A PANDEMIC OF PANDEMIC HYSTERIAS

- Bogus models, worthless tests, misreporting the cause of death.
- A financial bonanza for the media and the pharma.
- Unprecedented power for politicians.

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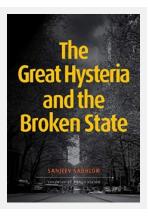
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PRELIMINARY SKETCH (**NOT YET A DRAFT**) 15 December 2020

Contents

1.	INTRODUCTION	5
	1.1 WHY THIS BOOK	5
	1.2 RULE NO. 1: REAL PANDEMIC MUST LEAVE ITS SIGNATURE IN TOTAL ANNUAL DEATHS	
	1.3 THE COVID-19 PANDEMIC THAT NEVER WAS — LET'S JUST CALL IT A FAKE PANDEMIC	
	1.3.1 The covid "pandemic" has left no signature in total annual deaths	
	1.3.2 covid facts	
	1.3.3 Failed modelling	
2	THE LESSONS FROM THE SWINE FLU HYSTERIA THAT THE WORLD HEALTH	
	RGANISATION PUBLISHED IN 2011	7
3.	WAITING FOR THE SPANISH FLU – THERE'S BIG BUCKS IN THAT	8
	3.1 'A WHOLE INDUSTRY IS WAITING FOR A PANDEMIC', 2009	
	3.2 FAITH IN QUICK TEST LEADS TO EPIDEMIC THAT WASN'T - NY TIMES, 2007	
	3.3 CORONAVIRUS OVERREACTION – RICHARD EPSTEIN, 23 MARCH 2020	13
	3.4 COVID-19 CONFUSION – BY RICHARD EBELING	16
PA	ART I: THE INSTITUTIONS THAT SUPPORT PANDEMIC HYSTERIAS	17
	THE VACCINE AND DRUGS LOBBY	
4.	THE VACCINE AND DRUGS LOBBY	18
	4.1 THE 'FALSE' PANDEMIC: DRUG FIRMS CASHED IN ON SCARE OVER SWINE FLU, CLAIMS EURO HEALTH CHIEF	
	4.2 LEADING COVID VACCINE CANDIDATES PLAGUED BY SAFETY CONCERNS	
	4.2.1 Illegal to mandate vaccines under Emergency Use Authorization	
	4.2.2 Settling for a 'new normal'	
	4.2.3 Flawed trial design	
	4.2.4 Preventing severe symptoms?	
	4.2.5 No blocking of transmission	
	4.2.6 Lack of study power in groups most affected by COVID-19	
	4.2.7 Adverse events and concerning vaccine ingredients	
	4.2.8 Paused trials	
	4.2.9 Questionable efficacy	
	4.2.10 High systemic adverse events	
	4.2.11 mRNA: unproven new vaccine technology	
	4.2.12 Other concerning ingredients	
	4.2.13 Meningitis vaccine 'fauxcebo'	25
5.	THE CAPTURE OF GOVERNMENT BY THE SCIENCE ESTABLISHMENT	28
6.	ROLE OF THE MEDIA AND SOCIAL MEDIA	29
PA	ART II: THE TECHNIQUES OF PANDEMIC HYSTERIAS	31
1.2 1.3 1.3 1.3 1.3 1.3 1.3 2. THORGAN 2.1 3. W. 3.1 3.2 3.3 3.4 PART I 4.1 4.2 4.2 4.2 4.2 4.2 4.2 4.2 4.2 4.2 7. CH 7.1 7.2 7.2 7.2 7.2 7.2 7.2	CHANGING DEFINITIONS TO ALLOW FRAUDULENT PANDEMIC DECLARATIONS.	32
	7.2 Changing the way deaths are counted (for COVID)	32
	7.2.1 Very few deaths are "from covid", most are "with covid"	33
	7.2.2 Financial incentives to report cases and deaths as COVID	
	7.2.3 Flu deaths are almost certainly being counted as COVID-19 deaths	36
	7.3 FALSE AND MISLEADING NEWS REPORTING	37

8.	BLATANTLY FRAUDULENT EPIDEMIOLOGICAL MODELS	39
	8.1 MODELS, ALWAYS UNRELIABLE AND DISCREDITED, ARE THE BASIS OF THESE HYSTERIAS	39
	8.1.1 Chronic failure of modelers to understand the basics of the immune system	
	8.2 MODELLING IS DISCREDITED GLOBALLY; MODELERS WITH NO INFECTIOUS DISEASE BACKGROUND	
	8.3 WHY EPIDEMIOLOGICAL MODELS CAN'T WORK	
	8.4 AN EPIDEMIC OF BAD EPIDEMIOLOGY – RONALD BAILEY, 23 DECEMBER 2016	41
	AFTER REPEATED FAILURES, IT'S TIME TO PERMANENTLY DUMP EPIDEMIC MODELS, MICHAEL FUMENTO 18 AP	
	8.6 MODELERS WERE 'ASTRONOMICALLY WRONG' IN COVID-19 PREDICTIONS, SAYS LEADING EPIDEMIOLOGIST—	AND THE
	World Is Paying the Price - Jon Miltimore - 2 July 2020	45
	8.7 FORECASTING FOR COVID-19 HAS FAILED - JOHN P.A. IOANNIDIS ET. AL	46
	8.8 ACADEMIC EVALUATION OF EPIDEMIOLOGICAL MODELS	54
	8.8.1 July 2020 review of model predictions	54
	8.8.2 Nature magazine argued that it was necessary to prepare for the worst case scenario	54
	8.8.3 WHO initially objected to the charge of fake pandemic	55
9.	BLATANTLY FRAUDULENT "SCIENTIFIC" STUDIES	56
10	BOGUS PCR TESTS ARE THE MAINSTAY OF FAKE PANDEMICS	60
	10.1.1 Long history of being unreliable and supporting hysterias	60
	10.1.2 No proof that PCR tests are testing SARS-CoV-2	
	10.1.3 The Australian Government doesn't consider these tests to be reliable	
	10.1.4 Powerful reasons why PCR tests are not necessarily detecting COVID	
	10.2 REVIEW REPORT CORMAN-DROSTEN ET AL. EUROSURVEILLANCE 2020	
PA	ART III: THE STUDY OF INDIVDUAL PANDEMIC HYSTERIAS	66
11	. THE BIRD FLU HOAX	67
12	. THE FAKE SWINE FLU (H1N1) PANDEMIC	68
	12.1 ARTICLES	68
	12.2 RECONSTRUCTION OF A MASS HYSTERIA: THE SWINE FLU PANIC OF 2009	69
	12.2.1 'Boy Zero'	69
	12.2.2 Worst-Case Scenarios	
	12.2.3 'Fine-Tuning' the Definition of Pandemic	71
13	. THE FAKE EBOLA PANDEMIC	76
PA	ART IV: THE ROLE OF SPECIFIC INDIVIDUALS	77
14	. THE CASE OF ALBERT OSTERHAUS	78
	14.1 WHO 'SWINE FLU POPE' UNDER INVESTIGATION FOR GROSS CONFLICT OF INTEREST	78
15	. THE CASE OF NEIL FERGUSON	82
16	. THE CASE OF ANTHONY FAUCI	85
17	END NOTES	86



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1. Introduction

1.1 Why this book

In this book I will not be discussing or debating the merits of lockdowns. I have discussed that issue at length in my complaint to the International Criminal Court. In that complaint I showed that there is no basis for a lockdown even for Ebola, let alone for a flu-like virus. Even if this was Spanish flu, there would be no basis to impose a lockdown.

In this book I want to discuss something much more sinister – the massive fraud being perpetrated on mankind by the science establishment (and I include both universities and private companies here) in collusion with politicians and the media.

The covid scam is not the only such example. Vast swathes of science have been captured by criminal scientists. The climate science fraud has been going on, unabated, for over three decades. But at least there are a number of good writers and commentators who provide alternative views to keep that scam at least under some check. In fact, if people simply read the IPCC's technical reports they will find out that, like Bjorn Lomborg repeatedly emphasises, there is simply no basis for the exaggerated climate claims made by corrupt scientists. The data do not even remotely support the claims of "runaway" global warming.

But there are very few people who educate us regarding pandemic scams. As a result, many otherwise diligent people, like me, who study every issue in considerable detail before forming an opinion, have been taken by surprise.

The last such fraud was the 2009 swine flu "pandemic" but because it did not involve mass disruption of everybody's life through lockdowns and mandatory masks, its learnings slipped below the radar. Most of us did not pay attention to the academic debates and ignored the lessons the scientists were supposed to have learnt from the swine flu scam.

But having personally suffered from the crimes being perpetrated by politicians and scientists in 2020 in the name of the covid pandemic (which it is not: i.e. not a pandemic), it has become necessary for me to study this matter. Just like we disbelieve "climate science" we must learn to disbelieve "public health science". In fact we must learn to disbelieve all science and check out everything. We must never "follow the science". We must "do" science, and that means applying a blow torch to every claim, demanding proof to back up every assumption. Where is the virus? Where is the proof that it causes the disease? What is the PCR test actually measuring? And so on. Proof for everything!

This much is clear as daylight now that the science establishment has been deeply criminalised, like a Mafia. Yes, we have a few honest scientists, people who are committed to principles, but they are getting as scarce as a hen's teeth.

1.2 Rule No. 1: real pandemic must leave its signature in total annual deaths

The final proof that something was a pandemic can be found in the rear view mirror – after it is over.

It doesn't really matter how much these people try to cheat us. They cannot succeed. The common man has the same brain found in anyone else. We can look at the data ourselves to determine the truth. It does take too much intelligence to outwit these fraudsters. All we need is to look at the data and ask simple questions. The first question we must ask is: what is the impact of the purported pandemic on overall deaths?

1.3 The COVID-19 pandemic that never was – let's just call it a fake pandemic

1.3.1 The covid "pandemic" has left no signature in total annual deaths

Just naming a death a COVID death doesn't make it so. The Grim Reaper's annual cull doesn't vary by much in a normal year. COVID is supposed to be a novel virus, i.e. over and above all other causes of deaths. All COVID deaths need to result in excess deaths.

If COVID deaths don't add substantially to the average Grim Reaper cull of the past years, we know that someone has been lying. Big time.

At the end of 2020, we are spotting what is at best a very small "blip" of additional deaths in the data¹. This suggests that COVID might be a little worse than a "bad flu" but it is **not even a modest pandemic**. Basically, the term "pandemic" cannot be meaningfully applied to it.

This happened with Swine flu as well – after the initial hysteria it was found that most people are already immune to it. In this case as well, there are very high levels of pre-existing immunity in the population.

My preliminary analysis suggests that not more than a third of the reported deaths from COVID have actually been caused by it or by the flu (with which covid has been conflated). The other two-third are people would have died in 2020 from other causes anyway (in thousands of cases even heart attacks are being labelled covid since the person had a "positive" covid test).

Science has been completely thrown out of the window in 2020.

1.3.2 covid facts

https://twitter.com/sabhlok/status/1332784886927695872

1.3.3 Failed modelling

https://twitter.com/SinisaCatic/status/1330144277855416330

¹ https://timesofindia.indiatimes.com/blogs/seeing-the-invisible/given-new-data-we-must-downgrade-the-severity-of-this-pandemic/

2. The lessons from the Swine flu hysteria that the World Health Organisation published in 2011

2.1 WHO's 2011 paper: Health is more than influenza

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c. Institute of Tropical Medicine, Antwerp, Belgium.

Bulletin of the World Health Organization 2011;89:539-540. doi: 10.2471/BLT.11.089086

The repeated pandemic health scares caused by an avian H5N1 and a new A(H1N1) human influenza virus are part of the culture of fear.1–3 Worst-case thinking replaced balanced risk assessment. Worst-case thinking is motivated by the belief that the danger we face is so overwhelmingly catastrophic that we must act immediately. Rather than wait for information, we need a pre-emptive strike. But if resources buy lives, wasting resources wastes lives. The precautionary stocking of largely useless antivirals and the irrational vaccination policies against an unusually benign H1N1 virus wasted many billions of euros and eroded the trust of the public in health officials.4–6 The pandemic policy was never informed by evidence, but by fear of worst-case scenarios.

In both pandemics of fear, the exaggerated claims of a severe public health threat stemmed primarily from disease advocacy by influenza experts. In the highly competitive market of health governance, the struggle for attention, budgets and grants is fierce. The pharmaceutical industry and the media only reacted to this welcome boon. We therefore need fewer, not more "pandemic preparedness" plans or definitions. Vertical influenza planning in the face of speculative catastrophes is a recipe for repeated waste of resources and health scares, induced by influenza experts with vested interests in exaggeration. There is no reason for expecting any upcoming pandemic to be worse than the mild ones of 1957 or 1968,7 no reason for striking pre-emptively, no reason for believing that a proportional and balanced response would risk lives.

