board of Executive Directors endorsed the World Bank Group (WBG) to take urgent action supporting client countries' response to the COVID-19 pandemic.

The Board further authorized the establishment of a US $12 Billion WBG Fast Track COVID-19 Facility (FTCF or "Facility") to assist IDA and IBRD eligible countries in addressing this global pandemic and its impacts.

Of this amount, US $6 Billion would come from IBRD/ IDA ('the Bank").

International Finance Corporation (IFC) has subsequently increased its amount from US $6 Billion to US $8 Billion, which brings the FTCF total to US $14 Billion.

As announced by WBG President in the remarks to G20 Leaders' Virtual Summit on 26 March 2020, the WBG has capacity to provide US $150- 160 Billion in total financial support over the next 15 months, and US$330-350 Billion **until the end of June 2023."** - in "COVID-19 Strategic Preparedness and Response Program (SPRP) (P173789), The World Bank, 29 March 2020.

"The World Bank has long been criticized by a range of non-governmental organizations and academics, notably including its former Chief Economist Joseph Stiglitz, who is equally critical of the International Monetary Fund, and other developed country trade negotiators.

Critics argue that the so-called free market reform policies - which the Bank advocates in many cases - **in practice are often harmful to economic development if implemented badly, too quickly "shock therapy", in the wrong sequence, or in very weak, uncompetitive economies.**

World Bank loan agreements can also force procurements of goods and services at uncompetitive, non free-market, prices.

Other critical writers such as John Perkins, label **the international financial institutions as "illegal and illegitimate", and a cog of coercive American diplomacy in carrying out financial terrorism."** - in , "World Bank Group", Wikipedia, 19 March 2021.

Public Information Campaign COVID Until 2023

"The Executive Office (UK Northern Ireland), requires the immediate appointment of an advertising contractor to build on and continue to deliver a multimedia advertising campaign on COVID-19.

The contract duration is for 2 years commencing on 1 April 2021.

The maximum budget is £2 Million exclusive of VAT." - in "ID 3351409 TEO - COVID Public Information Campaign", Gov.UK, 18 March 2021.

Science Cannot Block The Sun With One Finger

"I have 32 years of Clinical Practice.

When we go against the narrative we have to pay the price. It is curious that we have practically returned to those epochs extinguished in scientific history of processes. Science cannot block the sun with one finger.

They know that, **one of the things is to have people in fear, basically, pure basically to dominate everyone is to have fear.**

Fear of everything, of death, of himself and of his family.

I no longer watch television. **Those who watch TV receive their daily dose of Covid lies.**

Including all debate programs which include the invited guest who are being paid, and trained to say this and that, they who form part of the system of lies.

Official Medicine tells me, that I can place a stick inside a person without any symptoms, I only need to place a stick inside the person, and I can tell that person:

"You have a Pneumonia of Covid."

Is that the science that I refute? Obviously I refute such a science.

The best way to cure someone from Covid, is to not watch television." - Dr Alejandro Sousa Escandón, MD, Spanish Surgeon and leading Urologist, in "First Anniversary of the Sanitary Dictatorship", Modus TV, 14 March 2021.

Plans to Raise Prices on Coronavirus Vaccines

"The U.S. pharmaceutical firms behind the approved coronavirus vaccines: Johnson & Johnson, Moderna, and Pfizer, have quietly touted plans to raise prices on coronavirus vaccines in the near future and to capitalize on the virus's lasting presence.

Once the pandemic ends: a date that drugmakers themselves reserve the right to declare.

Pharmaceutical officials, speaking at recent conferences and on calls with investors, say **they expect the virus will linger, morphing from a pandemic into a perennial endemic.**

And as Covid-19 mutations continue to spread and booster shots may be required on a regular basis, leaders from the 3 companies are enthusiastic about cashing in.

Pfizer, revealed that it received **advance payments** for its vaccine totalling **USD $957 Million by 31 December 2020.**

In the U.S., Pfizer has agreed to a price of USD $19.50 per vaccine dose.

In the European Union, the company charges USD $64 per dose." - in **"Drugmakers Promise Investors They'll Soon Hike Covid-19 Vaccine Prices: Pfizer, Moderna, and Johnson & Johnson pledged affordable vaccines — but only as long as there's a "pandemic.""**, The Intercept, 18 March 2021.

The Vicissitudes of Compulsory Vaccination

"As showing the vicissitudes of compulsory vaccination legislation, a curious and interesting condition of affairs has arisen in New York State.

The Commissioner of Health began, during the past year (1914), to enforce a law requiring the vaccination of school children in the rural districts, and caused the vaccination of some 300,000 children. As a result of this campaign, which was very unpopular with the people, **a number of bad arms developed and some children were attacked by tetanus, but only those in the country districts; none in the cities.** A bill has been introduced into the New York Assembly, known as the "Tallett Bill", which was in large part instigated by **Mr Loyster, who lost a son from poliomyelitis, which he attributed to vaccination.**

This bill makes no provision for vaccination of school children except when smallpox exists in any school district or city or in the vicinity thereof. The bill was supported by the Commissioner of Education and by Dr Biggs, Commissioner of Health, who, however, wished it to apply only to the rural districts, and not cities of the first and second class. **The bill was opposed by the New York State Board of Health and by the Medical Society of the State of New York.** Curiously it was bitterly opposed by the anti vaccinationists, who felt that it was worse for them than the existing law, because it gave large discretionary powers to the Commissioner of Health. The situation is really one which, in relation to vaccination, is quite unique.

My personal belief is that the bill will be passed." - Dr Jay F. Schamberg, MD, in "Vaccination Legislation in New York", The Medical World, March 1915.

Jersey - £14.4 Million Budget Hospital Treated No Patients

"**Medical experts recommended**, Jersey's Nightingale Hospital will remain in place until June 2021. **It has treated no patients since it was completed in May 2020."** - in "ITV", 25 February 2021.

"Total to end June 2020.

£8,417,054

It is anticipated that the project will remain within the **£14.4 Million budget."** - in "Nightingale hospital decision making and costs, Freedom of Information office, Government of Jersey, 16 July 2020.

"Dr Anthony Fauci made $417,608 in 2019, the latest year for which federal salaries are available. That made him not only the highest paid doctor in the federal government, but the highest paid out of all four million federal employees." *- in "Forbes", 25 January 2021.*

Covid Mania Wearing Off

"Dr Anthony Fauci the most powerful man in the history of the united states, who's managed to undo the entire US Constitution, the bill of rights, the rule of law, and traditions of government and legality, 250 years in the making. Fauci basically managed to unwind that in a couple of weeks, two and a half weeks to flatten the curve." - Patrick Henningsen, in "Coronavirus Act Enthusiastically Renewed in Parliament", UK Column, 26 March 2021.

The Public Health Cartel

"The "public health experts" are scrambling to remain in the spotlight, and even their most reliable scare tactics are failing to keep the masses compliant, paranoid, and afraid. For the "public health" cartel, 2020 was the best year of their lives, and it seems that after one year of "two weeks to slow the spread". They just cant muster up the momentum needed to replicate that power high. A once panicked population, which for the past year has been captured under the spell of COVID hysteria, is slowly coming to the realization **that power drunk governors, bureaucrats like Anthony Fauci and the "public health" cartel, and other snake oil salesmen, have done so much residual harm in the name of a virus**, while never contributing in a positive manner to anything related to COVID-19. Despite our efforts to inform that COVID-19 - has 99.8% recovery rate - the **"Public Health" Terror Campaigns**, worked incredibly well." - Jordan Schachtel, in "The Chicken Little" Act Isn't Working – COVID Mania Is Wearing Off", Global Research Canada, 19 March 2021.

Until the End of 2022

"Until we get rid of it for the entire world, **we'll still have some restrictions on bans, on public gatherings. But even that by the end of 2022**, if we all work together, we should be completely back to normal. **Fortunately a technology called PCR allows us to do a test, a very accurate test.**" - Bill Gates, in "TVN24", 25 March 2021.

Wearing Masks Well Into 2022

"- Dr Rand Paul, MD, Senator from Kentucky: "Given that No scientific studies have shown significant numbers of reinfections of patients previously infected, or previously vaccinated, what specific studies do you cite to argue that the public should be wearing masks well into 2022."

- Dr Anthony Fauci, MD, Director National Institute of Allergy and Infectious Diseases (NIAID): "I'm not sure I understand the connection of what you're saying, about masks and re-infection, we're talking about people who have never been infected before.

- Dr Rand Paul, MD, Senator from Kentucky: "You're telling everybody to wear a mask whether they've had an infection or a vaccine." - in "US Senate Hearing", 18 March 2021.

The Financing of the Council of Europe by Open Society and Microsoft

"Even though the Council of Europe is an intergovernmental organisation, it receives private funding. According to the data on voluntary contributions published on the Council of Europe's website, its two main private funders are George Soros' Open Society and Bill Gates' Microsoft company, which contributed €1,527,466.67 between 2004 and 2013 and €967,078.07 between 2006 and 2014 respectively to the organisation." - Barna Pal Zsigmond, MEP, Hungary Representative, Hungarian National Assembly, in "Written question No. 756 to the Committee of Ministers, Doc. 15186", 18 November 2020.

"The annual financial reports of the Council of Europe, it appears that George Soros Open Society and Bill Gates' Microsoft are the 2 largest private donors to the organization. These 2 organizations have respectively given the Council of Europe nearly €1,400,000 between 2004 and 2013 and nearly €690,000 between 2006 and 2014. The Open Society also supports Council of Europe initiatives, including the European Institute for Roma Arts and Culture. The Council of Europe, but also for the International Criminal Court, which received $115,000 from the Open Society in 2017, and even more for the WHO and even the UN. The Gates Foundation is the second largest funder of the WHO after the United States, with a contribution of $530 million in 2019. 80% of WHO's budget is based on voluntary contributions." - Grégor Puppinck, in "How Soros' Open Society and Microsoft Invest in the Council of Europe & the UN", European Centre for Law and Justice, December 2020.

Develop Citizens Vaccination Card/Passport 2018

Hereby Welcomes The Commission's Intention To Take The Following Actions, In Close Cooperation With The Member States:

10. Aim at establishing a **European Vaccination Information Sharing (EVIS) System, coordinated by the European Centre for Diseases Prevention and Control (ECDC),** in order to:

a. Together with the **national public health authorities,**

i. examine the options of **establishing, by 2020, guidelines for a core EU vaccination schedule**, aiming to facilitate the compatibility of national schedules and promote equity in Union citizens′ health protection, and subsequently ensuring broad uptake of the core schedule as well as a **common vaccination card;**

ii. strengthen the consistency, transparency, and methodologies in the assessment of national and regional vaccination plans, by sharing scientific evidence and tools with the support of **National Immunization Technical Advisory Groups (NITAGs);**

iii. design EU methodologies and guidance on data requirements for better monitoring of vaccination coverage rates across all age groups, including healthcare workers, **in cooperation with the World health Organisation (WHO).** Collect such data and share them at EU level;

c. **Monitor online vaccine misinformation** and develop evidence-based information tools and guidance to **support Member States in countering vaccine hesitancy, in line with the Commission Communication on tackling online disinformation.**

Hereby Welcomes The Commission's Intention To:

17. Examine issues of insufficient vaccine coverage caused by cross-border movement of people within the EU and look into options to address them, including **developing a common EU citizens vaccination card/passport, compatible with electronic immunisation information systems and recognised for use across borders.**

24. **Strengthen partnerships and collaboration with international actors and initiatives, such as the World Health Organisation and its Strategic Advisory Group of Experts on Immunization (SAGE)**, the European Technical Advisory Group of Experts on Immunization (ETAGE), the Global Health Security Initiative and Agenda processes (Global Health Security Initiative, Global Health Security Agenda), UNICEF and financing and research initiatives like **GAVI the Vaccine Alliance, the Coalition for Epidemic Preparedness Innovations (CEPI),** and the Global Research Collaboration for Infectious disease Preparedness (GloPID-R).