The opposite of pre-emptive strikes against worst-case scenarios are adaptive strategies that respond to emerging diseases of any nature based on the evidence of observed virulence and the effectiveness of control measures. This requires more generic capacity for disease surveillance, problem identification, risk assessment, risk communication and health-care response. Such strengthened general capacity can respond to all health emergencies, not just influenza. Resources are scarce and need to be allocated to many competing priorities. Scientific advice on resource allocation is best handled by generalists with a comprehensive view on health. Disease experts wish to capture public attention and sway resource allocation decisions in favour of the disease of their interest. We referred previously to the principles of guidance on health by the British National Institute for Health and Clinical Excellence (NICE),2 cited as "We make independent decisions in an open, transparent way, based on the best available evidence and including input from experts and interested parties." Support from disease experts is crucial in delivering opinion, scholarly advice and evidence to a team of independent general scientists. But this team should independently propose decisions to policy-makers and be held accountable for them.

The key to responsible policy-making is not bureaucracy but accountability and independence from interest groups. Decisions must be based on adaptive responses to emerging problems, not on definitions. WHO should learn to be NICE: accountable for reasonableness in a process of openness, transparency and dialogue with all the stakeholders, and particularly the public.9

3. Waiting for the Spanish flu – there's big bucks in that

3.1 'A Whole Industry Is Waiting For A Pandemic', 2009

'A Whole Industry Is Waiting For A Pandemic' – Interview with Epidemiologist Tom Jefferson 21.07.2009

The world has been gripped with fears of swine flu in recent weeks. In an interview with SPIEGEL, epidemiologist Tom Jefferson speaks about dangerous fear-mongering, misguided, money-driven research and why we should all be washing our hands a lot more often.

SPIEGEL: Mr. Jefferson, the world is living in fear of swine flu. And some predict that, by next winter, one-third of the world's population might be infected. Are you personally worried? Are you and your family taking any precautions?

Tom Jefferson: I wash my hands very often -- and it's not all because of swine flu. That's probably the most effective precaution there is against all respiratory viruses, and the majority of gastrointestinal viruses and germs as well.

SPIEGEL: Do you consider the swine flu to be particularly worrisome?

Jefferson: It's true that influenza viruses are unpredictable, so it does call for a certain degree of caution. But one of the extraordinary features of this influenza -- and the whole influenza saga -- is that there are some people who make predictions year after year, and they get worse and worse. None of them so far have come about, and these people are still there making these predictions. For example, what happened with the bird flu, which was supposed to kill us all? Nothing. But that doesn't stop these people from always making their predictions. Sometimes you get the feeling that there is a whole industry almost waiting for a pandemic to occur.

SPIEGEL: Who do you mean? The World Health Organization (WHO)?

Jefferson: The WHO and public health officials, virologists and the pharmaceutical companies. They've built this machine around the impending pandemic. And there's a lot of money involved, and influence, and careers, and entire institutions! And all it took was one of these influenza viruses to mutate to start the machine grinding.

SPIEGEL: On your Italian homepage, there is a "pandemic countdown" that expires on April 1. Don't you think the situation calls for just a bit more seriousness?

Jefferson: I'm just using it ironically to expose the false certainty that we are fed. Will one-third of the world's population get swine flu? Nobody can say for sure right now. For now, at least, I don't really see any fundamental difference, no difference in the definition between this and a normal flu epidemic. Swine flu could have even stayed unnoticed if it had been caused by some unknown virus rather than an influenza virus.

SPIEGEL: Do you think the WHO declared a pandemic prematurely?

Jefferson: Don't you think there's something noteworthy about the fact that the WHO has changed its definition of pandemic? The old definition was a new virus, which went around quickly, for which you didn't have immunity, and which created a high morbidity and mortality rate. Now the last two have been dropped, and that's how swine flu has been categorized as a pandemic.

SPIEGEL: But, year after year, 10,000-30,000 people in Germany alone die from influenza. In the Western world, influenza is the most deadly infectious disease there is.

Jefferson: Hold on! These figures are nothing more than estimates. More than anything, you have to distinguish between an influenza-like illness and a genuine flu, the real influenza. Both of them have the same symptoms: a sudden high fever, a sore throat, coughing, rheumatic pain in the back and legs, possible bronchitis and pneumonia. But real flues, real influenzas are only caused by influenza viruses, while there are more than 200 different viruses that cause influenza-like illness. When it comes to figures

related to so-called flu deaths, you always get other causes of death caused by other viruses mixed in. Now, in the case of elderly people who die of pneumonia, nobody would do a postmortem to figure out if it was really an influenza virus that killed them. Approximately 7 percent of influenza-like illness cases are caused by influenza viruses. It's a very small percentage. What I know is that real influenza is systematically overestimated.

SPIEGEL: And what about the 200 other kinds of viruses?

Jefferson: They're not as popular as influenza. Researchers are just not as interested in that. Take rhinovirus, a horse-derived virus. It's the most commonly isolated agent in common colds. There are a hundred different types of these rhinoviruses. They usually only cause a normal runny nose, but they can be deadly, too. Or so-called RSV, the human respiratory syncytial virus, that is highly dangerous to infants and small children.

SPIEGEL: So why aren't researchers interested in it?

Jefferson: It's easy: They can't make money with it. With rhinoviruses, RSV and the majority of the other viruses, it's hard to make a lot of money or a career out of it. Against influenza, though, there are vaccines, and there are drugs you can sell. And that's where the big money from the pharmaceuticals industry is. It makes sure that research on influenza is published in the good journals. And that's why you have more attention being paid there, and the entire research field becomes interesting for ambitious scientists.

SPIEGEL: But is there any scientific reason to be interested in influenza viruses?

Jefferson: The strict focus on influenza is not only misguided; it's also dangerous. Do you remember something called SARS? That was a truly dangerous epidemic. It was like a meteor: It came and it went quickly, and it killed a lot of people. SARS took us by surprise because it was caused by a completely unknown coronavirus. Where did it come from? Where did it go? Or is it still here? We still don't know. There are lots of other strange things like that coming out. Every year, a new agent is identified. For example, there's something called bocavirus, which can cause bronchitis and pneumonia in small children. And there's something called metapneumovirus, which studies say is responsible for more than 5 percent of all flu-related illnesses. So, we should keep our eyes open in all directions!

SPIEGEL: But the great pandemic of 1918/1919 was caused by an influenza virus, and it killed up to 50 million people around the world. Or do scientists contest that?

Jefferson: It's very well possible that it was, but there are many aspects about the 1918/1919 pandemic that still puzzle us. It was only 12 years ago that we learned that the H1N1 virus caused it. But there was also a lot of bacterial activity going on at the time. And it's particularly unclear why the mortality rate for the flu dropped so dramatically after World War II. Today, you only get a fraction of what was standard before the war. When it comes to the later pandemics, such as the "Asian flu" of 1957 or the "Hong Kong flu" of 1968/69, you can barely detect them as exceptional figures when it comes to death statistics as a whole.

SPIEGEL: So why should we even speak of pandemics at all?

Jefferson: That's something you should ask the World Health Organization!

SPIEGEL: In your opinion, what do you think it takes to make a virus like the swine flu a global threat?

Jefferson: Unfortunately, we can only say that we don't know. I suspect that the whole issue is much more complex than we are even able to imagine it today. Given all the viruses that produce flu-like symptoms, perhaps Robert Koch's postulate that one particular pathogen causes one particular disease doesn't go far enough. Why, for example, do we not get influenza in the summertime? In the end, the pathogen is there all year long! Already in the 19th century, the German chemist and hygienist Max von Pettenkofer had developed a theory about how the pathogen's contact with the environment can alter the disease. I think that research in this direction would be worthwhile. Perhaps it would allow us to understand the pandemic of 1918/1919 better or to be able to assess the dangers of swine flu.

SPIEGEL: Humans have better defenses today than they did in 1918, and it probably won't be long before we have a swine flu vaccine. Last week, Germany's federal government announced that it wanted to buy enough for 30 percent of the population. How much do you think that will protect us?

Jefferson: When it comes to pandemic vaccination, as we say in English, the proof is in the pudding. The proof is in using it. We'll see. It does generate an antibody response, but will it really guard against the disease?

SPIEGEL: Are you pessimistic about that?

Jefferson: No, I'm just saying I think we're about to find out (laughter). Let's have this conversation again in about a year's time, shall we?

SPIEGEL: For a number of years, as part of the Cochrane Collaboration, you have been systematically evaluating all the studies on immunization against seasonal influenza. How good does it work?

Jefferson: Not particularly good. An influenza vaccine is not working for the majority of influenza-like illnesses because it is only designed to combat influenza viruses. For that reason, the vaccine changes nothing when it comes to the heightened mortality rate during the winter months. And, even in the best of cases, the vaccine only works against influenza viruses to a limited degree. Among other things, there is always the danger that the flu virus in circulation will have changed by the time that the vaccine product is finished with the result that, in the worst case, the vaccine will be totally ineffectual. In the best of cases, the few decent studies that exist show that the vaccine mainly works with healthy young adults. With children and the elderly, it only helps a little, if at all.

SPIEGEL: But aren't those the exact groups that influenza immunization is recommended for?

Jefferson: Indeed. That's one of the contradictions between scientific findings and practice, between evidence and policy.

SPIEGEL: So, what's behind this contradiction?

Jefferson: Of course, that has something to do with the influence of the pharmaceutical industry. But it also has to do with the fact that the importance of influenza is completely overestimated. It has to do with research funds, power, influence and scientific reputations!

SPIEGEL: So, at the moment is it reasonable to keep vaccinating against seasonal influenza?

Jefferson: I can't see any reason for it, but I'm not a decision maker.

SPIEGEL: And what about Tamiflu and Relenza, two of the anti-flu medications that are being deployed against swine flu? How well do they really work?

Jefferson: If taken at the right time, on average, Tamiflu reduces the duration of a real influenza by one day. One study also found that it diminishes the risk of pneumonia.

SPIEGEL: Could these medications lower mortality rates associated with the flu?

Jefferson: That's possible, but it has yet to be scientifically proven.

SPIEGEL: And what about side effects?

Jefferson: Tamiflu can cause nausea. And there are things that point toward psychiatric side effects. There are reports coming out of Japan that young people who have taken Tamiflu have had acute psychotic reactions similar to those found in schizophrenics.

SPIEGEL: So, is it sensible to use such medications at all?

Jefferson: When it comes to severe disease, yes. But under no circumstances should Tamiflu be handed out to whole schools, as is currently sometimes being done. With that being the case, it doesn't surprise me at all that we're already hearing reports about resistant strains of swine flu.

SPIEGEL: In Germany, the government is supposed to stockpile flu medications for 20 percent of the population. Do you see that as being sensible?

Jefferson: Well, at least there are much cheaper ways to accomplish a lot more. For example, school children should be taught to wash their hands regularly -- preferrably after every class! And every airport should install a couple hundred wash basins. Whoever gets off a plane and doesn't wash their hands should be stopped by the border police. You could tell for example by putting an invisible, neutral dye in the water. And wearing masks can be sensible, as well.

SPIEGEL: Has it really been shown that these measures work?

Jefferson: There are several good studies on this that were done during the SARS epidemic. They are so-called case-control studies that examined individuals that had had close contact with the SARS virus. They compared the characteristics of those who had been infected with the virus through this contact with those of people who had not been infected. These studies resulted in very clear results.

SPIEGEL: You sound pretty impressed.

Jefferson: I am. What's great about these measures is not only that they are inexpensive, but also that they can help against more than just influenza viruses. This method can fight against the 200 pathogens that bring about flu symptoms as well as against gastrointestinal viruses and completely unknown germs. One study done in Pakistan has shown that hand washing can even save children's lives. Someone should get a Nobel Prize for that!

SPIEGEL: Mr. Jefferson, we thank you for this interview.

This chapter will highlight the history of extreme projections by "epidemiologists" and how these are getting worse over time.

The articles below are placeholders – they will be restructured to reflect a coherent narrative.

3.2 Faith in Quick Test Leads to Epidemic That Wasn't - NY Times, 2007

Faith in Quick Test Leads to Epidemic That Wasn't

By Gina Kolata, Jan. 22, 2007

Dr. Brooke Herndon, an internist at Dartmouth-Hitchcock Medical Center, could not stop coughing. For two weeks starting in mid-April last year, she coughed, seemingly nonstop, followed by another week when she coughed sporadically, annoying, she said, everyone who worked with her.

Before long, Dr. Kathryn Kirkland, an infectious disease specialist at Dartmouth, had a chilling thought: Could she be seeing the start of a whooping cough epidemic? By late April, other health care workers at the hospital were coughing, and severe, intractable coughing is a whooping cough hallmark. And if it was whooping cough, the epidemic had to be contained immediately because the disease could be deadly to babies in the hospital and could lead to pneumonia in the frail and vulnerable adult patients there.

It was the start of a bizarre episode at the medical center: the story of the epidemic that wasn't.

For months, nearly everyone involved thought the medical center had had a huge whooping cough outbreak, with extensive ramifications. Nearly 1,000 health care workers at the hospital in Lebanon, N.H., were given a preliminary test and furloughed from work until their results were in; 142 people, including Dr. Herndon, were told they appeared to have the disease; and thousands were given antibiotics and a vaccine for protection. Hospital beds were taken out of commission, including some in intensive care.