Done at Brussels, **26 April 2018.**

For the Council
The President

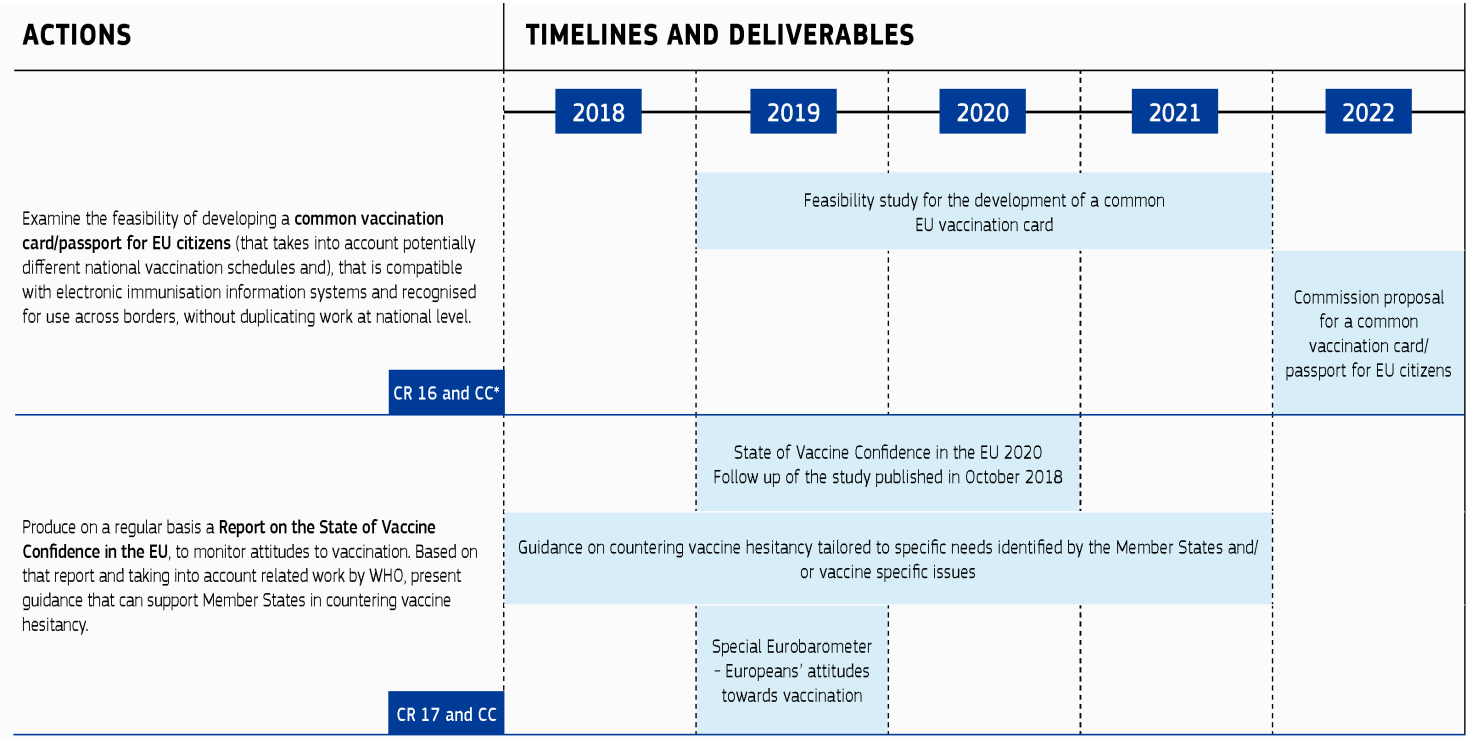
- in "Proposal for a Council Recommendation on Strengthened Cooperation against Vaccine Preventable Diseases", European Commission, EU, 26 April 2018.

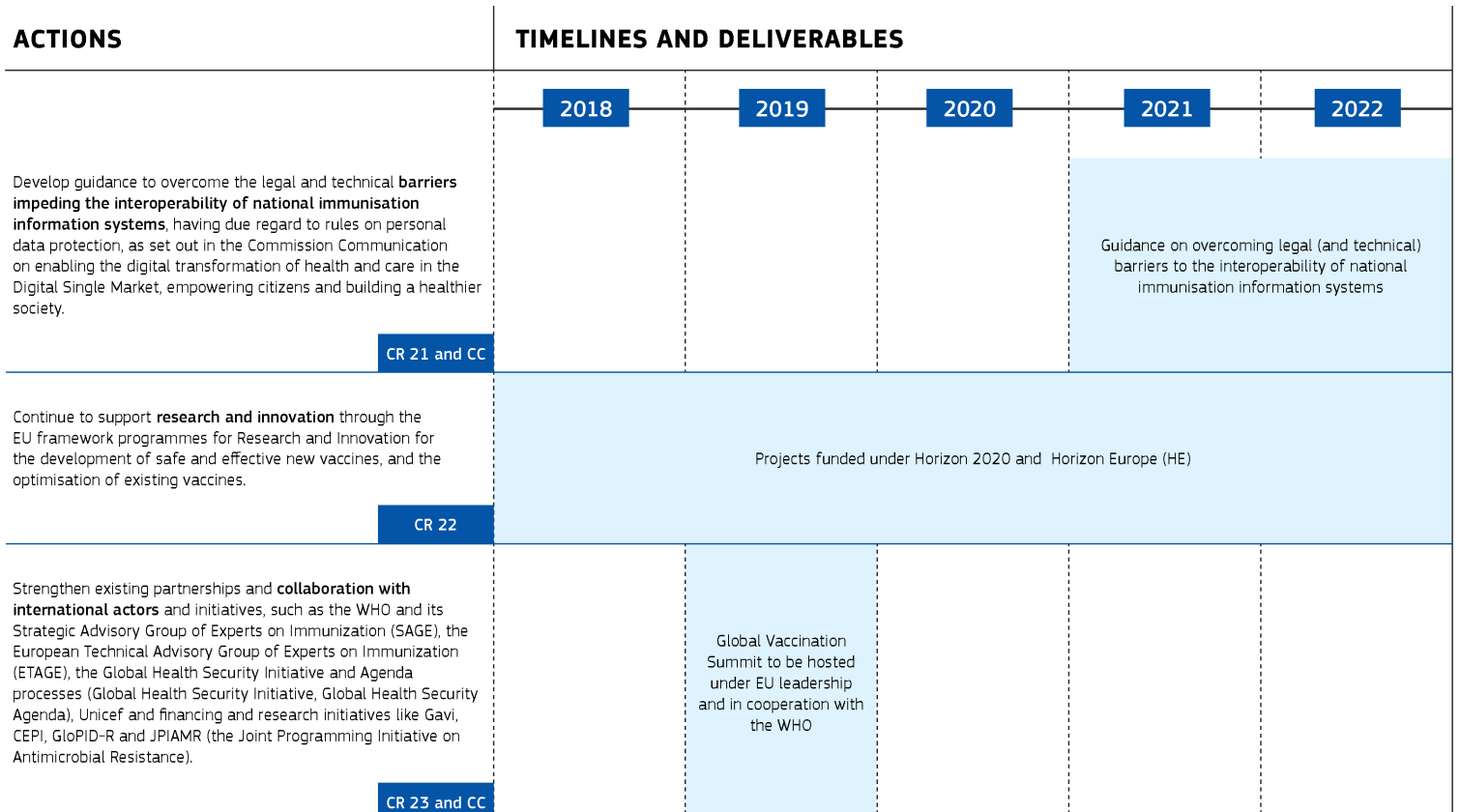
Vaccine Passport Roadmap 2019

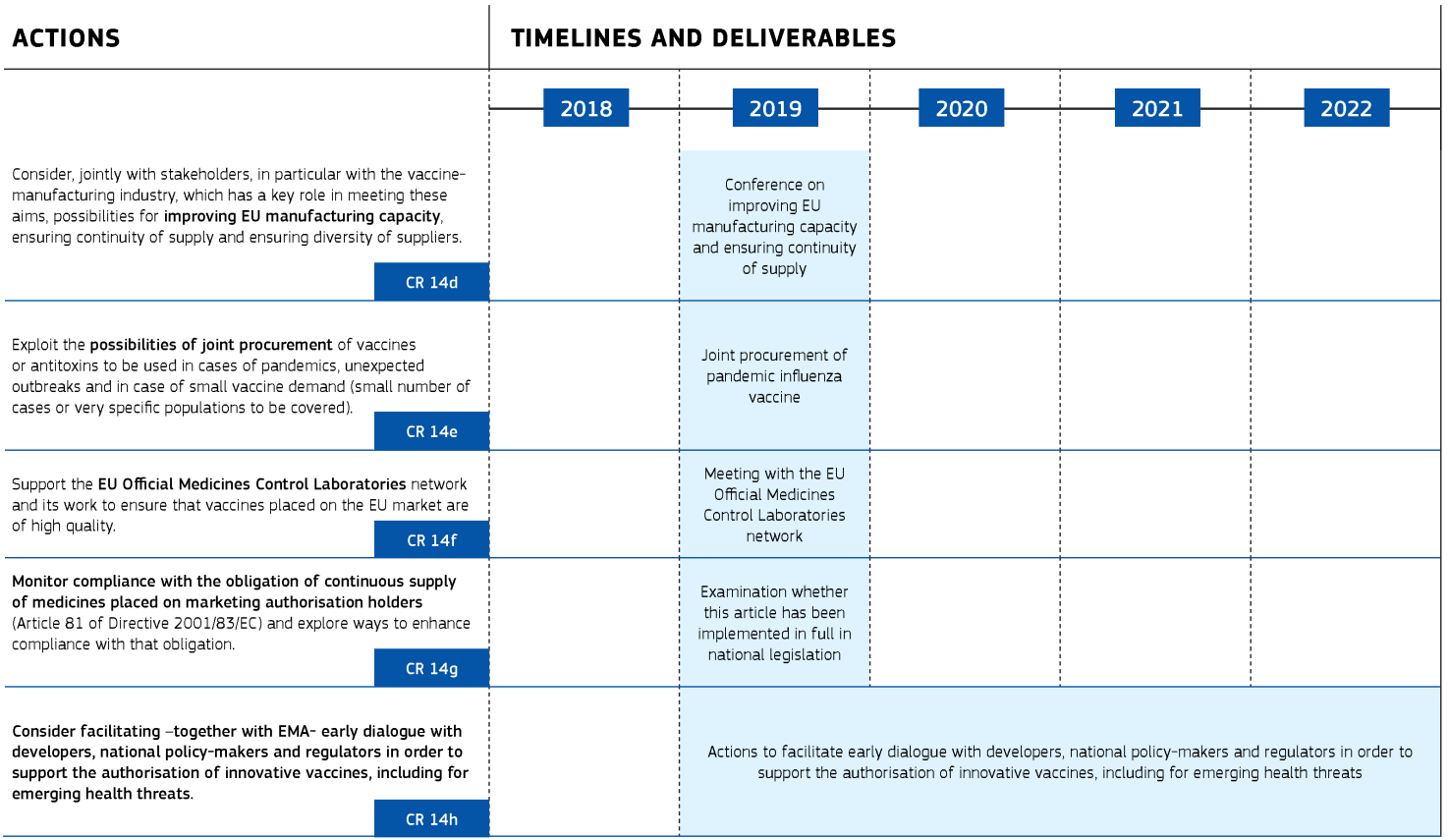
Roadmap for the Implementation of Actions by
The European Commission Based on the Commission Communication and the Council Recommendation on Strengthening Cooperation Against Vaccine Preventable Diseases

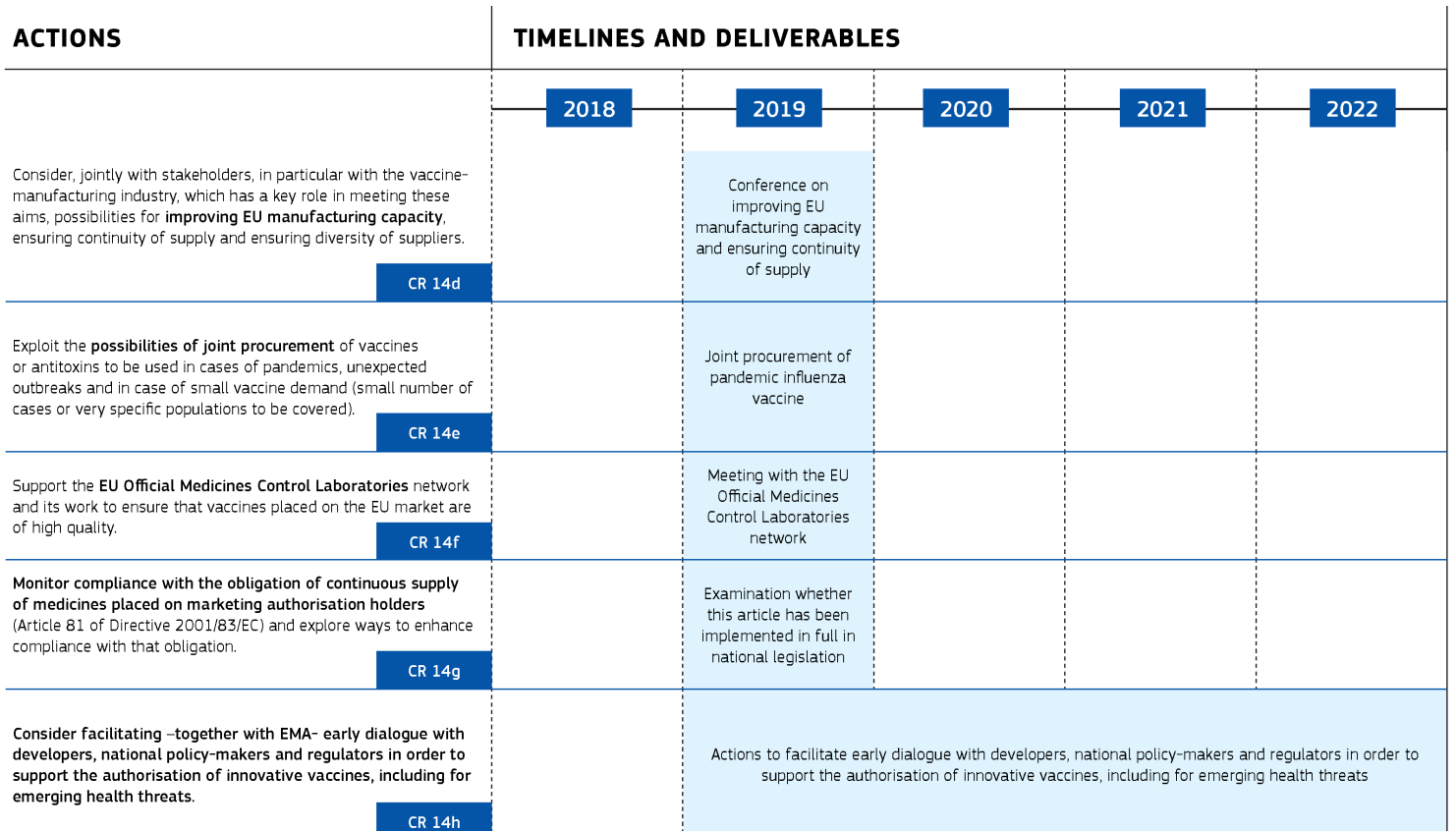
Last update: Q2 2019

European Commission, EU


ACTIONS
TIMELINES AND DELIVERABLES
2018
2019
2020
2021
2022
Examine the feasibility of developing a common vaccination card/passport for EU citizens (that takes into account potentially different national vaccination schedules and), that is compatible with electronic immunisation information systems and recognised for use across borders, without duplicating work at national level.
CR 16 and CC*
Feasibility study for the development of a common EU vaccination card
Commission proposal for a common vaccination card/ passport for EU citizens
Produce on a regular basis a Report on the State of Vaccine Confidence in the EU, to monitor attitudes to vaccination. Based on that report and taking into account related work by WHO, present guidance that can support Member States in countering vaccine hesitancy.
CR 17 and CC
State of Vaccine Confidence in the EU 2020
Follow up of the study published in October 2018
Guidance on countering vaccine hesitancy tailored to specific needs identified by the Member States and/ or vaccine specific issues
Special Eurobarometer - Europeans' attitudes towards vaccination


ACTIONS
TIMELINES AND DELIVERABLES
2018
2019
2020
2021
2022
Develop guidance to overcome the legal and technical barriers impeding the interoperability of national immunisation information systems, having due regard to rules on personal data protection, as set out in the Commission Communication on enabling the digital transformation of health and care in the Digital Single Market, empowering citizens and building a healthier society.
CR 21 and CC
Guidance on overcoming legal (and technical) barriers to the interoperability of national immunisation information systems
Continue to support research and innovation through the EU framework programmes for Research and Innovation for the development of safe and effective new vaccines, and the optimisation of existing vaccines.
CR 22
Projects funded under Horizon 2020 and Horizon Europe (HE)
Strengthen existing partnerships and collaboration with international actors and initiatives, such as the WHO and its Strategic Advisory Group of Experts on Immunization (SAGE), the European Technical Advisory Group of Experts on Immunization (ETAGE), the Global Health Security Initiative and Agenda processes (Global Health Security Initiative, Global Health Security Agenda), Unicef and financing and research initiatives like Gavi, CEPI, GloPID-R and JPIAMR (the Joint Programming Initiative on Antimicrobial Resistance).
CR 23 and CC
Global Vaccination Summit to be hosted under EU leadership and in cooperation with the WHO


ACTIONS
TIMELINES AND DELIVERABLES
2018
2019
2020
2021
2022
Consider, jointly with stakeholders, in particular with the vaccine-manufacturing industry, which has a key role in meeting these aims, possibilities for improving EU manufacturing capacity, ensuring continuity of supply and ensuring diversity of suppliers.
CR 14d
Conference on improving EU manufacturing capacity and ensuring continuity of supply
Exploit the possibilities of joint procurement of vaccines or antitoxins to be used in cases of pandemics, unexpected outbreaks and in case of small vaccine demand (small number of cases or very specific populations to be covered).
CR 14e
Joint procurement of pandemic influenza vaccine
Support the EU Official Medicines Control Laboratories network and its work to ensure that vaccines placed on the EU market are of high quality.
CR 14f
Meeting with the EU Official Medicines Control Laboratories network
Monitor compliance with the obligation of continuous supply of medicines placed on marketing authorisation holders (Article 81 of Directive 2001/83/EC) and explore ways to enhance compliance with that obligation.
CR 14g
Examination whether this article has been implemented in full in national legislation
Consider facilitating –together with EMA- early dialogue with developers, national policy-makers and regulators in order to support the authorisation of innovative vaccines, including for emerging health threats.
CR 14h
Actions to facilitate early dialogue with developers, national policy-makers and regulators in order to support the authorisation of innovative vaccines, including for emerging health threats


ACTIONS
TIMELINES AND DELIVERABLES
2018
2019
2020
2021
2022
Consider, jointly with stakeholders, in particular with the vaccine-manufacturing industry, which has a key role in meeting these aims, possibilities for **improving EU manufacturing capacity**, ensuring continuity of supply and ensuring diversity of suppliers.
CR 14d
Conference on improving EU manufacturing capacity and ensuring continuity of supply
Exploit the **possibilities of joint procurement** of vaccines or antitoxins to be used in cases of pandemics, unexpected outbreaks and in case of small vaccine demand (small number of cases or very specific populations to be covered).
CR 14e
Joint procurement of pandemic influenza vaccine
Support the **EU Official Medicines Control Laboratories** network and its work to ensure that vaccines placed on the EU market are of high quality.
CR 14f
Meeting with the EU Official Medicines Control Laboratories network
Monitor compliance with the obligation of continuous supply of medicines placed on marketing authorisation holders (Article 81 of Directive 2001/83/EC) and explore ways to enhance compliance with that obligation.
CR 14g
Examination whether this article has been implemented in full in national legislation
Consider facilitating –together with EMA- early dialogue with developers, national policy-makers and regulators in order to support the authorisation of innovative vaccines, including for emerging health threats.
CR 14h
Actions to facilitate early dialogue with developers, national policy-makers and regulators in order to support the authorisation of innovative vaccines, including for emerging health threats

A Convenient Pandemic

"The definition of a pandemic is ultimately a matter of interpretation. There is no data that currently supports the claim there is a pandemic in Britain at this moment, and whether any data ever did is doubtful.

So far the theatre of the pandemic has been organised as a campaign of psychological manipulation with policies conceived to 'nudge' compliance by alternately dangling rewards (which are usually snatched away) and making threats.

This campaign has also featured systematic censorship and intimidation directed against some of the most accomplished scientists in the world.

What is needed in the meantime is urgently to unwind the cycle of compliance, beginning with the mass removal of the mask, extending to the deconstruction of the narrative, and culminating in total disobedience against the tyranny now represented by this illegitimate and shameful government." - in "A Very Convenient Pandemic", The Conservative Woman, 8 April 2021.

NHS Vaccine Specialist Senior Nurse Testimony

"As you can see from my **National Health Service (NHS)** ID, I work for the **NHS as a Senior Nurse.**

I report directly to the line manager who sits at executive level within my board.

I am directly involved with the vaccination program for my health board, at senior nursing management level.

I'm essentially a policy writer, and I'm responsible for the prescribing documents that allow health care staff to administer the jabs, they are not vaccines, and as such I can't refer to them as this.

I have been in my current post directly responsible for all our vaccine policies and prescribing documents for sears, I work in tandem with our public health team, and I know a great deal in regard to vaccines and their use.

I have also worked previously as a research nurse, and I know how to critically appraise journal articles and trial protocols.

In response to the video "No Smoke Without Fire, Part II", and in particular concerning a question you put to Debbie Evans (a retired NHS nurse, and former government autism advisor), you asked Debbie what she believed was going on in regards to Medics, Nurses and Carers who were involved in the Vaccine Program, and whether or not they had knowledge of the risks around the jabs, but were carrying on regardless, or were they not aware as a result of how they are trained nowadays.

Everyone involved in the jab program is simply listening to senior management and there is very little if any questioning around the whole issue of the jabs.

I started to ask questions in regard to the safety of the jabs

before the Medicines and Healthcare Products Regulatory Agency (MHRA), gave their emergency use authorisation last year [2020].

I knew, I would be expected to be directly involved in the rollout of the jabs in our health board.

I had been reading the trial protocols, and their interim analysis data were published. I could see very early on that there were flaws in the design of the Pfizer trial, and for all the jabs there was little to no safety data made available.

I could see that the claims of the pharmaceutical companies as to the efficacy of the jabs was poetic license, and, as far as I'm concerned was designed to mislead.

Because my work has centred on vaccines for the last few years, I also questioned the speed with which these jabs came into use, and the fact that no one was questioning the outcomes of the numerous animal trials that had been undertaken over the previous 18 years for SARS and MERS.

Initially I refused to have any involvement and undertake my usual tasks in relation to these new jabs.

However, I was quickly threatened with redeployment to the planned vaccine centre where I would be expected to administer the jabs.

I definitely did not want to be in a position where I was expected to inject anyone, so I reigned in my objection but continue to refuse to have my name appear on any of the paperwork at every turn I have challenged and questioned the need for these jabs, in any cohort other than the plus 65 years, and the clinically at risk.

Even then, **I question the lack of safety and efficacy data.**

I challenged the fact that our health board had adopted a policy of not providing the Patient Information Leaflet

(PIL), to all jab recipients the PIL should always be made available to every recipient in a timely manner, so that they may read through it in order to make a truly informed decision, and provide consent to receiving the jab.

Yet it became policy that no one was to offer this to recipients, unless they had requested it.

However lay people, have no concept of the PIL, and are unaware that this is supposed to be provided to them.

Conversely, however it is written in the protocols that the health care professionals must use to authorize them to administer the jab, that the PIL, must be made available to the recipient.

Similarly, I challenged the fact that the documentation used by the healthcare professionals, as a checklist to be gone through with every recipient, **did not include that the recipient must be informed, that they are taking part in an Ongoing Clinical Trial.**

At every turn, and where I can, I have constantly questioned and confronted my executive level line manager, my public health colleagues, and my peers some of whom I've worked with for over 10 years now.

As a result of my non-conformity, I've been labelled an anti-vaxxer, and conspiracy nut.

I have been excluded from certain meetings, I've been openly ridiculed and laughed at in others. And most recently I was told, I needed to watch my step as when cost-saving measures are required later this year [2021], I may just find myself surplus to requirements.

So Debbie is correct, **those delivering the programs and injecting the public are simply following the orders**, relayed to them, and for the most part they are doing so naively, in the belief that they can trust the rhetoric dictated by senior management, however there is total awareness of

the issues and risks involved with these jabs at senior level within the NHS, and not just in my board.

I've spoken with colleagues from other health boards who report the same issues.

When I last faced up to my manager, **I asked why they were content to be taking part in what amounted to as far as I was concerned to genocide.**

Their reply was chilling, and left me feeling both disgusted and despairing, they agitatedly replied that: **"We all have a job to do and a part to play, and we need to just put up shut up and get it done".**

It was made very clear to me government were leaning heavily on health boards, to ensure not only compliance with the jab programme, but that the boards met the targets set by the government.

I have had numerous conversations with nurses who have years of experience working in the NHS, and who are also aware that things simply aren't right, but always to no avail, I am often told that it's futile and there's no point in speaking up or speaking out, as they being management just won't listen.

Then there are those who are aware of what's going on and simply can't take the stress of being involved, they have gone off work long term sick in their droves.

There are also very many senior nurses who have taken early retirement over the last few months, all of them citing the current situation with the jabs and the whole Covid debacle as the reasons they just had to get out.

Those NHS staff, who have knowledge of what's taking place and who are not speaking out are complicit in the atrocity.

Some, even go so far as to demand nurses like me speak out as a moral duty and they have no sympathy for us if we

stun, if we end up facing Nuremberg style Trials.

But I have a mortgage to pay, and 2 young children, and all the bills for the whole house to cover, after my partner was made redundant last year, I can't go public, if I did I would most certainly never work in nursing again, and with the current climate of unemployment what chance would I stand of getting a job, never mind one that would pay enough to cover our outgoings, and keep a roof over my children's head.

I hate my job, I am currently ashamed to be a nurse, and every day I work for the NHS I feel greater despair and loathing.

I would relay a conversation I had yesterday with a General Practitioner (GP), at one of our surgeries delivering the jabs, the GP in question knows of my direct involvement with the board's jab programme, and had questioned me in regards to the forthcoming Moderna jab, that we are to begin administering in April 2021.

Through the course of the conversation, I learned that the GP, had taken the **Pfizer jab** herself, aghast I asked her, was she crazy considering **the jab contained PEG, Polyethylene Glycol, also known as antifreeze.**

The GP didn't know the jab contained PEG, in fact the GP didn't know any of the excipients in the jab at all, as they had never read the PIL, or the full prescribing documentation.

I challenged this stating, that they couldn't fully obtain consent from their patients if they themselves weren't aware of the contents of the PIL.

I then asked, were they informing their patients that they were taking part in a clinical trial.

At this point the colour drained from the GP's face as they rather sheepishly replied that they weren't, **they were**

simply asking if the patient was happy to be followed up over a 2 year period for research. In all honesty, the GP didn't even know the jabs weren't approved or that they were still in Clinical Phase 3 trials.

Tragically this GP's lack of knowledge in regard to the jabs isn't rare.

Again, recently I had a conversation with an NHS consultant who took the Pfizer jab, they too didn't know they had taken part in the trial, or that the jabs weren't approved. If Consultants, Nurses, and Pharmacists within the NHS, aren't aware of this, how on earth can we expect the public to know. My NHS colleagues have forsaken their duty of care, broken their code of contact conduct Hippocratic oath, and have been brainwashed.