Then, about eight months later, health care workers were dumbfounded to receive an e-mail message from the hospital administration informing them that the whole thing was a false alarm.

Not a single case of whooping cough was confirmed with the definitive test, growing the bacterium, *Bordetella pertussis*, in the laboratory. Instead, it appears the health care workers probably were afflicted with ordinary respiratory diseases like the common cold.

Now, as they look back on the episode, epidemiologists and infectious disease specialists say the problem was that they placed too much faith in a quick and highly sensitive molecular test that led them astray.

Infectious disease experts say such tests are coming into increasing use and may be the only way to get a quick answer in diagnosing diseases like whooping cough, Legionnaire's, bird flu, tuberculosis and SARS, and deciding whether an epidemic is under way.

There are no national data on **pseudo-epidemics caused by an overreliance on such molecular tests**, said Dr. Trish M. Perl, an epidemiologist at Johns Hopkins and past president of the Society of Health Care Epidemiologists of America. But, she said, pseudo-epidemics happen all the time. The Dartmouth case may have been one the largest, but it was by no means an exception, she said.

There was a similar whooping cough scare at Children's Hospital in Boston last fall that involved 36 adults and 2 children. Definitive tests, though, did not find pertussis.

"It's a problem; we know it's a problem," Dr. Perl said. "My guess is that what happened at Dartmouth is going to become more common."

Many of the new molecular tests are quick but technically demanding, and each laboratory may do them in its own way. These tests, called "home brews," are not commercially available, and there are no good estimates of their error rates. But their very sensitivity makes false positives likely, and when hundreds or thousands of people are tested, as occurred at Dartmouth, false positives can make it seem like there is an epidemic.

"You're in a little bit of no man's land," with the new molecular tests, said Dr. Mark Perkins, an infectious disease specialist and chief scientific officer at the Foundation for Innovative New Diagnostics, a nonprofit foundation supported by the Bill and Melinda Gates Foundation. "All bets are off on exact performance."

Of course, that leads to the question of why rely on them at all. "At face value, obviously they shouldn't be doing it," Dr. Perl said. But, she said, often when answers are needed and an organism like the pertussis bacterium is finicky and hard to grow in a laboratory, "you don't have great options."

Waiting to see if the bacteria grow can take weeks, but the quick molecular test can be wrong. "It's almost like you're trying to pick the least of two evils," Dr. Perl said.

At Dartmouth the decision was to use a test, P.C.R., for polymerase chain reaction. It is a molecular test that, until recently, was confined to molecular biology laboratories.

"That's kind of what's happening," said Dr. Kathryn Edwards, an infectious disease specialist and professor of pediatrics at Vanderbilt University. "That's the reality out there. We are trying to figure out how to use methods that have been the purview of bench scientists."

The Dartmouth whooping cough story shows what can ensue.

To say the episode was disruptive was an understatement, said Dr. Elizabeth Talbot, deputy state epidemiologist for the New Hampshire Department of Health and Human Services.

"You cannot imagine," Dr. Talbot said. "I had a feeling at the time that this gave us a shadow of a hint of what it might be like during a pandemic flu epidemic."

Yet, epidemiologists say, one of the most troubling aspects of the pseudo-epidemic is that all the decisions seemed so sensible at the time.

Dr. Katrina Kretsinger, a medical epidemiologist at the federal Centers for Disease Control and Prevention, who worked on the case along with her colleague Dr. Manisha Patel, does not fault the Dartmouth doctors.

"The issue was not that they overreacted or did anything inappropriate at all," Dr. Kretsinger said. Instead, it is that there is often is no way to decide early on whether an epidemic is under way.

Before the 1940s when a pertussis vaccine for children was introduced, whooping cough was a leading cause of death in young children. The vaccine led to an 80 percent drop in the disease's incidence, but did not completely eliminate it. That is because the vaccine's effectiveness wanes after about a decade, and although there is now a new vaccine for adolescents and adults, it is only starting to come into use. Whooping cough, Dr. Kretsinger said, is still a concern.

The disease got its name from its most salient feature: Patients may cough and cough and cough until they have to gasp for breath, making a sound like a whoop. The coughing can last so long that one of the common names for whooping cough was the 100-day cough, Dr. Talbot said.

But neither coughing long and hard nor even whooping is unique to pertussis infections, and many people with whooping cough have symptoms that like those of common cold: a runny nose or an ordinary cough.

"Almost everything about the clinical presentation of pertussis, especially early pertussis, is not very specific," Dr. Kirkland said.

That was the first problem in deciding whether there was an epidemic at Dartmouth.

The second was with P.C.R., the quick test to diagnose the disease, Dr. Kretsinger said.

With pertussis, she said, "there are probably 100 different P.C.R. protocols and methods being used throughout the country," and it is unclear how often any of them are accurate. "We have had a number of outbreaks where we believe that despite the presence of P.C.R.-positive results, the disease was not pertussis," Dr. Kretsinger added.

At Dartmouth, when the first suspect pertussis cases emerged and the P.C.R. test showed pertussis, doctors believed it. The results seem completely consistent with the patients' symptoms.

"That's how the whole thing got started," Dr. Kirkland said. Then the doctors decided to test people who did not have severe coughing.

"Because we had cases we thought were pertussis and because we had vulnerable patients at the hospital, we lowered our threshold," she said. Anyone who had a cough got a P.C.R. test, and so did anyone with a runny nose who worked with high-risk patients like infants.

"That's how we ended up with 134 suspect cases," Dr. Kirkland said. And that, she added, was why 1,445 health care workers ended up taking antibiotics and 4,524 health care workers at the hospital, or 72 percent of all the health care workers there, were immunized against whooping cough in a matter of days.

"If we had stopped there, I think we all would have agreed that we had had an outbreak of pertussis and that we had controlled it," Dr. Kirkland said.

But epidemiologists at the hospital and working for the States of New Hampshire and Vermont decided to take extra steps to confirm that what they were seeing really was pertussis.

The Dartmouth doctors sent samples from 27 patients they thought had pertussis to the state health departments and the Centers for Disease Control. There, scientists tried to grow the bacteria, a process that can take weeks. Finally, they had their answer: There was no pertussis in any of the samples.

"We thought, Well, that's odd," Dr. Kirkland said. "Maybe it's the timing of the culturing, maybe it's a transport problem. Why don't we try serological testing? Certainly, after a pertussis infection, a person should develop antibodies to the bacteria."

They could only get suitable blood samples from 39 patients — the others had gotten the vaccine which itself elicits pertussis antibodies. But when the Centers for Disease Control tested those 39 samples, its scientists reported that only one showed increases in antibody levels indicative of pertussis.

The disease center did additional tests too, including molecular tests to look for features of the pertussis bacteria. Its scientists also did additional P.C.R. tests on samples from 116 of the 134 people who were thought to have whooping cough. Only one P.C.R. was positive, but other tests did not show that that person was infected with pertussis bacteria. The disease center also interviewed patients in depth to see what their symptoms were and how they evolved.

"It was going on for months," Dr. Kirkland said. But in the end, the conclusion was clear: There was no pertussis epidemic.

"We were all somewhat surprised," Dr. Kirkland said, "and we were left in a very frustrating situation about what to do when the next outbreak comes."

Dr. Cathy A. Petti, an infectious disease specialist at the University of Utah, said the story had one clear lesson.

"The big message is that every lab is vulnerable to having false positives," Dr. Petti said. "No single test result is absolute and that is even more important with a test result based on P.C.R."

As for Dr. Herndon, though, she now knows she is off the hook.

"I thought I might have caused the epidemic," she said.

3.3 Coronavirus Overreaction – Richard Epstein, 23 March 2020

Coronavirus Overreaction.

Out of over 367,000 COVID-19 cases reported as of noon March 23, 2020, 16,000 people have died, a rough increase of about 9,500 from the past week. China has contributed about 3,500, a figure that is

holding relatively stable--if we are to believe the reporting coming out of the People's Republic of China—as is Iran's total of 1,812 deaths (another potentially dubious total). In Spain, the death toll is 2,206. Italy has taken the lead with 6,077 deaths, 85 percent of which are of people over 70, which stems, it appears, from a conscious decision not to supply ventilators to anyone over 60. These four nations make up close to 13,000 deaths or about 82 percent of the total. Taken together, these four countries account for over 13,595 of the 16,097 deaths. The good news here is that the growth rates in both Italy and Spain have turned downward in the past 48 hours.

In my column last week, I predicted that the world would eventually see about 50,000 deaths from the novel coronavirus, and the United States about 500. These two numbers are clearly not in sync. If the first number holds, the total US deaths should be about 4 to 5 percent of that total, or about 2,000–2,500 deaths. The current numbers are getting larger, so it is possible both figures will move up in a rough proportion from even that revised estimate. Indeed, the recent run-ups in Italy and perhaps Spain suggest that those countries have yet to turn the corner.

Locally, the United States is high on cases (~35,000) but low on deaths (471). The conversion and expansion rate of COVID-19 are much in issue, and the breakdowns show a high variation across states, and within states. The state that continues to experience the most significant upward movement in fatalities is New York, at 122 as of March 23; its first death was reported only one week ago on March 14. Add in Washington State with 98 deaths, and now close to half of the fatalities are accounted for. California is at 33, with Georgia at 25.

The question is—what should we make of these data? The standard model sees a slow rise in cases until mid-July when it predicts that the United States shall have, for a period of several weeks, close to 10 million cases per day, with an ultimate death total that could reach one million deaths. A recent, thorough study by Aaron Ginn (which itself has been heavily attacked), takes a much more cautious view. A second article by David Katz also indicates that the global totals and that of the United States could be even higher than the numbers I suggested, perhaps by two- or three-fold. These estimates are almost two orders of magnitude lower than the common estimate. Ginn's study uses the term "hysteria" to describe the response to COVID-19, and, sadly, he is right, given the dangers of drawing hasty inferences from Italy to rest of the world. Unfortunately, the most common visuals of the virus spread, large red dots to indicate the number of cases in a given area, are alarmist and suggest a more severe crisis than the raw numbers indicate.

The key element in all these cases is the extrapolation from existing cases. The implicit assumption behind Ginn, Katz, and my earlier column is that the worst way to model growth in deaths from the coronavirus is through a geometric progression that runs rapidly through a large number of cycles, each of which generates more cases than the cycle before. If the exponent at each of these stages is greater than one, the model will quickly explode. Thus, if we assume that each infected person infects 2.3 other persons, a world that starts with 100 infections in the first period will have about 2,800, infections by the fifth period, and the rate would grow even more rapidly after that. If the periods are close together, it is easy to see how the fearful analyst could conclude that the world will be soon consumed.

Thus this statement from Tomas Pueyo captures the modern conceit: "Now, use the average doubling time for the coronavirus (time it takes to double cases, on average). It's 6.2. That means that, in the 17 days it took this person to die, the cases had to multiply by ~8... That means that, if you are not diagnosing all cases, one death today means 800 true cases today."

But there is no reason to assume that the doubling is a constant, and therefore there is no reason to accept the ratio of 800 to 1 for true cases compared to deaths. The situation in South Korea alone should dispel that narrative, where pervasive COVID-19 testing has revealed 8,897 cases against only 104 deaths, a ratio of approximately 80 to 1, an order of magnitude less than Pueyo's representation of the situation. Political leaders predict rising rates of infection, running perhaps for three months, while more cautious analysts think that the cycles turn down far sooner than the doomsday models predict. All of the stay-at-home orders that we see assume that the growth of cases (and of deaths) will be exponential, which is the sole justification for imposing the draconian measures that have wrecked both the economy and upended the lives of millions of people.

Our governors all believe in long-term positive duplication rates, some even subscribing to the 2.3 figure posited by The New York Times. To see the magnitude of these predictions, note that Gavin Newsom,

governor of California, has indicated that in the fullness of time, he believes that 25 million people in California will, without intervention, suffer from the virus, meaning that 250,000 people in his state alone will die given the conversion rate. J. B. Pritzker, the governor of Illinois, asserts that that his stay-at-home order will prevent "the loss of potentially tens of thousands of lives" within the state. He claims that he consulted with all the right experts before reaching this conclusion. Similarly, New York Governor Andrew Cuomo has issued an executive order that puts "New York State on PAUSE," with the exception of a long but limited list of essential services, while leaving schools, universities, restaurants, sporting events, and hotels shuttered for the foreseeable future. He thinks that the epidemic will be in force for nine months and claims that his experts expect "that between 40 and 80 percent of New Yorkers will be infected with coronavirus, however, authorities hope to spread out the rate of infection in order to not overwhelm the state's health system."

These projections are far more drastic than any sensible extrapolation from the data. If one assumes that there were just a 50 percent exposure rate in California (39.9 million, Illinois (12.7 million) and New York (19.4 million), the number of cases would equal 36 million that would translate into about 360,000 deaths in those three states alone. The current numbers of cases and death of those three states is: New York (15,168 cases, 122 deaths), California (1849 cases, 33 deaths), and Illinois, (1,049 cases, 9 deaths). The total cases are roughly 18,000 or 0.000050 of the projected totals, and the 155 deaths represent 0.00043 of the projected totals.