Just the same as the majority of the UK public through propaganda and predictive programming.

When I trained as a nurse, it was ingrained in me to question everything to never accept being told because we've always done it, or because I'm telling you to.

I learned that we were advocates for patients and it was our duty to protect them at all costs, and I learned to look for the evidence behind every treatment, or medicine, I would provide a patient. Therefore I am complicit too.

For now I am resigned to remain in my post I will continue to be defiant and to challenge everyone at every opportunity to try to wake them up.

If a time ever came when this genocide came to light, and if I ended up on trial testifying against those in positions of power who could have affected the outcomes, I would not hesitate to give evidence. I will also accept my fate should I too be found to have been duplicitous in this hurried act of human annihilation. I do not fear that day, indeed i pray for it to come." - in "UK Column News", 14 April 2021.

TV Channel During the COVID "Pandemic" and the Promotion of Fear

"Fear sells. No one ever says those things out loud, but it is obvious. Fear is the thing that keeps you tuned in. Its fear, liker fear really drives numbers (TV ratings). COVID, Gangbusters with ratings! Which is why, we constantly have the death toll on the side, which I have a major problem with how we're tallying how many people died every day. Because I've even looking at it, and been like; look at it and be like, **let's make it higher, like, why isn't it high enough. Like, it would make our point better if it was higher.**

And, I am like, what am I f..king rallying for?

That's a problem that we're doing that.

I've been in the room many times, where my director tells me take it down, and I take it down, **and then we get a phone call like that, the red phone rings in the back literally a red phone like this special red phone right here and they pick it up, and this producer picks it up, and every so often they put it on speaker, and being like:**

> ***"There's nothing that you're doing right now that makes me want to stick! Put the numbers back up, because that's the most enticing thing that we had. So put it back up."***

- Why don't you guys at CNN show the recovery rates on the death tolls at least?

- The recovery rates? Oh who's had it and then recovered! Because that's not scary. I would imagine, that's why they don't do it. Yeah, if it bleeds it bleeds! I think no

one ever says those things out loud, but it's obvious.

It's human nature, I mean, like I find myself watching more news when there's something looming and scary. I mean there's no such thing as unbiased. It just doesn't exist. There's too many agendas, there's too many people that have jobs that need to feed their families for it to be unbiased, it's impossible." - Charlie Chester, Technical Director, CNN in "CNN Director Reveals That Network Practices 'Art of Manipulation' to 'Change The World'", Project Veritas, 14 April 2021.

Global Citizen Event for Vaccination

"Global Citizen has announced Vax Live: The Concert to Reunite the World, a virtual concert and broadcast to encourage Covid-19 vaccinations around the world. During the special, Global Citizen will call on philanthropists and corporations to donate enough "dollars-for-doses" to vaccinate more than 27 million international healthcare workers." *- in "Selena Gomez to* ***Host Global Citizen Event for Vaccination****", Rolling Stone, 13 April 2021.*

The Global Citizen VAX LIVE Concert

VAX LIVE: The Concert to Reunite the World is celebrating the hope that COVID-19 vaccines are offering families and communities around the world. We are calling on world leaders to step up to make sure vaccines are accessible for all so we can end the pandemic for everyone, everywhere.

The VAX LIVE: The Concert to Reunite the World campaign includes policy partners

1. World Health Organization (WHO).
2. Coalition for Epidemic Preparedness Innovation (CEPI).
3. Gavi – The Vaccine Alliance.
4. Global Fund to fight AIDS, Tuberculosis and Malaria.
5. COVID-19 Therapeutics Accelerator.
6. Foundation for Innovative New Diagnostics (FIND).
7. UNITAID.

Philanthropic Partners

1. Bill & Melinda Gates Foundation
2. Rockefeller Foundation
3. Allan & Gill Gray Philanthropy.

Global Citizen Board of Directors

- Sarah L. Colamarino, Vice President, Corporate Equity & Partnerships, **Johnson & Johnson.**

- Daniel Green, Senior Advisor for Policy, Advocacy and Communications, **Bill & Melinda Gates Foundation.**

Fewer Deaths in "Pandemic" Year 2020 Country List

Country	Expected Age-standardised Mortality 2020 (per 100,000)	Age-standardised total mortality per 100,000	Absolute excess age-standardised mortality per 100,000	Percentage increase in Mortality per Age-Adjusted 100,000
Denmark	1016	972	-44	-4.30%
Finland	948	919	-29	-3.10%
Iceland	755	724	-31	-4.10%
Latvia	1446	1414	-32	-2.20%
Norway	893	861	-32	-3.60%
South Korea	779	757	-22	-2.90%

Absolute excess is the difference between the Expected and total age-standardised mortality (column 2 – column 1), percentage or relative excess is (column 2/column 1).

Denmark, Finland, Iceland, Latvia and Norway, South Korea experienced fewer deaths in 2020 according to our analysis." - Ufuk Parildar, medical student in the Final Honours School of the University of Oxford, Rafael Perara, Professor of Medical Statistics and Director of Medical Statistics at the Nuffield Department of Primary Care Health Sciences, Jason Oke, Senior Statistician at the Nuffield Department of Primary Care Health Sciences and Module Coordinator for Statistical Computing with R and Stata (EBHC Med Stats), in "Excess Mortality across Countries in 2020", 3 March 2021.

European Medicines Agency rules AstraZeneca vaccine is 'safe and effective'

"I would be vaccinated with AstraZeneca tomorrow", European Medicines Agency, Executive Director Emer Cooke says." *- in "Irish Times", 18 March 2021.*

European Medicines Agency

"The European Medicines Agency's (EMA) Executive Director is Ms Emer Cooke.

Before taking up her current role, she was the **Director responsible for all medical product-related regulatory activities at the World Health Organization (WHO)** in Geneva between November 2016 and November 2020.

Ms Cooke worked for the **European Federation of Pharmaceutical industries and Associations (EFPIA) as Manager of Scientific and Regulatory Affairs from 1992 to 1995 and from 1996 to 1998.** She also worked part-time as an **independent pharmaceutical policy advisor from 1996 to 1998. Ms Cooke worked in the Irish pharmaceutical sector between 1985 and 1991."** - in "About Us", European Medicines Agency, 21 April 2021.

Fees From The Pharmaceutical Industry

"For 2021, the total budget of the European Medicines Agency (EMA) **amounts to €385.9 Million**.

Around **86% of the European Medicines Agency budget derives from fees and charges.**

And 14% from the European Union (EU).

Of the Total Budget in 2021:

Approximately **€330.4 Million will come from fees and charges levied for regulatory services;**

Approximately €55.4 Million are expected in income from the European Union." - in "Funding", European Medicines Agency, 21 April 2021.

An ex-employee of the Pharmaceutical Industrial now "supervising" his old employers.

And the agency that controls the pharmaceutical industrial complex receives 86% of its funding from the same industry that is meant to regulate.

A total of €385.8 Million a year, €32 Million a month, €1 Million Euros a day!

If The Whole Country Is Vaccinated You Can't Open The Borders

"In terms of opening up, as has been set out by the the Prime Minister, and the Chief Medical Officer of Australia, is based on a series of factors.

Vaccination alone is no guarantee that you can open up.

And this was a discussion that in fact I had with Professor Dr Brendan Murphy, MD, in just the last 24 hours, **that if the whole country was vaccinated, you couldn't just open the borders." -** Greg Hunt, Australian Minister for Health and Aged Care, in "What 'seemed like liberation' during the pandemic, will soon 'look like a prison'", Sky News Australia, 16 April 2021.

> ***"In autumn-winter 2021, at least 20-30% of those vaccinated against COVID will die from the vaccine and a new strain will be blamed."*** *- Dr María José Martínez Albarracín, MD, Professor of Clinical Diagnostic Processes, Graduated in Medicine & Surgery University of Murcia, in "La Inmensa Minoría", 20 March 2021.*

> ***"The risk of a serious blood clot from AstraZeneca jab has doubled in a fortnight, new data show, but the Government's regulatory agency has said the benefits still outweigh the risks."*** *- in "Coronavirus latest news: AstraZeneca blood clot risk doubles, data show, but benefits 'still outweigh risks'", The Telegraph, 22 April 2021.*

The Country No Longer Needs The 10 Million AstraZeneca Jabs It Ordered

"We are trying to find the best solution. After all, ***we don't want (the vaccines) to get here and have to throw them into the trash. It's best that AstraZeneca vaccines do not reach the country.*** *At a time when we did not know which vaccine would be more effective, we made agreements with a number of companies –* ***and now we do not need them."*** *- Nachman Ash, Israel's national pandemic coordinator, Army Radio, Israel, 21 April 2021.*

99% of Covid Deaths Has Underlying Conditions

"Of the 230 deaths notified, 228 (99%) had underlying conditions. The recorded death figures for the illness ***"do not have a scientific basis. "In reality, a lot of people have terminal cancer or multiple other serious co-morbidities. People can die from Covid and or with Covid. I think numbers that are recorded as Covid deaths may be inaccurate and do not have a scientific basis. When a person is suffering from a number of medical conditions which will or may lead to their death at some short time in the future, if they are unlucky enough to be infected by the Covid virus then at death if they prove to be Covid positive in a test, it is that which is recorded as the principal cause of death — even though that person may have been terminally ill with a short life-expectancy prior to such testing."*** *- Coroner Patrick O'Connor, in "Mayo coroner questions Nphet's figures for Covid deaths", Independent, 18 April 2021.*

Ireland 2017 Flu & 2020 Covid Deaths

October to October Period	2017 FLU	2020 COVID	Difference
GRO/CSO Deaths	32066	32799	**267**
RIP.ie Deaths	32405	32128	**277**

- Ivor Cummins, BE(Chem), Ceng, MIEI, PMP, in "Mainstream News Dissected in a Scientific and Data-Centric Manner", 21 April 2021.

Covid-19 Can't Be Detected in Air

"SARS-COV-2 RNA can be detected intermittently by RT-PCR in the air in a variety of settings. ***A number of studies that looked for viral RNA in air samples found none, even in settings where surfaces were found to be contaminated with SARS-CoV-2 RNA.*** *The lack of recoverable viral culture samples of SARS-CoV-2 prevents firm conclusions to be drawn about airborne transmission." - Carl J. Heneghan, Elizabeth A. Spencer, Annette Plüddemann, Igho J. Onakpoya,Tom Jefferson,University of Oxford, Oxford, Oxfordshire, UK, and Jon Brassey, David H. Evans, John M. Conly, in "SARS-CoV-2 and the role of airborne transmission: a systematic review", F1000 Research, 24 Mar 2021.*

The Virus Is Here to Trigger an Acceleration of Social and Economic Change

"I know the people of this country are going to defeat this virus. But after all we have been through **it isn't enough just to go back to normal.**

We have lost too much. We have mourned too many. We have been through too much frustration and hardship just to settle for the status quo ante – **to think that life can go on as it was before the plague; and it will not. Because history teaches us that events of this magnitude – wars, famines, plagues; events that affect the vast bulk of humanity, as this virus has – they do not just come and go. They are more often than not the trigger for an acceleration of social and economic change,** because we human beings will not simply content ourselves with a repair job.

We see these moments as the time to learn and to improve on the world that went before.

That is why this government will build back better." - Boris Johnson, in "Prime Minister's Keynote Speech", Conservative Party Conference, 6 October 2020.

> ***"Those who fail to learn from history are condemned to repeat it."*** *- Sir Winston Churchill, speech to the House of Commons, United Kingdom, 1948.*

Risk of Anyone Under 30 Getting Ill or Dying from Covid is Astronomically Small

"- Julia Hartley-Brewer: **The risk of anyone under the age of 30 getting ill or dying from Covid is astronomically small.**

- Professor Robert Read, Member of the Joint Committee on Vaccination and Immunisation (JCVI): **Well um, yes, but dying yes, but I mean COVID does things, more, no more than kills you, it's associated with a ranger long nasty syndromes, such as LONG COVID etc..., and so you know, it's not just a sort of one-trick pony this this infection.**

- Julia Hartley-Brewer: **It's just interesting that the Government and Medics, are really happy for the British public to make decisions on the vaccine. On this front because we're all so sensible, and show common sense. But not when it comes to the COVID, we apparently then are incapable of understanding the risks. It's interesting that we pick and choose when we think the British public are sensible."** - Julia Hartley-Brewer, in "Talk Radio", 8 April 2021.

Access to COVID-19 Tools Accelerator (ACT)

"The Access to COVID-19 Tools Accelerator (ACT Accelerator or ACT-A), or the Global Collaboration to Accelerate the Development, Production and Equitable Access to New COVID-19 diagnostics, therapeutics and vaccines, is a G20 initiative announced on 24 April 2020.

A call to action was published simultaneously by the World Health Organization (WHO) on 24 April. On 10 September 2020, the UN and the European Union EU, co-hosted the Inaugural Meeting of the Facilitation Council of the ACT-Accelerator, which had received $2.7 Billion of the $35 Billion necessary to secure the 2 Billion COVID-19 vaccine doses, 245 million treatments, and 500 million tests.