The governors' numbers are hysterical and sloppy. None of them have released any detailed study that purported to support their extreme decrees. There was no opportunity for the many critics of their proposals to have their voices heard. The emergency mentality created a one-man gubernatorial dictatorship in each state.

We need a public debate on the political response to COVID-19, and we need it now. I fully understand the need for immediate responses to immediate threats, like fires, but not for crises that may last for three months or more. At this point, everyone knows that people who are elderly, especially those with chronic conditions, should stay out of harm's way. But that prohibition is self-enforcing because those people know that it is in their best interest to self-quarantine, at least in place of high incidence, but by no means nationally. But for low risk groups, a different set of precautions may fit the bill—an emphasis on thorough hand washing, reduced work hours, reducing workers per shift, and better availability of ventilation equipment.

The central Hayekian principle applies: All of these choices are done better at the level of plants, hotels, restaurants, and schools than remotely by political leaders. Our governors have failed to ask a basic question: When all the individual and institutional precautions are in place, what is the marginal gain of having the government shut everything down by a preemptive order? Put otherwise, with these precautions in place, what is the extent of the externalities that remain unaddressed?

Progressives think they can run everyone's lives through central planning, but the state of the economy suggests otherwise. Looking at the costs, the public commands have led to a crash in the stock market, and may only save a small fraction of the lives that are at risk. In addition, there are lost lives on both sides of the equation as many people will now find it more difficult to see a doctor, get regular exercise, stay sober, and eat healthily. None of these alternative hazards are addressed by the worthy governors.

It is critical therefore to get some perspective on this issue, which is perhaps done by taking a quick look at the now forgotten H1N1 pandemic that ran for about a year from April 2009 to April 2010. The similarities between the two pandemics are evident. Both were novel strains for which there were no available vaccines. Both viruses hit people over 60 the hardest. During the year that H1N1 raged, the CDC estimates that "there were 60.8 million cases (range: 43.3-89.3 million), 274,304 hospitalizations (range: 195,086-402,719), and 12,469 deaths (range: 8868-18,306)."

These figures are in flat contradiction to the wildly high estimates that supposed experts give to support their current doomsday scenario, and they suggest that a far more modest program of containment—and allowing the virus to run its course—is a better path forward for the economy. Our government fiats will probably save very few, if any, lives saved over what we can obtain through more focused voluntary precautions. All the while, the United States is entertaining hopeless stimulus negotiations that shift dollars around, but do nothing to make up for the trillions that will inevitably lost as result of the economic

shutdown. There is only one cure to the current malaise, which is to reverse these self-destructive policies before it is too late.

3.4 COVID-19 Confusion – by Richard Ebeling

COVID-19 Confusion

PART I: THE INSTITUTIONS THAT SUPPORT PANDEMIC HYSTERIAS

4. The vaccine and drugs lobby

4.1 The 'false' pandemic: Drug firms cashed in on scare over swine flu, claims Euro health chief

The 'false' pandemic: Drug firms cashed in on scare over swine flu, claims Euro health chief

The swine flu outbreak was a 'false pandemic' driven by drug companies that stood to make billions of pounds from a worldwide scare, a leading health expert has claimed.

Wolfgang Wodarg, head of health at the Council of Europe, accused the makers of flu drugs and vaccines of influencing the World Health Organisation's decision to declare a pandemic.

This led to the pharmaceutical firms ensuring 'enormous gains', while countries, including the UK, 'squandered' their meagre health budgets, with millions being vaccinated against a relatively mild disease.

A resolution proposed by Dr Wodarg calling for an investigation into the role of drug firms has been passed by the Council of Europe, the Strasbourg-based 'senate' responsible for the European Court of Human Rights.

An emergency debate on the issue will be held later this month.

Dr Wodarg's claims come as it emerged the British government is desperately trying to offload up to f.1billion of swine flu vaccine, ordered at the height of the scare.

Chief Medical Officer Sir Liam Donaldson last year ordered the NHS to plan for up to 65,00 deaths

Chief Medical Officer Sir Liam Donaldson last year ordered the NHS to plan for up to 65,000 deaths

The Department of Health warned of 65,000 deaths, set up a special advice line and website, suspended normal rules so anti-flu drugs could be given out without prescription and told health and local authorities to prepare for a major pandemic.

Planners were told to get morgues ready for the sheer scale of deaths and there were warnings that the Army could be called in to prevent riots as people fought to obtain drugs.

But with fewer than 5,000 in England catching the disease last week and just 251 deaths overall, Dr Wodarg has branded the H1N1 outbreak as 'one of the greatest medical scandals of the century'.

He said: 'We have had a mild flu - and a false pandemic.'

He added the seeds of the scare were sown five years ago, when it was feared the much more lethal bird flu virus would mutate into a human form.

The 'atmosphere of panic' led to governments stockpiling the anti-flu drug Tamiflu and putting in place 'sleeping contracts' for millions of doses of vaccine

Dr Wodarg said: 'The governments have sealed contracts with vaccine producers where they secure orders in advance and take upon themselves almost all the responsibility.

'In this way the producers of vaccines are sure of enormous gains without having any financial risks.

'So they just wait, until WHO says "pandemic" and activate the contracts.'

He also claims that to further push their interests, leading drug companies placed 'their people' in the 'cogs' of the WHO and other influential organisations.

He added that their influence could have led the WHO to soften its definition of a pandemic - leading to the declaration of a worldwide outbreak last June.

Dr Wodarg said: '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 healthcare resources for inefficient vaccine strategies and needlessly exposed millions of healthy people to the risk of unknown side-effects of insufficiently tested vaccines.'

He does not name any Britons with conflicts of interest.

But last year, the Daily Mail revealed that Sir Roy Anderson, a scientist who advises the Government on swine flu, also holds a £116,000-a-year post on the board of GlaxoSmithKline.

GSK makes anti-flu drugs and vaccines and is predicted to be one of the biggest beneficiaries of the pandemic.

The Department of Health says that although the disease appears to be on the wane, it cannot rule out a third surge and urges all those entitled to the jab to have it.

Professor David Salisbury, the Government's head of immunisation said there were 'no grounds whatsoever' for Dr Wodarg's claims, saying people with conflicts of interest were kept out of the decision-making process.

A GSK spokesman said: 'Allegations of undue influence are misguided and unfounded. The WHO declared that H1N1 swine flu met the criteria for a pandemic.

'As WHO have stated, legal regulations and numerous safeguards are in place to manage possible conflicts of interest.'

The company, which still employs Sir Roy, said he had declared his commercial interests and had not attended any meetings related to the purchase of drugs or vaccine for either the Government or GSK.

http://www.jorgprobst.com/en/why-not-a-covid-19-vaccine/

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4.2 Leading COVID Vaccine Candidates Plagued by Safety Concerns

https://childrenshealthdefense.org/defender/covid-vaccine-candidates-safety-concerns/

"It works!" trumpeted the normally stoic Nature journal about Pfizer's early release results in a Phase III trial of its vaccine for COVID-19. Pfizer stated the vaccine was 90% effective when trial participants were exposed to SARS CoV-2, the virus said to cause COVID-19 symptoms.

Not so fast. Pfizer's study protocol states cases count even if a trial participant has a positive test and only one symptom — like a cough, chills or diarrhea — that could easily be caused by one of 1,400 human pathogens, including 200 viruses known to infect humans. Except for Hepatitis A, B, C and HIV, the study protocol is silent on testing for other infectious causes of the participant's symptoms.

In other words, the study suffers from confirmation bias. A cough and a positive test equals COVID, even when an "alternative possible diagnosis" could be the real cause of the symptoms. Absence of evidence is not evidence of absence.

Pfizer, partnering with BioNTech, uses new messenger RNA (mRNA) technology in their vaccine, and will apply for a coveted Emergency Use Authorization from the U.S. Food and Drug Administration (FDA), likely before the end of November. Pfizer's announcement comes after 94 trial participants — of more than 43,000 — tested positive for SARS CoV-2. Pfizer has not released data on whether the cases were mild, moderate or severe.

Early results may sound encouraging to some, but experts like Eric Topol, director of the Scripps Research Translational Institute, indicated "the vaccine may not turn out to be as effective once the trial is complete and all the data has been analysed [sic]," however "its effectiveness is likely to stay well above 50%." Pfizer's study protocol (p. 103) states "success at the final analysis" will achieve a minimum 30% efficacy, with greater than 98% certainty. We hope the vaccine is not 30 to 90% effective against mild illness.

Will the Pfizer vaccine work, and is it safe? Questions remain. Any vaccine, including all COVID-19 vaccines, must be proven both safe and effective before being administered to high-risk groups or to the global population.

A successful vaccine must prevent severe illness, hospitalizations or death, without serious adverse events that outweigh these benefits. It cannot just claim to prevent mild cases that would resolve on their own. It must also prevent person-to-person transmission. The trial data must be sufficiently powered to answer these questions, not just for the healthy, but for high-risk groups such as the elderly and those with underlying conditions.

Any initial protection from COVID-19 symptoms should also endure, and not wane after a few weeks or a few months. Questions remain about these valid criteria as applied to COVID-19 vaccine candidates. Recent publications in leading medical journals indicate that the answers to safety and efficacy questions may be less than assuring.

As most of the world still suffers under lockdowns, many wonder if these magic keys dangled to unlock us — the vaccines being developed for COVID-19 — will cause more injuries and deaths than those caused by COVID-19 illness.

4.2.1 Illegal to mandate vaccines under Emergency Use Authorization

Any COVID vaccine(s) approved for emergency use should be voluntary, since the vaccine(s) are considered investigational and are held to a much lower standard for both efficacy and safety. For example, compared to the non-emergency approval process to get full licensure, an emergency approval allows for a vaccine that "may" be effective, compared to the non-emergency approval process where a vaccine must demonstrate "substantial" effectiveness.

Emergency Use Authorization (EUA) law is clear: States are barred from mandating a vaccine approved for emergency usage. (See Section VI. Preemption.) It also should be illegal for private businesses, airlines or your employer to mandate a vaccination while it is approved under an EUA.

The New York Bar Association somehow missed this materially important barrier to mandates. Their attorneys published a position statement urging states to make COVID vaccination mandatory, allowing only a medical exemption. It appears that these lawyers either have supernatural foresight that COVID vaccines will be granted full licensure sometime in the future, or they have great hubris thinking they can override EUA law.

Only if the FDA were to grant full licensure, which normally takes years, would the states or businesses be allowed to consider vaccine mandates. The PREP Act exempts COVID vaccine manufacturers from liability, even if the vaccine(s) harm recipients, so the idea of mandates is particularly frightening.

4.2.2 Settling for a 'new normal'

Public health authorities tantalize us with the idea of a "new normal" after a vaccine for COVID-19 is widely available. The term implies, and has been widely interpreted to mean, that for society to return to normal, the vaccine would prevent person-to-person transmission so everything could "open up."

As appealing as this may sound to those harmed by lockdowns, only 42% of Americans now say they would get a COVID vaccine, according to the latest YouGov poll. Even among this sanguine minority, two-thirds harbor concerns about COVID vaccine safety. If public health authorities want high uptake of the vaccine, they need to push manufacturers to provide transparent trial information to address concerns, as the vaccine will have to be voluntary if any EUAs are granted.

In June, vaccine industry spokesperson Dr. Peter Hotez said, "Ideally, you want an antiviral vaccine to do two things. ... First, reduce the likelihood you will get severely ill and go to the hospital, and two, prevent infection and therefore interrupt disease transmission."

However, last week, Dr. Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases (NIAID) and White House coronavirus spokesperson, moved the goalpost and admitted the goal of COVID vaccines is to provide personal protection only, not to prevent death, or person-to-person transmission. Fauci said he and his colleagues would "settle for ... the primary endpoint to prevent clinically recognizable disease."

"Settle for" could be used when someone cannot afford the house they want, or when their favorite pizza topping is not available, so someone settles for cheese pizza instead of pepperoni. It is hard to imagine the

words "settle for" would ever be uttered in reference to a vaccine, let alone by the guy leading the COVID vaccine program for the U.S.

Settling for a vaccine that does not meet the initially lofty promises will not make more people voluntarily line up to get it.

4.2.3 Flawed trial design

As conceded by Fauci, there are indeed some concerning issues with the trial design, spelled out nicely by Dr. Peter Doshi in the British Medical Journal. Doshi focuses on the two biggest issues. First, none of the leading vaccine candidate trials is designed to test if the vaccine can reduce severe COVID-19 symptoms, defined as: hospital admissions, ICU or death. And, second, the trials are not designed to test if the vaccine can interrupt transmission.

If neither of these conditions is met, the vaccine in essence performs like a therapeutic drug, except a vaccine would be taken prophylactically, even by the perfectly healthy, and more than likely carries a higher risk of injury than a therapeutic drug. If this were to be true, then therapeutic drugs would be superior to any COVID vaccine.