Although the Trump administration of the United States had withdrawn its financial support of the WHO, and ACT Accelerator in 2020, the United States reasserted its support of the WHO and COVAX on 21 January 2021 following the inauguration of President Joe Biden.

The ACT Accelerator is a cross-discipline support structure to enable partners to share resources and knowledge. It comprises four pillars, each managed by 2 to 3 collaborating partners:

1. Vaccines (also called "COVAX")
2. Diagnostics
3. Therapeutics
4. Health Systems Connector

By December 2020, more than 10 billion vaccine doses had been pre-ordered by developed countries.

The manufacturers of three vaccines closest to global distribution, Pfizer, Moderna, and AstraZeneca, predicted a

manufacturing capacity of 5.3 Billion doses in 2021, which could be used to vaccinate about 3 Billion people (as the vaccines require 2 doses for a protective effect against COVID-19).

Due to the high demand in pre-orders from rich countries for 2021, people in low-income developing countries may not receive vaccinations from these manufacturers until 2023 or 2024, increasing the use of the COVAX initiative to supply vaccines equitably. Emphasizing the need for broad distribution of safe, effective vaccines against COVID-19, especially across developing countries, GAVI uses the slogan, "No one is safe until everyone is safe." - in "Access to COVID-19 Tools Accelerator ", Wikipedia, 2021.

The Bill Gates Covid19 Business Plan

"As the pandemic struck, there was a realization that this was a global problem and that we needed to orchestrate resources on a global basis and so uh particularly the United Kingdom, France and Germany came together with other actors like the World Health Organization (WHO) and our Foundation (Bill and Melinda Gates Foundation), and said OK, what are the vehicles we can use:

1. The Coalition for Epidemic Preparedness Innovations (CEPI) was there to do Vaccine research (CEPI was outlined in a July 2015 paper in The New England Journal of Medicine, titled "Establishing a Global Vaccine-Development Fund", co-authored by British medical researcher **Jeremy Farrar** (director of **Wellcome Trust**), A**merican physician Stanley A. Plotkin, co-discoverer of the Rubella vaccine), and American expert in infectious diseases Adel Mahmoud (developer of the HPV vaccine and rotavirus vaccine**. The concept was expanded at the 2016 **World Economic Forum (WEF) in Davos**, **Switzerland,** where it was discussed as a solution to the problems encountered in developing and distributing a vaccine for the Western African **Ebola virus epidemic**. **Co-founder, and funder, Bill Gates said**:

> *"The market is not going to solve this problem because* ***epidemics do not come along very often - and when they do, you are not allowed to charge some huge premium price for the tools involved."***

CEPI's creation was also supported and co-funded by the pharmaceutical industry including GlaxoSmithKline, (GSK), please note that GSK and the Wellcome Trust are in fact one and the same financial source [please read the book "Nescience of Medicine", 2021]).

2. Global Alliance for Vaccines and Immunisation (GAVI) to buy vaccines (Bill and Melinda Gates Foundation and a group of founding partners in 2000 setup the Global Alliance for Vaccines and Immunisation: Gavi the Vaccine Alliance).

3. Global Fund for therapeutics including oxygen (The organization began operations in January 2002. Microsoft founder Bill Gates (through the Bill & Melinda Gates Foundation) was one of the first donors to provide seed money for the partnership).

And that's what Access to COVID-19 Tools Accelerator (ACT-A) is it's taking all of that additional resources and coordinating it on a global basis. Of course you know because we didn't prepare for this pandemic (laugh, giggle) nearly like we should have, you know we've been learning as we've been going.

The good news is that partly because of the ACT-A day efforts partly because of us Research & Development (R&D) money, we have the vaccines and we can see the end will come uh for this pandemic. We haven't had any dramatic therapeutics unfortunately the vaccine spaces is been amazing, not only did we get them very rapidly.

Now the volumes are getting up and we're using factories in India and other places as a second source so we're not just relying on the company that invented the vaccine but for the first time ever transferring exactly that

vaccine into factories like the Serum Institute [India] to get the capacity up.

We want to vaccinate certainly all the elderly in the world, and in most countries we want to get to over 80% vaccination.

I Do a Regular Phone Call With the Pharmaceutical CEO's

- Question: Allowing these vaccines as you say, the recipe for these vaccines to be shared would be helpful and do you think that would be helpful.

- Bill Gates: **No!** We got all the rights from the vaccine companies, they didn't hold it back they were participating. **I do a regular phone call with the**

Pharmaceutical CEO's (Chief Executive Officers) to make sure that work is going at full speed.

The actual death rate from this epidemic in the poorest countries has actually been quite low and so the places where you know you want to get everyone over 60 vaccinated like South Africa, Brazil [these are huge markets], you know that will become a priority.

In this emergency, partly because of the second source agreements all the cooperation,he government money, where the United Kingdom, France and Germany actually pulled act a together with some other actors like the WHO, and our foundation, that's made a difference.

It's clear that understanding variants and understanding how quickly you can do the regulatory stuff you know when this comes up again we could be a lot smarter people didn't invest enough in this risk, forming SEPI that the UK, and the Wellcome Foundation and our Bill & Melinda Gates Foundation.

Others did was one of the few things and it's only if you know a few percent what should have been done to really practice you know do simulations understand when that how quickly you could get the diagnostics ready and so you know I hope we keep in mind that we do need to invest in being ready for the next pandemic.

My Wife Melinda is Working with the UK Prime Minister

- Question: Has it got easier since US President Biden arrived?

- Yes it's changed dramatically unblocked the $4 Billion that the congress had appropriated, he rejoined the WHO.

I'm very pleased that the UK is making uh pandemic preparedness, both finishing this pandemic and thinking through what happens next.

It's a real priority, and in fact my wife Melinda is working with the UK Prime Minister on the panel, that will present, what that template for future preparedness looks like.

The Ebola epidemic was the time I thought people would be interested and that's you know, when I was out talking about what we needed to do SEPI was created which has helped with some of the R&D, but that was only you know say 5% of what it would have meant to be fully prepared the UK, Wellcome Foundation and ourselves were among the backers of of that SEPI effort that has contributed along with the country specific R&D money.

I do think because trillions were lost that this generation will remember this, and we will do simulations, and we will look at can you make our MRNA cheaper, and have a network of factories all over the world, not in every country,

but enough so that the capacity could go up 5 times faster than it did this time.

We're getting Vaccines out to the entire world in late 2021 and through 2022. The UK Government was great in terms of realizing that Vaccines were important supporting SEPI supporting GAVI, this ACT-A thing which it's the anniversary the prime minister was key to pulling that together, he's using the G7 meeting. The UK has been the strongest proponent of getting behind vaccines." - Bill Gates, in "COVID-19: Bill Gates hopeful world "completely back to normal" by end of 2022", Sky News, 25 April 2021.

COVAX

"COVID-19 Vaccines Global Access, abbreviated as COVAX, is a global initiative aimed at equitable access to COVID-19 vaccines led by Gavi, the Vaccine Alliance (Global Alliance for Vaccines and Immunization, GAVI), the Coalition for Epidemic Preparedness Innovations (CEPI), and the World Health Organization (WHO).

It is one of the 3 pillars of the Access to COVID-19 Tools Accelerator (ACT-A), an initiative begun in April 2020 by the WHO, the European Commission (EU), and the Government of France, as a response to the COVID-19 pandemic.

COVAX coordinates international resources to enable low-to-middle-income countries equitable access to COVID-19 tests, therapies, and vaccines.

By 15 July 2020, 165 countries, representing 60% of the human population – had joined COVAX." - in "COVAX", Wikipedia, April 2021.

India Covid-19 the Untold Story

16 May 2020

If Spain Were Kerala (India) We Would Have a Total of 5 Deaths from Covid-19

"In Kerala (India), with 35 Million inhabitants, 4 people have died from Covid-19.

In Spain, with 47 Million inhabitants, 27,500 people have died from Covid-19.

That is, if Spain were Kerala, we would have 5 deaths from Covid-19.

Kerala is not a rich country, the per capita income is USD$3,000. The per capita income in Spain is USD$41,500." - Dr Juan Gérvas, MD Professor of management and organization of Primary Care at Master of Health Administration and Health Services (Gaspar Casal Foundation and Pompeu Fabra University) and Collaborator of Centre for Research in Health and Economics (CRES), in "Acta Sanitaria", 16 May 2020.

"Covid" Deaths per Million of Population		
Date	**Kerala**	**Spain**
16 of May 2020	9 Deaths	585 Deaths
25 of April 2021	126 Deaths	1659 Deaths

State of Kerala in India, Population: 35 Million.
Spain, Population: 47 Million.

7 August 2020

Gates Foundation $150 Million For India Serum Institute Produce Covid-19 Vaccine

"Serum Institute of India said on Friday it would receive USD$150 Million in funding from the Bill & Melinda Gates Foundation and the GAVI vaccines alliance to make 100 million COVID-19 vaccine doses for India and other emerging economies as early as 2021." - in Reuters, 7 August 2020.

29 September 2020

Scientists Puzzled For Africa's Low Fatality Rates From Pandemic

"Hospitals in many African countries say COVID-19 admission rates are falling." - in "Puzzled scientists seek reasons behind Africa's low fatality rates from pandemic", Reuters, 29 September 2020.

16 February 2021

Scientists Puzzled Drop of Cases From Pandemic in India

"India was on course for the largest number of infections in the world until cases suddenly began dropping in September." - in "COVID-19: Experts left puzzled by sudden drop in coronavirus cases in India", Sky News, 16 February 2021.

The vaccine is not ready for distribution in India.

The UK Government Covid19 Business Plan

A new Vaccine Taskforce will drive forward, expedite and co-ordinate efforts to research and then produce a coronavirus vaccine.

UK Government Launches Vaccine Taskforce to Combat Coronavirus

"21 new research projects combating coronavirus will receive government funding from a £14 Million pot investment to rapidly progress treatments and vaccines this follows the government's £250 Million pledge to develop a vaccine, putting the UK at the forefront of international efforts to fight the virus.

The taskforce, led by Chief Scientific Adviser Sir Patrick Vallance and Deputy Chief Medical Officer Professor Jonathan van Tam, will support efforts to rapidly develop a coronavirus vaccine as soon as possible by providing industry and research institutions with the resources and support needed.

This includes reviewing regulations and scaling up manufacturing. Representatives from government, academia and industry are coming together to form the taskforce.

Members will include government Life Sciences Champion Sir John Bell, as well as AstraZeneca, and the Wellcome Trust.

The taskforce will focus on 5 strands of activity including:

1. Supporting the discovery of potential coronavirus vaccines by working with the public and **private sector, rapidly mobilising funding**, supporting **leading academics** and identifying ways to fast-track clinical trials

2. Preparing the UK as a leader in clinical vaccine testing and manufacturing, working with companies already at the forefront of vaccine development.

3. Reviewing government regulations to facilitate rapid and safe vaccine trials developing funding and operational plans for the procurement and delivery of vaccines

4. Building on the UK's research and development expertise to support international efforts to find a coronavirus vaccine.

5. The taskforce is also working closely with the Bioindustry Association, which has set up an industry-led group, to accelerate vaccine development and manufacturing.

One new project led by the University of Oxford will trial an anti-malarial drug believed to have anti-inflammatory properties to determine whether it could diminish the effects of COVID-19 on people in high risk groups.

Additionally, funding under the international CEPI programme is helping scientists and researchers, including those in the UK, continue to lead global efforts to develop a workable coronavirus vaccine.

Pioneering British researchers at the University of Oxford are among its recipients, alongside the universities of Edinburgh, Liverpool, Southampton and Bristol.

UK aid is working with CEPI to ensure any coronavirus vaccine, once developed, is available and affordable to the NHS." - in "Government launches Vaccine Taskforce to combat coronavirus ", Gov.uk, 19 April 2021.

"The taskforce will also look at opportunities to establish production of the antiviral treatments within Britain – as seen with the Novavax vaccine, which is due to be manufactured in the northeast of England.

British scientists from Oxford University found that Budesonide, a medicine used for Asthma, can shorten the recovery time of Covid-19 sufferers who do not need hospital treatment by an average of 3 days." - in "Government seeks to 'supercharge' search for at-home Covid treatments", Independent, 20 April 2021.

"**The UK has proven itself to be a world-class force in the production of COVID-19 vaccines, with the Oxford/AstraZeneca, Novavax and Valneva vaccines all researched, developed or manufactured on British soil. We've backed UK science from the very start of this pandemic** and this £29.3 Million funding for a state-of-the-art vaccine testing facility at Porton Down will enable us to further future-proof the country from **the threat of new variants. We are committed to supporting the UK's flourishing life sciences industry and this announcement is yet another critical way, we will "Build Back Better",** to protect the country over the coming months and years." - Matt Hancock, Health Secretary (UK), House of Commons, 4 May 2021.

> ***"Since the pandemic started in March 2020, the virus that causes COVID-19 has managed to quickly develop several mutations that have concerned scientists, including the Kent, South African, Indian, Brazil variants."*** *- in Sky News, 5 May 2021.*

These are the Markets that the British Politicians and Pharmaceutical Industry want to sell vaccines in Perpetuity

1. Kent, UK.
2. South African.
3. Indian.
4. Brazil.

Prime Minister sets out Vision to cement UK as a Science Superpower

"**We were home to the world's first national DNA database. I want the UK to continue to be a global science superpower, and when we leave the EU we will support science and research and ensure that, far from losing out, the scientific community has a huge opportunity to develop and export our innovation around the world."** - Boris Johnson, UK Prime Minister, in "PM sets out vision to cement UK as a science superpower", **8 August 2019**.