4.2.4 Preventing severe symptoms?

Regarding the new Pfizer trial results, Paul Offit, director of the Vaccine Education Center at Children's Hospital of Philadelphia, said: "I want to know the spectrum of disease that the vaccine prevents. You'd like to see at least a handful of cases of severe disease in the placebo group."

Though Pfizer stated "the study also will evaluate the potential for the vaccine candidate to ... [prevent] against severe COVID-19 disease," Pfizer's press release did not indicate if the cases described in the company's Phase III early release results were mild or severe. "In all the ongoing phase III trials for which details have been released, laboratory confirmed infections even with only mild symptoms qualify as meeting the primary endpoint definition," wrote Doshi.

Phase III trials include a challenge test, where those who are vaccinated and those in the placebo group are followed to see if they end up testing positive for COVID-19, referred to as events or cases. "Final efficacy analyses are planned after just 150 to 160 'events," stated Doshi, "regardless of severity of the illness." He went on to say that "hospital admissions and deaths from COVID-19 are simply too uncommon in the population being studied for an effective vaccine to demonstrate statistically significant differences in a trial of 30,000 people."

The entire point of clinical trials is to demonstrate statistical significance so the FDA can make an informed decision on whether or not to approve the vaccine. The present clinical trials do not provide reliable data on whether these vaccines prevent hospitalizations and deaths.

4.2.5 No blocking of transmission

Plans to roll out vaccines to the 7.5 billion people in the world based on about 160 clinical trial participants per vaccine candidate not only lacks statistical power; most would consider it reckless.

Regarding the Pfizer results, Mt. Sinai virologist and trial participant Florian Krammer indicated "a transmission-blocking vaccine could accelerate the end of the pandemic. However, it will be difficult to determine if the Pfizer vaccine, or others in late-stage trials, can achieve this." Moderna Chief Medical Officer Tal Zaks concurs, stating "our trial will not demonstrate prevention of transmission, because ... you have to swab people twice a week for very long periods, and that becomes operationally untenable," citing the need for a five-to-ten times longer trial length and even higher costs.

Since these COVID-19 vaccines will not be approved for full licensure based on their ability to stop the spread of COVID-19 or prevent hospitalization or death, we may face never-ending lockdowns. If the present COVID-19 vaccine clinical trials eventually lead to full licensure, yet do not statistically significantly establish prevention of person-to-person transmission, they should not be used to justify mandated vaccinations in order to board a plane, go to work, attend a concert or eat at a restaurant.

4.2.6 Lack of study power in groups most affected by COVID-19

After Phase I trials, manufacturer studies are recruiting the elderly, minorities and those with underlying health conditions into larger studies with more than 30,000 subjects. However, though Pfizer stated that "approximately 42% of global participants and 30% of U.S. participants have racially and ethnically diverse backgrounds," there are concerns the trials are not sufficiently powered to evaluate vaccine effectiveness in these groups.

The 160-event challenge tests will not be broken down by sub-population, leaving little actionable data on these vulnerable groups. Additionally, Pfizer has not disclosed how many elderly are enrolled in its trial. "I can't see how anybody — the DSMB [Data Safety Monitoring Board] or the FDA Vaccine Advisory Committee, or FDA decision-makers — would ever allow a vaccine to be recommended for that group [age 65 and older] without having adequate data," said Offit.

4.2.7 Adverse events and concerning vaccine ingredients

So exactly what has been revealed thus far by the COVID-19 vaccine trials? Below are the issues with trial design, paused trials, adverse events, and questions about fast-tracking a new mRNA technology, among many other questions and issues.

Here are the five companies hoping the FDA will grant an Emergency Use Authorization: Moderna, Pfizer/BioNTech, Johnson & Johnson, Astra-Zeneca/Oxford, and GlaxoSmithKline. All receive funding from Operation Warp Speed to compress development time into a few months. Normally, vaccines take years to go through proper safety testing.

Significantly, with about two dozen vaccines in active use today, at least 66 formally tested and approved vaccines in the U.S. have been discontinued. Many — like RotaShield (rotavirus), Lymerix, and the DTP shot — were removed due to safety issues. Given the highly compressed development time, the adverse events experienced by trial participants and the possibility of vaccine mandates under full licensure, the public must demand transparency and open access to trial data.

4.2.8 Paused trials

Johnson & Johnson was the latest vaccine maker to pause its COVID-19 vaccine trial due to a severe adverse event in a vaccine recipient. At the Oct. 30 Advisory Committee on Immunization Practices (ACIP) meeting, Johnson & Johnson's Dr. Jerald Sadoff was pressed by no fewer than six ACIP members to reveal the illness, but refused, citing confidentiality.

Meanwhile, Astra-Zeneca/Oxford also had to pause their trial after trial participants developed neurological conditions like transverse myelitis and multiple sclerosis and due to a death, reportedly in the placebo group, which received meningitis vaccines instead of true saline placebos.

In Moderna's Phase I trial, at least one participant had to drop out due to urticaria, a common allergic drug reaction that can cause a life-threatening anaphylaxis, but the drugmaker did not pause its trial. Pfizer/BioNTech has stated it will not pause its trial despite "side effects that have emerged."

On Oct. 23, the FDA cleared both Johnson & Johnson and Astra-Zeneca to resume their trials, stating they could not definitively link the severe adverse events or death to the COVID vaccines. Given the small number of people in the trials, severe adverse events in just a few participants could translate into thousands, if not millions of injuries if the entire world population were vaccinated.

Leading COVID-19 Vaccine Candidates in the United States									
	Moderna	Pfizer/ BioNTech	Oxford/Astra-Zeneca	1&1	GSK Sanofi				
Type of Vaccine	mRNA in Lipid Nanoparticle (LNP)	mRNA in Lipid Nanoparticle (LNP)	Chimp adenovirus with CoV spike protein	Human Adenovirus with CoV Spike Protein	Recombinant Spike protein antigen				
Placebo Used	Saline	Saline	Meningitis Vaccine (MenACWY)	Saline	Saline				
Ingredients of Concern	PEG in LNP	mNeonGreen gene & PEG in LNP			AS03				
Efficacy									
Neutralizing Antibodies after 2 Doses	100%	100%	100%	> 90% (after 1 dose)	N/A				
Target Efficacy Rate	60%	30-60%	N/A	N/A	N/A				
Adverse Events After 2 Doses									
Systemic Adverse Events	100%	50% of ages 18 - 55	> 50% after 1st Dose	64% ages 18 - 55; 36% over 65 (1 dose only)	N/A				
Serious Adverse Events	21% (high dose group)	Possibly	Transverse myelitis and MS	YES, not disclosed	N/A				
Trial Paused Due to Adverse Events?	NO	NO	YES	YES	NO				
Other			Tylenol in some study arms; Saline placebo trial starting in Africa						

4.2.9 Questionable efficacy

Among the leading COVID vaccine candidates, Moderna, Pfizer/BioNTech, Astra-Zeneca/Oxford and Johnson & Johnson (J&J) have all published data from early human trials. (Links to published studies within the text above, and also cited after the article.)

While all four report 90% to 100% of participants developed antibodies after two doses (single dose for J&J), all four also report a high rate of adverse events. Note that antibodies are merely presumed to be effective, when levels are comparable to antibodies in people who recovered naturally from COVID.

We will not know if the vaccines prevent or reduce symptoms, like the early release results from the Pfizer trial, until complete challenge test results are back. In the challenge test, the vaccinated and those who got a placebo injection remain blinded, that is, they do not know which group they are in. If a participant experiences COVID-like symptoms, he or she will get a "nasal swab" test. Cases will be counted when a participant tests positive for SARS CoV-2, the virus that is thought to cause COVID-19 symptoms, via a polymerase chain reaction test. The vaccinated group will then be compared to the placebo group.

4.2.10 High systemic adverse events

One hundred percent of those injected with two doses of Moderna's mRNA vaccine (100 mcg) experienced systemic adverse events, while 50% of those aged 18-55 in Pfizer's trial had systemic adverse events.

In Astra-Zeneca/Oxford's trial, it took only one dose to cause more than 50% of participants to experience adverse events. In J&J's trial, a single dose caused almost two-thirds of those under 55 to have systemic adverse events, compared to about a third of those over 65.

Systemic adverse events experienced by participants in all trials include chills, fever, muscle pain and headache, which participants claim last about 24 hours. One man with chills chattered his teeth so badly that he broke a tooth.

4.2.11 mRNA: unproven new vaccine technology

Historically, vaccines are made from an infectious organism — either a virus or a bacterium — that is grown in a cell culture, like egg or aborted fetal cells such as MRC-5.

Vaccine antigens are prepared in four ways: 1) live, but weakened by attenuation, like the measles, mumps, rubella vaccine (MMR); 2) inactivated with a poison such as formaldehyde, like the flu shot; 3) using part of an organism — a subunit, recombinant, polysaccharide or a conjugate vaccine, like Hepatitis B or the shingles vaccine; or 4) using a toxoid (toxin) made by a germ, like a tetanus shot.

In all cases, the resulting vaccine provokes the recipient's B-cells to make antibodies to that organism. Subunit and toxoid vaccines tend not to work without an adjuvant like aluminum, which causes a more robust immune response.

In a technological departure from the four basic vaccine types, both Moderna and Pfizer/BioNTech are testing mRNA vaccines, a technology that does not appear to rely at all on biological products. mRNA instructs our cells to take action. In the case of the COVID vaccine, the lab works with synthetic mRNA intended to instruct the body's cellular machinery to make some of the SARS CoV-2 proteins, but not the entire SARS CoV-2 virus. Then the immune system is expected to make antibodies against those parts of the virus. Basically, mRNA vaccines are intended to biohack — through genetic modification — a human being to produce parts of a virus.

Vaccines are classified as biologics, not drugs, because traditional vaccines have always been derived from biological materials. It is questionable that an mRNA vaccine using synthetic RNA — which appears to have nothing biological in it — could still maintain this classification as a biologic. It is really an injected drug, and obviously a huge departure from traditional biologically based vaccine technology. This should give us pause, given the fast-tracked schedule is even more inappropriate for an entirely new vaccine technology.

Autoimmune syndromes caused by vaccination: pathogenic priming and antibody-dependent enhancement

The handful of animal trials performed by the manufacturers — J&J (primate), Moderna (mouse & primate), Pfizer (mouse & primate) and AstraZeneca/Oxford (primate) — focused on overall tolerability of the vaccines, clearance of pathogens from the upper and lower respiratory tract, and probed for which dose level might be immunogenic and safe.

The animal trials are being conducted alongside — not before — human trials, and have yet to release results regarding the possibility of pathogenic priming, which could lead to enhanced COVID-19 disease in individuals vaccinated against the SARS-CoV-2 virus, and potentially cause autoimmunity against many human proteins, including critical proteins in our immune systems.

As far as is known, none of the vaccines has eliminated unsafe epitopes — the part of SARS-CoV-2 proteins that match human proteins. If the immune system produces antibodies to these epitopes, they could attack "self," the hallmark of autoimmune disease.

We may have to wait for results from Phase III COVID vaccine trials for information on another untoward autoimmune condition, antibody-dependent enhancement (ADE). In ADE, vaccines may cause idiopathic antibodies that act like a Trojan horse for wild viruses, allowing the target virus to enter cells and replicate. The opposite of protecting someone from an infection, ADE causes the vaccinated person to get a worse case of the disease, and possibly suffer organ damage.

A recent review of ADE, also termed immune enhancement, noted current trials are not designed to find ADE, concluding that "rigorous clinical trial design and postlicensure [sic] surveillance should provide a reliable strategy to identify adverse events, including the potential for enhanced severity of COVID-19 disease, after vaccination."

ADE has been demonstrated in studies on SARS CoV in: humans, ferrets (liver damage) and non-human primates (acute lung damage), among a much larger body of literature.

It is not known what percent of the population may suffer pathogenic priming or antibody-dependent enhancement after vaccination with a COVID vaccine. Estimates of Americans who already have an autoimmune disease range from 14.7 million to 23.5 million. They are likely more susceptible to pathogenic priming and ADE.

4.2.12 Other concerning ingredients

Aside from Moderna and Pfizer/BioNTech, the other leading vaccine manufacturers are using recombinant vaccine technology, producing a genomic chimera with properties intended to both activate the immune system and generate antibodies to the SARS CoV-2 spike protein.

Astra-Zeneca/Oxford is using a chimp virus — an adenovirus — that can be the cause of the common cold, combined with the spike protein from SARS CoV-2. There are long-standing concerns about primate viruses in vaccines ever since the polio vaccine administered from 1955 to 1963 was linked with cancer. The polio vaccine was cultured in primate kidney cells infected with simian virus 40 (SV40).

Johnson & Johnson is using a human adenovirus combined with the spike protein. GlaxoSmithKline/Sanofi is using a recombinant antigen based on their flu vaccine technology.

Veteran vaccine researchers have also raised a warning flag about COVID-19 vaccine candidates that use adenoviruses that could result in an increased susceptibility to HIV infections based on previous findings. In a Lancet report in October, researchers utilizing adenovector COVID vaccine technology acknowledged the "controversial" possibility of their vector increasing the risk of HIV infection, and said they would watch for it in the vaccine candidate trials.