Covid Vaccines - Pfizer could Add Further €33.3 Billion "Extra" Benefit from EU Taxpayers 2022-23

"BioNTech, the German company that developed the vaccine, received **€475 Million Euros** from the German Government, and the European Union (EU) for its research.

In addition, through the first advance purchase contract with the EU, the Pfizer company received **€700 Million** (for the first 200 million doses).

The same thing happened in the USA.

This amount should be distributed among all doses expected to be sold for 20 years (duration of patents).

In 2021 Pfizer expects to sell more than 1.3 Billion doses.

Pfizer's contract with the European Union, for 200 million doses plus an additional 100 million.

The first 100 million doses a price of €17.5 is set, and for the next 100 million, the price is €13.50, making an average of €15.5 per dose.

That price holds for the additional 100 million doses.

The European Union EU, has signed another contract for 2021, for another 200 + 100 million doses.

Pfizer is negotiating with the EU a price increase for its next orders. Bulgarian Prime Minister Boyko Borisov reported that the EU was negotiating with Pfizer a price of €19.5 Euros for a possible order of 900 million doses in 2022." - in "COVID Vaccines: Pfizer could add a further €33.3 Billion "extra" benefit from EU taxpayers in 2022 and 2023", El Obrero, 23 April 2021.

Pfizer Covid-19 Vaccine $26 Billion Revenue in 2021

"Pfizer's COVID-19 vaccine earned the company $3.5 Billion in the first 3 months of 2021, representing nearly a quarter of its total revenue, the company announced ahead of its earnings call Tuesday. The drug giant said it expects the vaccine to earn about $26 Billion in total revenue for 2021, based on signed contracts as of mid-April 2021." - in "Pfizer earned $3.5 billion on COVID-19 vaccine in first quarter", The Hill, 4 May 2021.

The NIH (USA) Covid19 Business Plan

"The National Institutes of Health (NIH) is preparing to offer more than $1 Billion in grants within 3 weeks for more research into the long-term health issues after a COVID-19 infection, commonly known as "long COVID-19." *- in "NIH readies grants for more research on long-term health effects of COVID-19". The Hill, 28 April 2021.*

NIH Funds New Influenza Research Network

"The National Institute of Allergy and Infectious Diseases (NIAID), part of the **National Institutes of Health (NIH), has established a network of research sites to study the natural history, transmission and pathogenesis of influenza and provide an international research infrastructure to address influenza outbreaks.**

The program, called the Centers of Excellence for Influenza Research and Response (CEIRR), is expected to be supported for 7 years by NIAID contracts to 5 institutions.

Funding for the first year of the contracts will total approximately $24 Million." - in "NIH funds new influenza research network", NIH, 14 April 2021.

After the CDC, NIH making compulsory for children to use marks in classrooms during 2020 and 2021, it is pathetic that it gets **$70 Million USD in funding from the US Government for research into Childhood Asthma, and this just covers Asthma in Urban Settings not Rural Settings.**

"The National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health, has awarded **$10 Million in first-year funding** to establish a clinical research network called Childhood Asthma in Urban Settings (CAUSE).

This nationwide network will conduct observational studies and clinical trials to improve understanding of asthma and develop treatment and prevention approaches tailored to children of low-income families living in urban communities.

NIAID intends to provide approximately $70 Million over 7 years to support the CAUSE network." - in "NIH establishes new childhood asthma clinical research network", NIH, 23 April 2021.

Nature Conference on Viral Infection and Immune Response

21 to 23 October 2016

Wuhan, China

"The Nature Conference on Viral Infection and Immune Response (VIIR), which will be held on 21-23 October 2016, in Wuhan, China, aims at **bringing together leading international scientists to explore emerging themes in viral infections** and immune dysregulation, and **providing promising venues for immune interventions.**

Organizers:

1. Wuhan Institute of Virology, Chinese Academy of Sciences.
2. Nature Microbiology.
3. Chinese Society for Immunology.
4. Committee on Virology, Chinese Society for Microbiology.

Scientific Organizing Committee:

1. Hong Tang **(Key Laboratory of Infection and Immunity, Chinese Academy of Sciences, China)**
2. George Gao **(Institute of Microbiology, Chinese Academy of Sciences, China)**
3. Andrew Jermy **(Nature Microbiology, UK)**
4. Nonia Pariente **(Nature Microbiology, UK)**

Local Organizing Committee:

1. Xin-wen Chen **(Director General, Wuhan Institute of Virology, Chinese Academy of Sciences)**
2. Yan-yi Wang **(Wuhan Institute of Virology, Chinese Academy of Sciences)**
3. Bin Wei **(Wuhan Institute of Virology, Chinese Academy of Sciences)**
4. Zhong Huang **(Deputy Secretary General of Chinese Society for Immunology, Chinese Academy of Medicine)**
5. Ying Wu **(Secretary General of Chinese Society for Microbiology, Division of Virology)**

Session topics

Session 1: Epidemiology of Emerging Viral Disease
Session 2: Persistent viral infection and immune dysregulation
Session 3: Viral pathogenesis
Session 4: Immune intervention and prevention of disease
Session 5: Innate antiviral immunity
Session 6: Induction of systemic adaptive immunity

Keynote Speakers:

1. Thirumala-Devi Kanneganti (St Jude Children's Research Hospital, USA)
2. Hong-bing Shu (Wuhan University, China)

Plenary Speakers:

- Wendy Barclay **(Imperial College London, UK)**
- Dennis Burton (The Scripps Research Institute, USA)

- Hualan Chen (Harbin Veterinary Research Institute, Chinese Academy Agricultural Sciences, China)
- James Chen (University of Texas Southwestern, USA)
- Gong Cheng (Tsinghua University School of Medicine, China)
- Andrea L Cox **(Johns Hopkins University, USA)**
- George Gao (CAS Key Laboratory of Pathogenic Microbiology and Immunology, China)
- Elodie Ghedin (New York University, USA)
- Paul Klenerman **(University of Oxford, UK)**
- Sharon Lewin (University of Melbourne, Australia)
- David Masopust (University of Minnesota, USA)
- Ed Mocarski (Emory University, USA)
- Malik Peiris **(The University of Hong Kong, China)**
- Hai Qi (Tsinghua University School of Medicine, China)
- Andrew Rambaut (University of Edinburgh, UK)
- John Schoggins (University of Texas Southwestern, USA)
- Rafick-Pierre Sekaly (Case Western Reserve University, USA)
- Kanta Subbarao **(National Institute of Allergy and Infectious Diseases, NIH, USA)**
- Nancy Sullivan **(National Institute of Allergy and Infectious Diseases, NIH, USA)**
- Bing Sun **(Institut Pasteur of Shanghai, CAS, China)**
- Jose Villadangos **(The University of Melbourne, Australia)**
- Fusheng Wang **(Beijing Institute of Infectious Diseases, China)**
- Kwok-Yung Yuen **(The University of Hong Kong, China).”** - in “Nature Conference: Viral Infection and Immune Response (First Announcement)”, Wuhan Institute Of Virology, Chinese Academy Of Sciences”; “A Nature Conference”, 11 February 2016.

"Dr Fauci has served as Director of the institute since 1984, and remains the highest paid United States Government employee, despite a bevy of false prognostications and outright lies. At the time of the conference, attendee Kanta Subbarao served as Chief of the NIAID's Emerging Respiratory Viruses Section. Nancy Sullivan served as Chief of the Biodefense Research Section at the NIAID's Vaccine Research Center. Sullivan still serves under Fauci while Subbarao departed the agency to become Director of the World Health Organization's (WHO), Collaborating Centre for Reference and Research on Influenza." *- in "Fauci's NIAID Scientists Attended Wuhan Lab Summit, Now WIPED From The Internet", The National Pulse, 26 April 2021.*

Deaths in Scotland
Month of September 2020

Cause	Deaths
Dementia	4449
Heart Disease	4104
Lung Cancer	2324
Strokes & Blood Clots	2120
Respiratory Diseases	1829
Colon Cancer	1285
Flu & Pneumonia	1132
Ill-Defined Conditions	1106
Blood Cancer	902
Prostate Cancer	861
"Covid-19"	**690**

Provision of Media Buying Services for COVID 19 Campaigns

"Location of contract: United Kingdom, Isle of Man, Channel Islands

Value of contract: £320,000,000

Contract start date: 1 April 2021

Contract end date: 31 March 2022

This contract was awarded to 1 supplier: OMD GROUP LIMITED, 85 Strand WC2R 0DW, London England." - in "COVID 19 - Media Buying Services", Gov.UK, 30 April 2021.

Contract	Value
OMD 2020-2021 (12 Months Contract)	£119 Million
OMD 2021-2022 (12 Months Contract)	£320 Million

***"The Victorian Government (Australia)**, helped by PwC (PricewaterhouseCoopers a multinational professional services network of firms), has appointed OMD and **hammer home health messaging." - in "OMD secures $100 Million Victoria Government** account ahead of bumper year", Mi3, 1 March 2021.*

***"When taken all together, is probably the biggest campaign of fear, the world has ever seen."** - Jon Dobinson, former Secretary-General for the International Society For Human Rights, UK, May 2021.*

Nothing Special Would Have Occurred in Terms of Mortality Had a Pandemic Not Been Declared

"We are compelled to state that the Public Health Establishment, and its Agents fundamentally caused all the excess mortality in the Covid period, via:

1. Assaults on Populations,
2. Harmful Medical Interventions,
3. Covid-19 Vaccine rollouts.

We conclude that nothing special would have occurred in terms of mortality had a pandemic not been declared, and had the declaration not been acted upon." - Dr Denis G. Rancourt, Correlation Research in the Public Interest; Professor Dr Joseph Hickey, Université du Québec à Trois-Rivières; Professor Dr Christian Linard, Université du Québec à Trois-Rivières, in "Spatiotemporal variation of excess all-cause mortality in the world (125 countries) during the Covid period 2020-2023 regarding socio-economic factors and public-health and medical interventions", 19 July 2024.

Boards of Health

"The work entrusted to local Boards of Health is of great importance.

It relates not only to life and health, but may have much to do with the financial condition of towns.

When promptly done and well done it may save a town many hundreds of dollars.

This thought should have a place in the minds of municipal officers this spring, and as level - headed and efficient men as are obtainable should be appointed as members of local Boards of Health.

Each board should have its 1 or 2 Medical Members if practicable, but the having of a physician as the executive officer is not essential.

Some of the most efficient local public health work done in this State has been done by non-medical men.

If a really good man for this place is found, he should be kept as long as possible." - in "Sanitary Inspector", February 1898.

Investors Ditch Vaccine Stocks After Joe Biden Says: "Pandemic is Over"

"Investors wiped more than $10 Billion off the market value of the main Covid-19 Vaccine Makers on monday after US president Joe Biden said "the pandemic is over".
Shares in Moderna, BioNTech and Novavax fell as much as 9% while Pfizer, which has a much broader portfolio of products, fell as much as 2% in early trading in New York." *- in "Financial Times", 19 September 2022.*

"Shares of Covid Test Kit and Drug Makers are in the spotlight in Asia, posting strong gains in recent days following a surge of cases.

Among the top performers is Chinese Covid Test Maker Daan Gene Co., which has jumped 17% this week.

In Japan, Drug Maker Daiichi Sankyo Co. rose as much as 5.6%, the most in about a week, while South Korea's Shin Poong Pharmaceutical Co. pared gains after a 5 session 71% rally." - in "Covid-Linked Stocks Back in Play as Asia Sees Surge in Cases", Bloomberg, UK, 13 August 2024

"We were talking about Janet Yellen (United States Secretary of the Treasury).

Yellen is setting aside a Fund for Bird Flu Pandemic Preparedness.

And John said:

"You know, she's not a Health Care expert.
Why is Yellen talking about Bird Flu?"

I said, because Bird Flu has nothing to do with Health.

It's a tool of the Central Bankers.

Of course, Yellen can talk about it, because she is an expert.

She's a Central Banker.

She's an expert at Central Banking tools, to manage when you're printing monetary inflation.

You need a way to create deflation on demand.

So, as a Central Bank tool, she's perfectly expert to deal with this.

Anyway, central Vaccine Passports went over like a lead balloon in Europe in Covid-19.

So they're coming back around again, and let's see how they do.

I think many more people are hip to the trick." - Catherine Austin Fitts in "Children's Health Defence", 1 August 2024.

"Dictators like Stalin, and other dictators they could have only dreamt of the enormous power that Central Bank Digital Currencies (CBDC's) give to Central planners,.

I mean we are talking about dystopian digital prisons, that will be created through Central Bank Digital Currencies.

Because the programmability, and this has been mentioned in the studies by Central Banks, include of course geography.

And there is this proposal for climate change, whatever reasons that people should stay within their 15 minute walking small local area, and be restricted.

Which, I mean just the thought, I find quite nightmarish being locked into your local area, and there will be digital controls.

The Covid Operation, I mean it's quite clear that many of the Policies had no proper Medical justification, or purpose.