There are some other concerning ingredients to watch closely. In the Moderna and Pfizer mRNA vaccines, polyethylene glycol (PEG) is found in the fatty lipid nanoparticle coating around the mRNA. Seventy percent of people make antibodies to PEG and most do not know it, creating a concerning situation where many could have allergic, potentially deadly, reactions to a PEG-containing vaccine. PEG antibodies may also reduce vaccine effectiveness.

Pfizer is inserting an ingredient derived from a marine invertebrate, mNeonGreen, into its vaccine. The ingredient has bioluminescent qualities, making it attractive for medical imaging purposes, but it is unclear why an injected vaccine would need to have the equivalent of a visual day-glow marker. mNeonGreen has unknown antigenicity.

Finally, the GlaxoSmithKline vaccine will have a well-characterized toxic ingredient, AS03, an adjuvant used in the H1N1 vaccine that was linked with narcolepsy and cataplexy. It contains squalene which is harvested from shark livers, and is linked with Gulf War Syndrome. AS03 also contains polysorbate 80, which disrupts the normally protective blood-brain barrier, and tocopherol, a form of Vitamin E, as an emulsifier.

4.2.13 Meningitis vaccine 'fauxcebo'

While Pfizer and GSK are using saline placebos in their trials, Astra-Zeneca/Oxford is using a meningitis vaccine as its "placebo," which some term a "fauxcebo." The meningitis vaccine causes significant levels of adverse events, and may have even caused the reported death in the Astra-Zeneca/Oxford trial.

Comparing a COVID-19 vaccine to a meningitis vaccine as a placebo may have comparable levels of adverse events, allowing the manufacturers to misleadingly assert their COVID-19 vaccines had no more adverse events than the meningitis placebo. If they actually compared their vaccines to a saline placebo, the COVID-19 vaccine would likely have more adverse events.

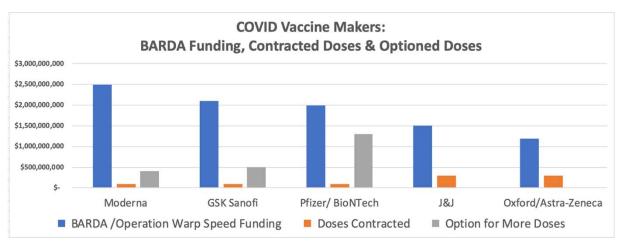
In their study protocol, Astra-Zeneca/Oxford stated the "use of saline as a placebo would risk unblinding participants, as those who had notable reactions would know they were in the ChAdOx1 nCoV-19 vaccine group." Astra-Zeneca/Oxford does have one saline placebo trial planned in South Africa, so there will be safety data compared to a real placebo when that trial is completed in a few years.

Tylenol in some study groups

Finally, another oddity in the Astra-Zeneca/Oxford trial is the use in some study groups of acetaminophen, also known as Tylenol or paracetamol. The vaccine maker explained that it wanted to use the highest vaccine dose possible, so a higher percentage of people would develop immunity after the first dose. Per their Phase I study, "a single higher [vaccine] dose was chosen to provide the highest chance of rapid induction of neutralizing antibody. In the context of a pandemic wave where a single higher, but more reactogenic dose might be more likely to rapidly induce protective immunity, the use of prophylactic paracetamol appears to increase tolerability and would reduce confusion with COVID-19 symptoms that might be caused by short-lived vaccine-related symptoms without compromising immunogenicity."

Acetaminophen is made from coal tar, and even though it's been in use since the late 1800s, science is still unsure of its mechanism of action. Side effects are well known, however. It depletes glutathione, the body's most abundant antioxidant made in the liver. It is a questionable practice to administer this overthe-counter drug with vaccines, as the body needs abundant glutathione to detoxify vaccine ingredients.

BARDA funding and potential approval right around the corner



All five of the leading vaccine manufacturers have received money from the Department of Health and Human Services' Biomedical Advanced Research and Development Authority (BARDA), in amounts ranging from \$1.2 to \$3 billion to accelerate trials under Operation Warp Speed. Manufacturers are all committed to producing 100-300 million initial doses of their vaccines, with contracts to produce millions or billions more doses.

As enthusiasm for a COVID-19 vaccine wanes, it appears the clinical trials will not inspire more confidence. Since everyone eagerly awaits the "new normal" and some think a vaccine is the key to end lockdowns, enthusiasm remains for even a sub-optimal vaccine. If suboptimal means a high rate of serious injury, the vaccine makers still have a long road ahead to prove the vaccines do not cause more death and injury than the symptoms of COVID-19.

Confidence is certainly not boosted when new mRNA vaccine technologies are being tested at Warp Speed led by former GSK executive Moncef Slaoui, who helped conceal Avandia's severe cardiac adverse events — a clear case of the fox guarding the henhouse.

Trading COVID disabilities and deaths for vaccine injuries and deaths is not an option. Even if manufacturers can show the serious injury rate is less than 1%, if the 7.5 billion people in the world were all vaccinated, millions could be permanently injured or die from the vaccine. Though mandates are prohibited under an Emergency Use Authorization, it will not be too much longer until manufacturers seek full licensure.

However, even under full licensure, if the vaccine doesn't prevent spread, there is no case to be made for vaccine mandates. Individuals should always have the choice of whether or not to vaccinate themselves or their minor children, after being fully informed of both risks and benefits. As always, Children's Health Defense awaits a safe and effective vaccine, and opposes all mandated medicines.

Contributors to this article include: James Lyons-Weiler, Ph.D. and Greg Glaser, General Counsel for Physicians for Informed Consent.

https://www.facebook.com/CM201QP/videos/699648027338881

Profit before people: 6/11/20, R Labonte & M Johri

Discusses TRIPS waiver and IP rights

https://theconversation.com/covid-19-drug-and-vaccine-patents-are-putting-profit-before-people-149270

3 Existing drugs may help treat Covid 19: 26/10/20, T Huzar

Talks to repurposed drugs (therefore readily available) however has not made it as mainstay treatment

https://www.medicalnewstoday.com/articles/study-identifies-3-existing-drugs-that-may-help-treat-covid-19

Article from Daily Mail on big Pharma spending:

https://www.dailymail.co.uk/health/article-8620057/Big-Pharma-spent-nearly-250-million-lobby-lawmakers-amid-coronavirus-pandemic.html

5. The capture of government by the science establishment

Most of this corruption of the science establishment has to do with the fact that government funding has intruded into scientific research which was earlier managed by the private sector (i.e. we the citizens in our private capacity). Private science necessarily had to be authentic because someone could profit only based on the truth. Falsehoods did not take anyone very far.

But the government's intrusion into science changed everything. Terence Kealey's analysis (*Sex, Science and Profits*) warns us against government funding of science. The fact is that today, universities, companies and government agencies collude behind the scenes to decide what is to be funded. This collusion operates like a Star Chamber: a black box which no one can pierce. This collusion should send shivers down our spine. The incentive structure for science no longer has anything to do with the truth but everything to do with politics, power and money. The biggest pile of research money doesn't go to scientists who are looking for the truth. It goes to scientists who are best able to mislead the people and politicise issues through their "friends" in the media and big business.

Corruption in science has reached astronomical proportions. The very survival of mankind is endangered by this criminal "scientific establishment" that has captured taxpayers funds and is now also able to get the government to point its guns (police) against anyone who raises any question. This is not any conspiracy theory: it is just the plain and obvious nature of incentives that are embedded into the current government funding system for science. The truth is the greatest fatality in this process. But also, as we have seen, our liberty itself.

6. Role of the media and social media

6.1 Role of the media

https://twitter.com/sabhlok/status/1332778782948659200

2) The role of the media

In previous pandemics the media was aware of its own impact on society and acted with a sense of responsibility in reporting deaths. It was noted in *The Lancet* on 25 May 2020 that²:

At the end of July, 1957, the Daily Mail issued a dire warning about a "new outbreak of Asian flu" when a 1-year-old girl fell ill in Fulham. The Guardian surrendered its cool editorial tone for a headline reading: "Crash Fight Against Asian 'Flu".

However, such headlines were the exception and for the most part newspapers seem to have behaved responsibly during the pandemic. Publishers were also reluctant to be seen to be stoking public fears.

But this time around, the media has behaved differently. Without the daily drumming up of the panic by the media, it is doubtful that we would have had the Great Hysteria.

Why has the media seemingly lost its sense of proportion and much of its ethics?

I venture to suggest that this state of affairs is at least partly attributable to the fact that mainstream media is in its death throes. Its revenues have plummeted due to stiff competition from social media and private blogs. Worse, the "sane" journalists can't attract enough "clicks" and are therefore being guided out of the door. The ones left behind are those who are inclined to be hysterical but they are successful in driving "eyeballs" and revenues.

Fear is an extremely powerful emotion, deeply etched into the human limbic system. We are perfectly programmed to be hyper-reactive receptacles for panicky "news". We hear, "Wolf, Wolf!" and without hesitating, run first to gather our sheep.

Neil Ferguson (and his co-authors) inadvertently put the matchlight to our fear and the media doused it with petrol. It was now a blazing inferno. And a huge feast for the media. The moolah rolled in like the heavens had parted. For a few weeks I myself became a pair of "eyeballs", watching YouTube news channels every evening from around the world. A flood of advertisement revenues must have poured into media coffers.

Marc Siegel's 2005 book, False Alarm, looked at some recent fears: the anthrax scare and fears about smallpox and gas bioterrorism agents that arose after the 11 September 2001 attacks in the USA, as well as the SARS epidemic and the mad cow disease. In each case we managed as a species to blow the threats out of all proportion.

The only way out of this fearful mess is through our higher brain, by seeking information that gives us a better handle on the risk. But science is not of much use here. Most scientists know nothing about the human mind and are happy to add fuel to the fire. Siegel shows how the CDC "attached itself to the media megaphone and made us afraid to open our mail" during the anthrax scare. Likewise, in this current pandemic, the WHO fueled the hysteria and ignored its own published recommendations.

The net result of all this is that the people of the world have been scared witless. An opinion poll company, Kekst CNC found in July 2020³ that the average person in the UK, USA, France, Sweden and Germany thinks that 100 to 300 times more people have died from this virus than it has actually killed.

² Honigsbaum, Mark, "Revisiting the 1957 and 1968 influenza pandemics", *The Lancet*, 25 May 2020. Short URL: https://bit.ly/33kvpoX.

³ KEKST CNC, "COVID-19 Opinion Tracker", 10th - 15th July 2020, Edition 4. Short URL: https://bit.ly/307pFN4.

But Charles Mackay wrote: "Men, it has been well said, think in herds; it will be seen that they go mad in herds, while they only recover their senses slowly, and one by one". That is how all hysterias end – one person at a time.

So, this hysteria, too, will one day come to an end. Its amazing path of devastation with the non-COVID-19 deaths (even as it was a godsend for media moguls) will no doubt be analysed by scholars from a range of disciplines for many decades to come.

Does this mean that I oppose what the media did this time? No. I think that's how the competitive private sector works. It is never perfect.

But that's why we pay 40% of our earnings to the government in taxes – to hire hyper-rational people like me to provide rock-solid advice regardless of any media circus that might be playing out there. The problem is not that the media drummed up the hysteria but that governments dumped their own plans.

6.2 Role of social media

https://twitter.com/sabhlok/status/1332781069138092034

PART II: THE TECHNIQUES OF PANDEMIC HYSTERIAS

7. Changing definitions to allow fraudulent pandemic declarations

7.1 Changing the definition of a pandemic to make everything into one

Before 2009, things were different. At that time, the necessary characteristics of a pandemic included a great many serious illnesses and numerous deaths, with a worldwide catastrophic overload of health care. [Source]

SOURCE BELOW

- 1. Make sure you change the definition of a pandemic so that you can call a 'pandemic' even when the new virus is *not causing serious harm to most of the population*. The WHO changed the definition of a 'pandemic' in May 2009 (ch 10 PhD thesis or my book)
- 2. The new definition *removed* the following clause: "A pandemic may occur when a new influenza virus appears ...resulting in epidemics worldwide with enormous numbers of deaths and illness....." A 'pandemic' in 2020 can be called simply if "A disease epidemic occurs when *there are more cases of that disease than normal.*" In this definition a "case" is defined as the presence of the virus (infection) in the person *without any symptoms of disease* or if it is diagnosed on *symptoms only* (clinical diagnosis) then there is *no proof* that the disease (COVID19) was caused by the new mutated *coronavirus 2019*. So a pandemic in 2020 can be called simply on the detection of the virus in the person no serious symptoms required or 'flu-like symptoms' with no virus identified and this gives the medical-industry complex, with vested interests in these health policies, *the power to control populations with medical testing and vaccines*.

7.2 Changing the way deaths are counted (for COVID)

My blog posts:

The BIGGEST SCANDAL: Flu deaths being counted as covid deaths

COVID-19 deaths are counted DIFFERENTLY to deaths from other causes: THIS IS A SERIOUS MISDEMENOUR.

Dr Mark Hobart – who's ACTUALLY worked in Melbourne nursing homes – confirms that MOST people dying WITH covid do not show respiratory symptoms

Reference for excess deaths associated with Covid-19 (US stats only):

https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess_deaths.htm

https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6942e2-H.pdf (Talks to an estimated ~300k more deaths due to Covid)

Incorrectly recorded "Covid deaths"?

Many comments on social media suggest that there are deaths mis-classified as "Covid deaths".

See articles:

1. IDPH Director explains how Covid deaths are classified: 20/4/20< L Melendez: https://week.com/2020/04/20/idph-director-explains-how-covid-deaths-are-classified/

"Essentially, Dr. Ezike explained that anyone who passes away after testing positive for the virus is included in that category.

"If you were in hospice and had already been given a few weeks to live, and then you also were found to have COVID, that would be counted as a COVID death. It means technically even if you died of a clear alternate cause, but you had COVID at the same time, it's still listed as a COVID death. So, everyone who's listed as a COVID death doesn't mean that that was the cause of the death, but they had COVID at the time of the death." Dr. Ezike outlined.

- 2. From the American Institute for Economic Research: Death by Lockdown: 2/11/20, JA Tucker (https://www.aier.org/article/death-by-lockdown/): provides an explanation to the CDC attempts to explain excess deaths.
- 3. Question raised from a pathologist's view about real number of deaths as a result from Covid "The way 'Covid deaths' are being counted is a national scandal: 30/5/20, Dr J Lee: https://www.spectator.co.uk/article/the-way-covid-deaths-are-being-counted-is-a-national-scandal
- 4. From Australia: Rise in pneumonia deaths sparks concern about misdiagnosed Covid-19: 27/7/20, D McCauley https://www.smh.com.au/politics/federal/rise-in-pneumonia-deaths-sparks-concern-about-misdiagnosed-covid-19-20200626-p556gp.html

"A spike in deaths attributed to flu and pneumonia has sparked concerns that COVID-19 deaths may have been misdiagnosed in Australia, suggesting there could be higher levels of community transmission than believed..... The data was "strongly indicative that many deaths from COVID-19 were misdiagnosed as influenza or pneumonia deaths," Dr Kippen said."

7.2.1 Very few deaths are "from covid", most are "with covid"

There is a genuine problem in classifying a death: "It's not always easy to tell if someone has died because of the effects of the SARS-CoV-2 virus, or whether they've passed away from pre-existing medical conditions but with the virus in their system".4

But the data collection methodology for COVID seems to be **hugely biased towards inflating COVID death figures.** Just having coronavirus in the body at the time of death is no proof that it <u>caused</u> the death. The virus must actually *cause* the death, but today we can't be sure of that.

I outline below some of the information I have gathered to date. The public has also begun to get anxious about this issue.

On 5 October 2020, a Melbourne newspaper, *The Herald Sun* reported that: "The accuracy of Victoria's coronavirus death toll is being brought into question following allegations government officials attributed deaths to COVID-19 even when doctors were unable to verify a cause"⁵.

On 9 September 2020 Marc Trabsky, the Director of the Centre for Health, Law and Society, La Trobe University and Courtney Hempton of Deakin University (both in Melbourne) noted:

There's been confusion, however, over whether reported death statistics reflect those who've died **from** COVID-19, or those who've died **with** the virus. Often it's hard for medical practitioners to determine which of these categories a death falls into. But the COVID-19 death toll publicised daily on Australian state and territory government websites and reported to the press **does not differentiate between the two**. Clarifying what's being counted as a COVID-19 death is necessary for understanding the impact of the virus, and for informing public health and clinical responses to the pandemic. ⁶

In the USA, we know that CDC has reported that:

⁴ https://theconversation.com/died-from-or-died-with-covid-19-we-need-a-transparent-approach-to-counting-coronavirus-deaths-145438

 $^{^5\,}https://www.heraldsun.com.au/lifestyle/health/doubts-raised-over-accuracy-of-victorias-coronavirus-death-toll/news-story/6e4c77fb8c0425ea854f8445845db264$

 $^{^6\,}https://the conversation.com/died-from-or-died-with-covid-19-we-need-a-transparent-approach-to-counting-coronavirus-deaths-145438$

For 6% of the deaths, COVID-19 was the only cause mentioned. For deaths with conditions or causes in addition to COVID-19, on average, there were 2.6 additional conditions or causes per death"⁷.

This means that only 6 per cent of the reported COVID deaths in USA can be genuinely considered to be entirely caused by COVID. For the remainder, the real cause remains unclear. In general, it seems that most "COVID-19 deaths" in the world have not occurred **'from'** COVID-19 but **'with'** COVID-19.

I have tried to look into this in some detail, below:

Case 1: When a person dies with the virus

The Age reported on 10 September 2020⁸ that "under federal Health Department guidelines, a death is defined for surveillance purposes as COVID-19-related if the person dies with the virus and there is no clear alternative cause of death, such as trauma. Those guidelines also stipulate that when a coroner's report finds a different cause of death, those findings take precedence".

But the mere fact that someone died **with a virus** in his or her body is no proof that the virus actually killed the person. Dr Ngozi Ezike Director of Public Heath, Illinois, said this clearly on TV in April 2020.

I just want to be clear in terms of the definition of people dying of covid. So the case definition is very simplistic. It means at the time of death it was a COVID positive diagnosis. So that means that if you were in hospice and had already been given – you know a few weeks to live – and then you also were found to have covid, that would be counted as a COVID death. It means that if **technically even if you died of a clear alternate cause but you had COVID at the same time, it is still listed as a COVID death.** So everyone who's listed as a COVID death **doesn't meant that that was the cause of the death** but they had COVID at the time of death. I hope that's helpful.⁹

When autopsies are actually done, it seems that the death reports can change completely. Hamburg in Germany decided to conduct autopsies and found that **none** of the deaths were actually *caused* by covid:

According to Dr Klaus Püschel in this interview on 21 April, out of the over 100 COVID-19 deaths he autopsied, all of them died with significant pre-existing conditions, and so had a weakened immune system when they contracted COVID-19.¹⁰

It is not clear whether any such validation of COVID deaths is taking place through autopsies in Victoria.

Case 2: When a person who dies had the virus in the past month

I am not sure whether this applies to Australia but in the UK "deaths within 28 days of a positive Covid-19 test" are counted as a COVID death. 11 This approach is even more problematic, in that a person need not even have an active COVID infection at the time of death.

As Roger Helmer, former Member of the European Parliament has remarked about such cases:

Anyone who dies within 30 days of a +ve C19 test is being counted as a Covid death. **It's like saying that someone dying of a heart attack, who also had a cold, has died of the cold**. And the bitter irony is that many of those C19 infections will have been acquired in hospital. ¹².

Case 3: When a person who dies did not even test COVID-positive

On 25 March 2020, the Australian Bureau of Statistics wrote that it is quite valid to even make an *assumption* about a death being from COVID – effectively without regard to the existence of the virus in the body:

⁷ https://www.cdc.gov/nchs/nvss/vsrr/covid_weekly/index.htm#Comorbidities

⁸ Baker, Richard, "Youngest COVID-19 victim may have died of another cause', *The Age*, 10 September 2020. Short URL: https://bit.ly/346a8yc.

⁹ https://www.youtube.com/watch?feature=youtu.be&v=zYUExBc1ijU

¹⁰ http://www.jorgprobst.com/en/covid-19-inflating-the-numbers/

¹¹ https://www.spectator.co.uk/article/The-ten-worst-Covid-data-failures

¹² https://twitter.com/RogerHelmerMEP/status/1320998352813776896

The new coronavirus strain (COVID-19) should be recorded on the medical cause of death certificate for ALL decedents where the disease caused, or is assumed to have caused, or contributed to death.¹³

The Coroners Court in Western Australia has the following guidance on counting COVID deaths:

Where a person is known to have **suffered typical symptoms of COVID-19**, such as fevers, cough, or breathing difficulties, during a COVID-19 pandemic, but has **not been formally tested** or diagnosed, then it is reasonable to **"assume"** the death was related to COVID-19 and should be recorded on the death certificate.¹⁴

The University of Melbourne (CRVS technical guide: Correctly certifying deaths due to COVID–19: guidance for physicians¹⁵) has issued guidance which states that "there are two distinct ICD-10 codes used for coding COVID-19 deaths - U07.1 (COVID-19, virus identified) and U07.2 (COVID-19, virus not identified)". It then notes that "Evaluation studies have shown that **medical certificates of cause of death are often of poor quality**, even when the cause of death has been certified by a physician".

It seems highly questionable to have a code for COVID deaths (U07.2) when the virus was not even identified on the person.

It appears that deaths from respiratory illness (or even other causes) can be simply assumed to be COVID deaths. But given the strong overlap in symptoms between COVID and flu, how can we say that we are not classifying flu as covid? Indeed, that is what is certainly happening. (I'll discuss this separately, below).

In addition, financial incentives seem bias the reporting.

7.2.2 Financial incentives to report cases and deaths as COVID

The following financial incentives are likely at play:

a) Payments to residential care for COVID cases

We know for certain that the NDIS system pays residential care facilities between \$1200-\$1800 per patient per day for COVID-19 positive patients. ¹⁶ This could easily set up corrupt incentives for data reporting.

b) Payments to hospitals for COVID cases

In the USA hospitals are provided financial incentives for COVID cases:

U.S. Centers for Disease Control and Prevention Director Robert Redfield acknowledged during a House hearing Friday that COVID-19 data could be inflated because hospitals receive a monetary gain by reporting COVID-19 cases. ¹⁷

Some evidence has emerged in a letter issued by a few Melbourne lawyers on 6 November 2020¹⁸ that suggests that something on these lines (of the US experience) might be also happening in Victoria. The letter provides as evidence a statement from an anonymous former Health Information Manager & Clinical Coder, in whose opinion:

[T]he coding rules for Covid (coded information is the baseline data for reporting the total number of state cases). Under a 'mandated screening by authority test' or a 'self-presenting non-mandated test' (where there has been NO exposure and NO symptoms), the reporting guidelines state 'for clinically diagnosed or **probable cases where testing is inconclusive**, **unavailable or not specified'**, Australian hospitals (including emergency and non-admitted care) are to assign;

Principal Diagnosis - B34.2 - "Coronavirus infection, unspecified site"

Additional diagnoses - U07.2 "Emergency use of U07.2, Coronavirus NOT identified"

¹⁶ https://twitter.com/sabhlok/status/1315577610508750848

¹³ https://www.abs.gov.au/ausstats/abs@.nsf/mf/1205.0.55.001

 $^{^{14}\,}https://www.coronerscourt.wa.gov.au/_files/COVID_Medical_Certificate_Cause_Death_Guide.pdf$

¹⁵ https://crvsgateway.info/file/17062/3922

¹⁷ https://www.christianpost.com/news/cdc-director-agrees-that-hospitals-have-monetary-incentive-to-inflate-covid-19-data.html

¹⁸ https://concernedlawyersnetwork.net/wp-content/uploads/2020/10/6.11.20-CLN-TO-GOVTS-LETTER.pdf

(I have discussed the U07.2 code earlier)

It is suggested in this letter by these Melbourne lawyers that the use of this COVID code for inconclusive cases could provide Australian hospitals with more money than attributing the case to some other cause. Obviously, once such coding – no matter how erroneous – gets into the system, the code is likely to continue till the death of the patient. (I am not certain about this matter, though, and it will need further investigation.)

c) Payments to relatives to declare non-COVID deaths as COVID.

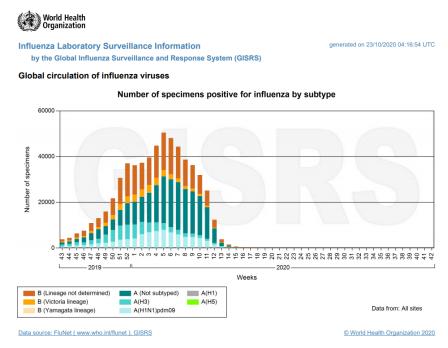
Finally, in relation to financial incentives, there are unverified reports circulating on social media about payments being made to the relatives of those who have died from a non-COVID cause, to motivate them to agree to the (fraudulent) declaration of that death as a COVID death. These social media reports are entirely unverified and need investigation.

Regardless, there is sufficient reason overall to believe that data on COVID deaths is unclear if not biased towards over-reporting.

7.2.3 Flu deaths are almost certainly being counted as COVID-19 deaths

As if this confusion wasn't enough, it is almost certain that flu deaths are being counted as COVID deaths.

It is shocking to realise that the overall prevalence of flu during 2020 has dropped off a cliff, even as COVID has spread like wildfire across the world. The World Health Organization website has the following chart on 8 November 2020¹⁹:



This chart mainly reflects the performance of flu in the Southern Hemisphere, but the virus seems to have gone dormant even in the Northern Hemisphere. Charts that compare flu cases of 2020 with previous years show that the situation is even more stark.²⁰

In relation to the Southern Hemisphere:

In Australia, just 14 positive flu cases were recorded in April, compared with 367 during the same month in 2019 – a 96 per cent drop. By June, usually the peak of its flu season, there were none. In fact, Australia has not reported a positive case to the WHO since July.