And so whereas if you have the hypothesis that partly was used to even sort of lay the groundwork for Central Bank Digital Currencies, there's plenty of evidence.

I mean, why did the Bank of England come out in March 2020, around the time when the first lockdown was announced, with its first sort of Public Consultation meeting online, while we're lockdown about introducing CBDC's, and all the benefits and needs of CBDC's, also of course Vaccine Passports.

Was a way to push Digital ID's, which are precondition for CBDC's in order to introduce CBDC's you need Digital ID's, and Digital ID's were meant to be introduced with the Vaccine Passport.

Passport which is a form of Digital ID, and so there is a direct connection there to these Covid policies.

I mean, the Covid policies were given that they were medically not really justifiable, and some of them were very contradictory and nonsensical.

And so there's a combination of somewhat unusual policies let's say, some quite surprising.

But every country in the world seem to have the same policies, well mostly certainly in Europe, and North America.

And so there was an extraordinary degree of of coordination that was revealed to us, and clearly that didn't come from any democratic process, but somehow topped down from behind the scenes.

So, I think a lot has been revealed about these processes from that experience, and that's really another reason why we should be against CBDC's." - Prof Richard Werner, in "Central Banks Want Central Bank Digital Currency", Big Picture, 30 August 2024.

Note on the Elsevier COVID-19 Resource Centre

"Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website. Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active." - in "Novel Coronavirus Information Center Elsevier's free health and medical research on the novel coronavirus (SARS-CoV-2) and COVID-19", 27 January 2020.

Public Health Emergency Covid-19 Initiative

"On 13 March 2020, the National Science and Technology Advisors from a dozen countries, including the United States, called on publishers to voluntarily make their COVID-19 and coronavirus-related publications, and the available data supporting them, immediately accessible in PubMed Central (PMC) and other appropriate public repositories to support the ongoing public health emergency response efforts.
To date, more than 50 publishers have responded to the call and volunteered to make their coronavirus-related articles accessible in PMC in formats and under license terms that facilitate text mining and secondary analysis.
In addition, many other PMC journals and publishers make their coronavirus-related articles available the same way.

List of Collaborators

American Association of Neurological Surgeons (AANS)
American Chemical Society
American Institute of Physics
American Medical Informatics Association
American Physical Society
American Society for Biochemistry and Molecular Biology
American Society of Mechanical Engineers (ASME)
American Society for Microbiology
American Society of Tropical Medicine and Hygiene
Annals of Internal Medicine, a publication of the American College of Physicians
The British Medical Journal (BMJ)
Bulletin of the World Health Organization
Cambridge University Press (CUP)
Cell Press
Chinese Journal of Lung Cancer
CSIRO Publishing
eLife
Elsevier
EMBO Press
Emerald Publishing
European Respiratory Society
F1000 Research Limited
Frontiers
Future Science Group
Healthcare Infection Society
IEEE
IOP Publishing
JMIR Publications
Karger Publishers
The Lancet
Life Science Alliance
Microbiology Society
New England Journal of Medicine (NEJM)

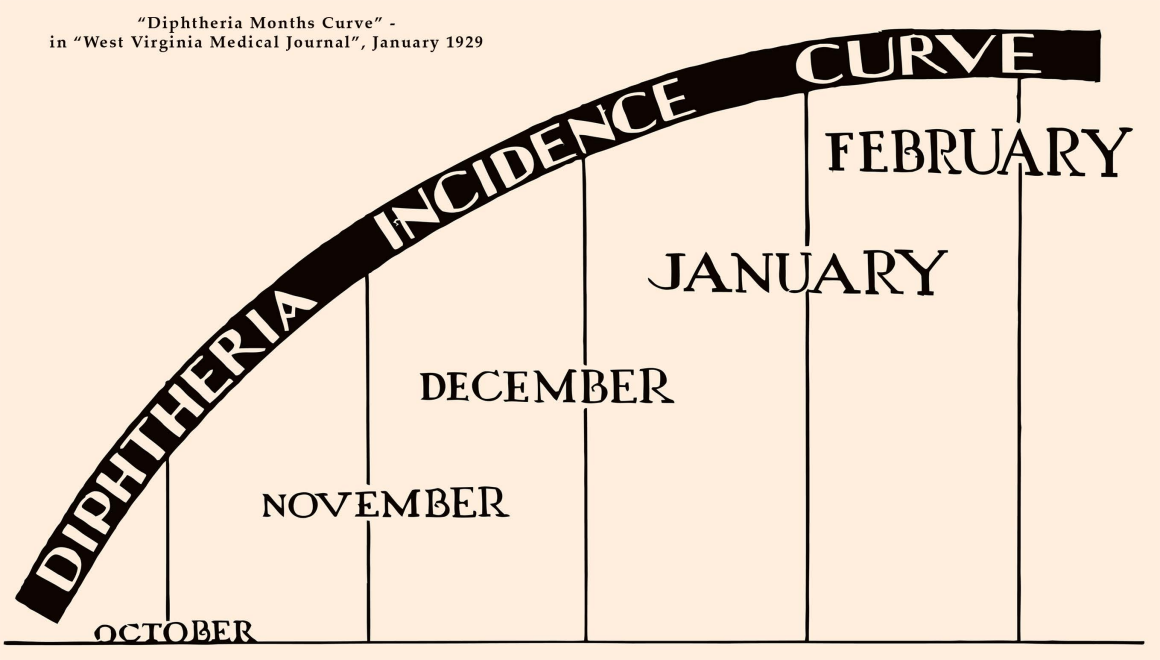
Oxford University Press
PLOS
PNAS - Proceedings of the National Academy of Sciences of the USA
Radiological Society of North America (RSNA)
Rockefeller University Press (RUP)
SAGE Publishing
Science Journals
Springer Nature
Taylor & Francis
The Royal Society
Thieme Medical Publishers
Wiley
Wolters Kluwer" - in "PMC", U.S. National Library of Medicine, NIH, 5 February 2021.

Keep Learning

www.yourpath.info

www.volksmed.org

"Diphtheria Months Curve" -
in "West Virginia Medical Journal", January 1929



Deaths in Utah who've Taken at Least One Dose of Covid-19 Vaccine

KUTV 2News, 4 March 2021

COVID-19 vaccine: Deaths in Utahns who've taken at least one dose

As of March 3, the CDC has received reports of 97,458 adverse events with 1,381 deaths in people who have taken at least one dose of the approved COVID-19 vaccines. (Those statistics are constantly changing.) Four of those reported deaths were made in Utah through VAERS either by caregivers or loved ones of those who received at least one dose of a COVID-19 vaccine.

For all reports, the CDC notes that "submitting a report to VAERS does not mean that healthcare personnel or the vaccine caused or contributed to the adverse event (possible side effect)."

Current deaths of Utahns reported to the CDC's VAERS are as follows (data retrieved by 2News on March 3, 2021):

Report 1: 83-year-old female

Details for VAERS ID: 0962308-1

Event Information			
Patient Age		**Sex**	Female
State / Territory	Utah	**Date Report Completed**	2021-01-21
Date Vaccinated		**Date Report Received**	2021-01-21
Date of Onset		**Date Died**	
Days to onset			
Vaccine Administered By	Unknown	**Vaccine Purchased By**	Not Applicable *
Mfr/Imm Project Number	USPFIZER INC2021045659	**Report Form Version**	2
Recovered	No	**Serious**	Yes

Event Categories	
Death	Yes
Life Threatening	No
Permanent Disability	No
Congenital Anomaly / Birth Defect *	No
Hospitalized	No
Days in Hospital	None
Existing Hospitalization Prolonged	No
Emergency Room / Office Visit **	N/A

* VAERS 2.0 Report Form Only
** VAERS-1 Report Form Only
"Not Applicable" will appear when information is not available on this report form version.

Emergency Room *	No
Office Visit *	No

* VAERS 2.0 Report Form Only
** VAERS-1 Report Form Only
"N/A" will appear when information is not available on this report form version.

Vaccine Type	Vaccine	Manufacturer	Lot	Dose	Route	Site
COVID19 VACCINE	COVID19 (COVID19 (PFIZER-BIONTECH))	PFIZER\BIONTECH	NONE	UNK		

Symptom
DEATH

Adverse Event Description
died; This is a spontaneous report from a Pfizer-sponsored program. A contactable consumer reported that an 83-year-old female patient (reporter mother) received BNT162B2 (PFIZER-BIONTECH COVID-19 VACCINE, Solution for injection), via an unspecified route of administration on an unspecified date at single dose for covid-19 immunization. Medical history

included hospice care and dementia. The patient's concomitant medications were not reported. The patient died one day after getting vaccine. She was reportedly in good health the day before receiving vaccine. She was on hospice, frail, but in good condition and checked by a hospice nurse the day before which she reported her in good health considering. She was with dementia but stable in her health. The reporter read investigating 23 deaths of people receiving vaccine in similar conditions. The patient died on an unspecified date. It was not reported if an autopsy was performed.; Reported Cause(s) of Death: died

Lab Data	Current Illness	Adverse Events After Prior Vaccinations

Medications At Time Of Vaccination	History/Allergies
	Medical History/Concurrent Conditions: Dementia; Hospice care (on hospice, frail, but in good condition),

Report 2: 83-year-old female

Details for VAERS ID: 0986063-1

Event Information			
Patient Age	83.00	**Sex**	Female
State / Territory	Utah	**Date Report Completed**	2021-01-29
Date Vaccinated	2021-01-12	**Date Report Received**	2021-01-29
Date of Onset	2021-01-16	**Date Died**	2021-01-16

Event Categories	
Death	Yes
Life Threatening	No
Permanent Disability	No
Congenital Anomaly / Birth Defect *	No
Hospitalized	No

Days to onset	4		
Vaccine Administered By	Senior Living *	**Vaccine Purchased By**	Not Applicable *
Mfr/Imm Project Number	NONE	**Report Form Version**	2
Recovered	No	**Serious**	Yes

* VAERS 2.0 Report Form Only
** VAERS-1 Report Form Only
"Not Applicable" will appear when information is not available on this report form version.

Days in Hospital	None
Existing Hospitalization Prolonged	No
**Emergency Room / Office Visit ** **	N/A
Emergency Room *	No
Office Visit *	No

* VAERS 2.0 Report Form Only
** VAERS-1 Report Form Only
"N/A" will appear when information is not available on this report form version.

Vaccine Type	Vaccine	Manufacturer	Lot	Dose	Route	Site
COVID19 VACCINE	COVID19 (COVID19 (PFIZER-BIONTECH))	PFIZER\BIONTECH	NONE	1	IM	RA

Symptom
DEATH

Adverse Event Description
Resident was vaccinated on 1/13/21. Resident passed away on 1/16/21

Lab Data	Current Illness	Adverse Events After Prior Vaccinations

No tests/results pertaining to this incident.	COPD, CHF, Major Depressive Disorder, Anxiety, Respiratory Failure, Insomnia, OsteoArthritis, Hypertension, Irritable Bowel Syndrome, Atrial Fibrillation, COVID recovered	

Medications At Time Of Vaccination	**History/Allergies**
Cholestyramine, Duloxetine, Fiber, Haloperidol, Hyoscyamine, Lisinopril, Lorazepam, Metoprolol, Morphine, Nystatin powder, Pepto Bismol, Seroquel, Spiriva, Symbicort, Tramadol, Tylenol, Vistaril, Zolpidem	Resident was a Hospice Patient as of: 11/17/2020,No Known Allergies

Report 3: 86-year-old male

Details for VAERS ID: 1032662-1

Event Information			
Patient Age	86.00	**Sex**	Male
State / Territory	Utah	**Date Report Completed**	2021-02-16
Date Vaccinated	2021-01-25	**Date Report Received**	2021-02-16
Date of Onset	2021-02-05	**Date Died**	2021-02-05
Days to onset	11		
Vaccine Administered By	Public	**Vaccine Purchased By**	Not Applicable *

Event Categories	
Death	Yes
Life Threatening	No
Permanent Disability	No
Congenital Anomaly / Birth Defect *	No
Hospitalized	No
Days in Hospital	None
Existing Hospitalization Prolonged	No

Mfr/Imm Project Number	NONE	**Report Form Version**	2
Recovered	No	**Serious**	Yes

* VAERS 2.0 Report Form Only
** VAERS-1 Report Form Only
"Not Applicable" will appear when information is not available on this report form version.

Emergency Room / Office Visit **	N/A
Emergency Room *	No
Office Visit *	No

* VAERS 2.0 Report Form Only
** VAERS-1 Report Form Only
"N/A" will appear when information is not available on this report form version.

Vaccine Type	Vaccine	Manufacturer	Lot	Dose	Route	Site
COVID19 VACCINE	COVID19 (COVID19 (PFIZER-BIONTECH))	PFIZER\BIONTECH	EL9261	1	SYR	AR

Symptom
DEATH

Adverse Event Description
Death

Lab Data	Current Illness	Adverse Events After Prior Vaccinations
	Absolutely none. Unusually healthy for 86	

Medications At Time Of Vaccination	History/Allergies
	None,

Report 4: 39-year-old female

Details for VAERS ID: 1037207-1

Event Information			
Patient Age	39.00	**Sex**	Female
State / Territory	Utah	**Date Report Completed**	2021-02-17
Date Vaccinated	2021-02-01	**Date Report Received**	2021-02-17
Date of Onset	2021-02-02	**Date Died**	2021-02-05
Days to onset	1		
Vaccine Administered By	Private	**Vaccine Purchased By**	Not Applicable *
Mfr/Imm Project Number	NONE	**Report Form Version**	2
Recovered	No	**Serious**	Yes

Event Categories	
Death	Yes
Life Threatening	No
Permanent Disability	No
Congenital Anomaly / Birth Defect *	No
Hospitalized	Yes
Days in Hospital	2
Existing Hospitalization Prolonged	No
Emergency Room / Office Visit **	N/A
Emergency Room *	No
Office Visit *	No

* VAERS 2.0 Report Form Only
** VAERS-1 Report Form Only

"Not Applicable" will appear when information is not available on this report form version.

* VAERS 2.0 Report Form Only
** VAERS-1 Report Form Only
"N/A" will appear when information is not available on this report form version.

Vaccine Type	Vaccine	Manufacturer	Lot	Dose	Route	Site
COVID19 VACCINE	COVID19 (COVID19 (MODERNA))	MODERNA	NONE	2		

Symptom
DEATH
INCOHERENT
INJECTION SITE PAIN
LIVER FUNCTION TEST ABNORMAL
MALAISE
NAUSEA

PYREXIA
URINARY RETENTION
VOMITING

Adverse Event Description
She had pain in the injection site Tuesday night and then during Tuesday she got worse with nausea and some fever. By Wednesday she was complaining that she could not pee even though she was drinking a lot of fluids. She continued to complain it was the worst she ever felt and then at 0600 Thursday morning she woke us up and said she needed to go to the hospital. We arrived at the hospital just before 0700 and she immediately threw up in the trash can. We went into a treatment room and they took blood and started fluids as she became incoherent. She said she had taken Tylenol so they started a drug to counter that but her liver function was all wrong and they started to look for a hospital that could transplant a liver. She was air evade about 0930 to Medical center and just over 30 hours latter she was dead. There is a pending autopsy. She was a healthy 39 year old mother who got the shots because she worked as a surgical tech and she was the single mother of a 9 year old little girl.

Lab Data	**Current Illness**	**Adverse Events After Prior Vaccinations**
contact shock trauma center and the medical examiner	none,	

Medications At Time Of Vaccination	History/Allergies
birth control, and she did do botox	trigeminal neuralgia - has been in remission since she started doing botox,sulfa drugs

REG 174 INFORMATION FOR UK RECIPIENTS

Package leaflet: Information for the recipient

COVID-19 Vaccine AstraZeneca solution for injection
COVID-19 Vaccine (ChAdOx1-S [recombinant])

This medicinal product has been given authorisation for temporary supply by the UK Department of Health and Social Care and the Medicines & Healthcare products Regulatory Agency. It does not have a marketing authorisation, but this temporary authorisation grants permission for the medicine to be used for active immunisation of individuals aged 18 years and older for the prevention of coronavirus disease 2019 (COVID-19).

Reporting of side effects

As with any new medicine in the UK this product will be closely monitored to allow quick identification of new safety information. You can help by reporting any side effects you may get. See the end of section 4 for how to report side effects.

Read all of this leaflet carefully before the vaccine is given because it contains important information for you.
- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor, pharmacist or nurse.
- If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

What is in this leaflet

1. What COVID-19 Vaccine AstraZeneca is and what it is used for

COVID-19 Vaccine AstraZeneca is a vaccine used to protect people aged 18 years and older against COVID-19.

COVID-19 is caused by a virus called coronavirus (SARS-CoV-2).

COVID-19 Vaccine AstraZeneca stimulates the body's natural defences (immune system). It causes the body to produce its own protection (antibodies) against the virus. This will help to protect you against COVID-19 in the future. None of the ingredients in this vaccine can cause COVID-19.

2. What you need to know before you receive COVID-19 Vaccine AstraZeneca

Do not have the vaccine:
- If you have ever had a severe allergic reaction to any of the active substances or any of the other ingredients listed in section 6. Signs of an allergic reaction may include itchy skin rash, shortness of breath and swelling of the face or tongue. Contact your doctor or healthcare professional immediately or go to the nearest hospital emergency room right away if you have an allergic reaction. It can be life-threatening.

If you are not sure, talk to your doctor, pharmacist or nurse.

Warnings and precautions
Tell your doctor, pharmacist or nurse before vaccination:
- If you have ever had a severe allergic reaction (anaphylaxis) after any other vaccine injection;
- If you currently have a severe infection with a high temperature (over 38°C). However, a mild fever or infection, like a cold, are not reasons to delay vaccination;
- If you have a problem with bleeding or bruising, or if you are taking a blood thinning medicine (anticoagulant);
- If your immune system does not work properly (immunodeficiency) or you are taking medicines that weaken the immune system (such as high-dose corticosteroids, immunosuppressants or cancer medicines).

If you are not sure if any of the above applies to you, talk to your doctor, pharmacist or nurse before you are given the vaccine.

As with any vaccine, COVID-19 Vaccine AstraZeneca may not protect everyone who is vaccinated from COVID-19. It is not yet known how long people who receive the vaccine will be protected for. No data are currently available in individuals with a weakened immune system or who are taking chronic treatment that suppresses or prevents immune responses.

Children and adolescents
No data are currently available on the use of COVID-19 Vaccine AstraZeneca in children and adolescents younger than 18 years of age.

Other medicines and COVID-19 Vaccine AstraZeneca
Tell your doctor, pharmacist or nurse if you are taking, have recently taken or might take, any other medicines or vaccines.

Pregnancy and breastfeeding
If you are pregnant or breastfeeding, think you may be pregnant, or are planning to have a baby, **tell your doctor, pharmacist or nurse**. There are limited data on the use of COVID-19 Vaccine AstraZeneca in pregnant or breastfeeding women. Your doctor, pharmacist or nurse will discuss with you whether you can be given the vaccine.

Driving and using machines
COVID-19 Vaccine AstraZeneca has no known effect on the ability to drive and use machines. However, side effects listed in section 4 may impact your ability to drive and use machines. If you feel unwell, do not drive or use machines.

COVID-19 Vaccine AstraZeneca contains sodium and alcohol (ethanol)
This medicine contains less than 1 mmol sodium (23 mg) per dose of 0.5 ml. This means that it is essentially 'sodium-free'.
This medicine contains a very small amount of alcohol (0.002 mg of alcohol (ethanol) per dose of 0.5 ml). This is not enough to cause any noticeable effects.

3. How COVID-19 Vaccine AstraZeneca is given

COVID-19 Vaccine AstraZeneca is injected into a muscle (usually in the upper arm).

You will receive 2 injections. You will be told when you need to return for your second injection of COVID-19 Vaccine AstraZeneca.

The second injection can be given between 4 and 12 weeks after the first injection.

When COVID-19 Vaccine AstraZeneca is given for the first injection, COVID-19 Vaccine AstraZeneca (and not another vaccine against COVID-19) should be given for the second injection to complete vaccination course.

If you miss your second injection
If you forget to go back at the scheduled time, ask your doctor, pharmacist or nurse for advice. It is important that you return for your second injection of COVID-19 Vaccine AstraZeneca.

4. Possible side effects

Like all medicines, this vaccine can cause side effects, although not everybody gets them. In clinical studies with the vaccine, most side effects were mild to moderate in nature and resolved within a few days with some still present a week after vaccination.

If side effects such as pain and/or fever are troublesome, medicines containing paracetamol can be taken.

Side effects that occurred during clinical trials with COVID-19 Vaccine AstraZeneca were as follows:

Very Common (may affect more than 1 in 10 people)
- tenderness, pain, warmth, redness, itching, swelling or bruising where the injection is given
- generally feeling unwell
- feeling tired (fatigue)
- chills or feeling feverish
- headache
- feeling sick (nausea)
- joint pain or muscle ache

Common (may affect up to 1 in 10 people)
- a lump at the injection site
- fever
- being sick (vomiting)
- flu-like symptoms, such as high temperature, sore throat, runny nose, cough and chills

Uncommon (may affect up to 1 in 100 people)
- feeling dizzy
- decreased appetite
- abdominal pain
- enlarged lymph nodes
- excessive sweating, itchy skin or rash

In clinical trials there were very rare reports of events associated with inflammation of the nervous system, which may cause numbness, pins and needles, and/or loss of feeling. However, it is not confirmed whether these events were due to the vaccine.

If you notice any side effects not mentioned in this leaflet, please inform your doctor, pharmacist or nurse.

Reporting of side effects
If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet.
If you are concerned about a side-effect it can be reported directly via the Coronavirus Yellow Card reporting site https://coronavirus-yellowcard.mhra.gov.uk/ or search for MHRA Yellow Card in the Google Play or Apple App Store and include the vaccine brand and batch/Lot number if available.
By reporting side effects you can help provide more information on the safety of this vaccine.

5. How to store COVID-19 Vaccine AstraZeneca

Keep this medicine out of the sight and reach of children.

Your doctor, pharmacist or nurse is responsible for storing this vaccine and disposing of any unused product correctly.

Storage
Do not use COVID-19 Vaccine AstraZeneca after the expiry date which is stated on the carton. The expiry date refers to the last day of that month.

Store in a refrigerator (2°C to 8°C).
Do not freeze.
Keep vials in outer carton to protect from light.

The vaccine does not contain any preservative and should be administered by a healthcare professional. After the first dose is withdrawn, the vaccine should be used as soon as practically possible and within 6 hours. During use it can be stored from 2°C to 25°C.

Disposal
COVID-19 Vaccine AstraZeneca contains genetically modified organisms (GMOs). Any unused vaccine or waste material should be disposed of in accordance with local requirements. Spills should be disinfected with an appropriate antiviral disinfectant.

6. Contents of the pack and other information

What COVID-19 Vaccine AstraZeneca contains
One dose (0.5 ml) contains:
COVID-19 Vaccine (ChAdOx1-S* recombinant) 5×10^{10} viral particles
*Recombinant, replication-deficient chimpanzee adenovirus vector encoding the SARS-CoV-2 Spike glycoprotein. Produced in genetically modified human embryonic kidney (HEK) 293 cells.

This product contains genetically modified organisms (GMOs).

The other excipients are L-histidine, L-histidine hydrochloride monohydrate, magnesium chloride hexahydrate, polysorbate 80, ethanol, sucrose, sodium chloride, disodium edetate dihydrate, water for injections.

What COVID-19 Vaccine AstraZeneca looks like and contents of the pack
Solution for injection. The solution is colourless to slightly brown, clear to slightly opaque and particle free.

Pack sizes (not all pack sizes may be marketed):
- 10 dose vial (5 ml) in packs of 10 vials.
- 8 dose vial (4 ml) in packs of 10 vials.

Manufacturer
MedImmune UK Ltd
6 Renaissance Way
Liverpool, L24 9JW
United Kingdom

MedImmune Pharma B.V., Nijmegen
Lagelandseweg 78
Nijmegen, 6545CG
Netherlands

For any information about this medicine, please contact:
AstraZeneca UK Ltd
Tel: 08000541028

This leaflet was last revised in 12/2020

Other sources of information

www.azcovid-19.com

NIAID director wins Canada Gairdner Global Health Award

Infectious disease expert Anthony Fauci has been awarded 2016's Global Health Award from the Gairdner Foundation for his decades of work against HIV/AIDS. Brian Owens reports.

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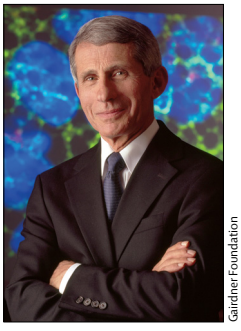
Anthony Fauci, the director of the US National Institutes of Health's (NIH) National Institute of Allergy and Infectious Diseases (NIAID), has won the 2016 Global Health Award from Canada's Gairdner Foundation for his work on HIV/AIDS.



Gairdner Foundation

Anthony Fauci

Fauci was one of the first scientists to begin studying AIDS. He was studying how the immune system is regulated when the first American cases surfaced in 1981, and immediately changed the direction of his research to focus on the new disease. "I foresaw that even though we didn't know what the virus was, we were just seeing the tip of the iceberg", says Fauci. "I had an ominous feeling it would explode into something huge for global health."

"He established the HIV/AIDS programme at the institute and led the largest research effort on the disease in the world, which succeeded in turning around the AIDS epidemic through the discovery of drugs and treatments that could suppress the virus…"

could suppress the virus to the point where people could live normal lives. "All of the clinical trials that were done in collaboration with industry have NIAID fingerprints on them", says Fauci.

The treatments that Fauci's NIAID helped develop have revolutionised the way that HIV/AIDS is dealt with over the past few decades. Dirks recalls working in Vancouver when the HIV epidemic was gripping the west coast in the 1980s and 1990s, with wards full of terminally ill patients with AIDS, whereas now very few people are admitted to hospital as inpatients, instead mostly attending clinics as chronic patients. "The whole clinical picture is different today", says Dirks. "He turned AIDS, in most places, into a chronic disease."

Although Fauci has won many accolades for his work on HIV/AIDS, including a US Presidential Medal of Freedom and a Lasker Award, he says the Gairdner Award is particularly meaningful to him because of its global focus. "I have a passion for global health that has driven my research efforts", Fauci says. "Infectious disease knows no boundaries."