In Chile, just 12 cases of flu were detected between April and October. There were nearly 7,000 during the same period in 2019.²¹

¹⁹ https://www.who.int/influenza/gisrs_laboratory/updates/summaryreport/en/

²⁰ https://twitter.com/MLevitt_NP2013/status/1323416055507677184

The idea that flu virus can disappear makes no sense. Claims by some academics that social distancing measures are causing this cannot be believed.

To rebut such claims we simply need to look at Chile's data. How is it possible to have 518,390 coronavirus cases in Chile during this period and only 12 cases of flu? Chile has also reported 14,450 COVID deaths. If one virus can transmit in Chile, why can't the other?

The only explanation that makes sense is that **deaths from flu-like symptoms are being counted as COVID deaths.** (We have seen above how this is feasible, with COVID deaths often just being "assumed".)

If this interpretation is correct then we have further serious reasons to doubt the COVID case and death counts. Since flu kills up to 650,000 people each year, if it is proven that flu is being counted as COVID, then COVID would turn out to be an even milder pandemic than currently thought.

As if this data confusion was not enough, we find that PCR tests for COVID can't rule out flu.

The CDC says on its website that "This test cannot rule out diseases caused by other bacterial or viral pathogens"²².

Further, it appears that only on 4 September 2020 has the first PCR test which can allegedly distinguish between the flu and Covid-19 been approved²³. This suggests that prior to 4 September 2020 the PCR tests that were available were perhaps unable to distinguish between COVID-19 and the flu. And we don't really know whether the 4 September 2020 test actually works since it was given emergency approval, therefore its validity has not been confirmed.

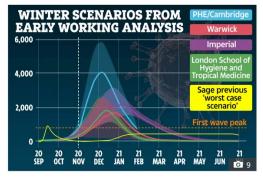
There is perhaps yet another proof that flu and COVID are being conflated. A 16 October 2020 study reported that: "we found that SARS-CoV-2 infection was less common among Dutch hospital employees who had received influenza vaccination during the 2019/2020 winter season"²⁴. One hypothesis is that this is about "trained immunity" imparted by the flu vaccine. But the more direct link is far more plausible – namely, that the flu vaccine is actually preventing the flu virus but because the PCR test can't distinguish between flu and COVID, these hospital employees are testing negative for COVID. This is how immunising against flu might be creating immunity against "so-called" COVID.

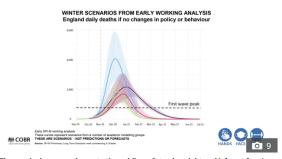
In conclusion, an overlap between flu and COVID is almost certainly happening on a rather large scale.

This is not directly related to the intentions of the Accused since it is probably a global issue. But I believe that honesty is the first requirement in any government and to date the Victorian Government has not discussed these matters truthfully with the people.

7.3 False and misleading news reporting

https://www.the-sun.com/news/1733689/death-graphs-second-covid-lockdown-proved-incorrect/ (note the comment on how SAGE "worst case" data was omitted when graph was shown to the UK public





The graph above was shown to the public on Saturday night and left out Sage's 'worst case scenario'

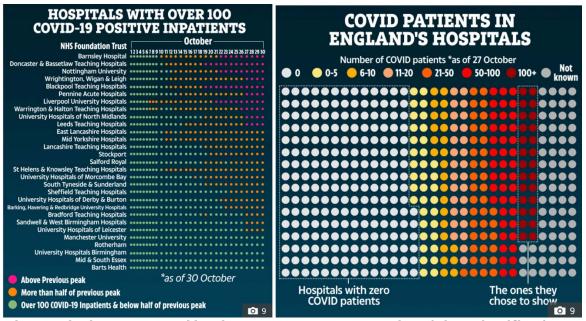
²¹ https://www.dailymail.co.uk/health/article-8875201/Has-Covid-killed-flu.html

²² https://www.fda.gov/media/134922/download

²³ https://www.roche.com/media/releases/med-cor-2020-09-04.htm

²⁴ https://www.medrxiv.org/content/10.1101/2020.10.14.20212498v1

Likewise, the argument to support a second lockdown in the UK extended to increase in hospitalisation cases. A graph was used to showcase this aspect – however failed to acknowledge the majority of hospitals that did not have C-19 patients:



The graph above was used by the government on Saturday night as justification for a second lockdown. It shows the worsening rates of Covid in 29 NHS hospitals, some of which had been in Tier 3 areas. But as the graph below shows, the scientists left out 232 hospitals that currently have no Covid patients and concentrated on the very worst-hit hospitals

Blatantly fraudulent epidemiological models 8.

Models which cannot be even remotely considered scientific, leave alone a scientific proof of a policy. Models are the wild imagination of alleged "scientists". A mathematical model is necessarily the wild imagination or speculation of a modeller. All epidemiological models have comprehensively failed always, in the written historical record and are unfit for purpose. At a minimum, they have no business being used as the primary tool in public health decisions which should be informed by a knowledge biology, immunity, laws, human rights and ethics.

This is not just happening in Australia. As Dr Simon Thornley of New Zealand has noted regarding New Zealand's policies (similar in many ways to Australia's) the Government's elimination and lockdown policy was based on hope because little analysis of the downsides of the policy has been carried out.

If you base your rationale on discredited models and you don't count impacts, this is not a policy based on evidence. "This is a policy basewd on an assumption that the low Covid-19 impact is the result of the lockdown policy. There is no proof of that, and international studies indicate it is unlikely.²⁵

8.1 Models, always unreliable and discredited, are the basis of these hysterias

Public health has a sub-discipline called epidemiology which does not necessarily require any medical training. Anyone with elementary mathematical skills can set themselves up as an "epidemiologist". They do not need any training in (and are probably disinterested in) the ethics of medicine or the laws of public health. Such "experts" have been the bane of mankind for a long time but this time around they have caused unimaginable devastation.

Epidemiological models are notoriously unreliable. There is no basis in science to use them for any public policy. They are a form of guess work but shrouded as "expertise", with simple mathematics being put out as an apocalyptic prophesy for all of mankind to "believe". But mathematics is not science; at best it is a tool of science. Given my strong mathematics and modelling background, I wish to assure the Prosecutor that any claims that models are a part of science are a figment of the imagination. Mathematical models can be made out of anything that a person imagines, but as we all know, imagination is not science.

It is very problematic that modelers seem to have taken over the discipline of public health (except for a few wholistic practitioners like Anders Tegnell).

I have written elsewhere about the innumerable problems with these models, such as in my 30 May 2020 blog post on my Times of India blog²⁶:

One reason we can't use these models is that their most basic concept, R0, is not just difficult to calculate, it can be misleading. The shakiness of this concept is known among the epidemiologists.

For instance, a 2007 paper, "Theory versus Data: How to Calculate R0?" by Breban et. al. warned us that "obtaining R0 from empirical contact tracing data collected by epidemiologists and using this R0 as a threshold parameter for a population-level model could produce extremely misleading estimates".

And a 2011 paper entitled, "The Failure of RO" by Jing Li et. al. said: "If R0 is to be used, it must be accompanied by caveats about the method of calculation, underlying model assumptions and evidence that it is actually a threshold. Otherwise, the concept is meaningless".

I have also elaborated this issue in my book, The Great Hysteria and The Broken State²⁷. In this (ongoing) pandemic, modelling by the Imperial College in the UK and the Peter Doherty Institute in Australia

²⁵ https://www.covidplanb.co.nz/epidemiology/call-for-data-on-covid-19-health-impacts/

²⁶ https://timesofindia.indiatimes.com/blogs/seeing-the-invisible/why-less-than-25-of-the-worlds-population-is-likely-to-getcovid-19/

²⁷ https://www.amazon.com.au/Great-Hysteria-Broken-State-ebook/dp/B08L26W2WY/

indicated that the hospital system would not cope and up to 150,000 Australians would die. But their modelling has been entirely discredited, as usual with all such models.

If needed by the Prosecutor, I can provide a fuller list of such examples and extensive proofs (including from peer reviewed journals) to confirm that epidemiological models have no credibility and must never be allowed to play a primary role in determining public health policy.

Unfortunately, the Victorian Government has continued to use a range of discredited "experts" and ignored anyone who wishes to bring reason, risk assessment, proportionality and **ethics** to the table.

There is perhaps no greater evil mind today in the world than that of these "modellers" who are literally playing with our lives on their computer screen, with no accountability whatsoever.

8.1.1 Chronic failure of modelers to understand the basics of the immune system

One of the basic problems with most modelers is that they are not biologists but mathematicians and do not understand immunology.

In a paper on 17 September 2020 in the *British Medical Journal*, entitled, "Covid-19: Do many people have pre-existing immunity?" ²⁸, Peter Doshi showed that key policy makers have forgotten key biological lessons learnt from the swine flu pandemic:

In late 2009, months after the World Health Organization declared the H1N1 "swine flu" virus to be a global pandemic, Alessandro Sette was part of a team working to explain why the so called "novel" virus did not seem to be causing more severe infections than seasonal flu.

Their answer was pre-existing immunological responses in the adult population: B cells and, in particular, T cells, which "are known to blunt disease severity." Other studies came to the same conclusion: people with pre-existing reactive T cells had less severe H1N1 disease. In addition, a study carried out during the 2009 outbreak by the US Centers for Disease Control and Prevention reported that 33% of people over 60 years old had cross reactive antibodies to the 2009 H1N1 virus, leading the CDC to conclude that "some degree of pre-existing immunity" to the new H1N1 strains existed, especially among adults over age 60.

The data forced a change in views at WHO and CDC, from an assumption before 2009 that most people "will have no immunity to the pandemic virus" to one that acknowledged that "the vulnerability of a population to a pandemic virus is related in part to the level of pre-existing immunity to the virus." But by 2020 it seems that lesson had been forgotten.

In my book, *The Great Hysteria and The Broken State*²⁹ I have discussed the nature of the human immune system in some detail – the Prosecutor may wish to examine it. The main lesson of biology that I outline in my book is that humans have a strong immune system that develops immunity to a range of viruses over a lifetime. We have significant cross-reactivity to this novel coronavirus. I have discussed this at some length in my *Times of India* blog posts of 24 May 2020³⁰ and 27 July 2020³¹, as well as in my book.

Models do not even remotely the complexity of biological science into their equations, leave alone the complexity of risk assessment and proportionality. They are children's toys and must be kept out of any discussion of public health policy.

8.2 Modelling is discredited globally; Modelers with no infectious disease background

I have discussed this earlier but wish to emphasise that models can never form the basis of any public policy, particularly for a pandemic in which tens of thousands of factors come into play which no model can *possibly* accommodate. At best, models can support the policy process.

³⁰ https://timesofindia.indiatimes.com/blogs/seeing-the-invisible/the-effect-of-innate-immunity-cross-reactivity-trained-immunity-and-vitamin-d-on-covid-19/

²⁸ Doshi, Peter, "Covid-19: Do many people have pre-existing immunity?", BMJ, 17 September 2020. Short URL: https://bit.ly/33TO8GE.

 $^{^{29}\} https://www.amazon.com.au/Great-Hysteria-Broken-State-ebook/dp/B08L26W2WY/$

³¹ https://timesofindia.indiatimes.com/blogs/seeing-the-invisible/explaining-indias-extraordinarily-low-death-rate-from-covid-19/

But the main data for policy making should include things like the actual gap in the capacity of the health care system. Such data was never presented because there was always huge spare capacity.

But Victoria also seems to have had particularly bad modellers. Aaron Patrick wrote in the *Australian Financial Review* on 16 September 2020 that:

One of the mysteries behind Victoria's plan out of one of the most extreme pandemic lockdowns anywhere is: why did the government select a team of highly opinionated non-specialists to advise when normal life would be safe to begin again. The lead researchers who built the model used for Daniel Andrews COVID-19 "road map" aren't infectious diseases scientists. The team does include epidemiologists such as New Zealander Tony Blakely. But his career has spanned computer science, economics, smoking and cancer. 32

Not to be outdone, some of the modelers themselves objected to the misuse of their models. On 12 September 2020, it was reported in the newspapers that:

World-leading scientists linked to the modelling Daniel Andrews has used to lock down Melbourne say **the research has been misrepresented** and have urged the Premier to rethink the restrictions as his virus -suppression targets are impossible to meet.³³

This would have been a comedy of errors if only it did not have such disastrous consequences for millions of people.

8.3 Why epidemiological models can't work

The Failure of R 0

8.4 An Epidemic of Bad Epidemiology – Ronald Bailey, 23 December 2016

An Epidemic of Bad Epidemiology

Getting Risk Right is a potent antidote to the toxic misinformation peddled by activist scaremongers RONALD BAILEY | 12.23.2016

Eating bacon and ham four times a week could make asthma symptoms worse. Drinking hot coffee and tea may cause cancer of the esophagus. South Africa's minister of health warns that doggy-style sex is a major cause of stroke and cancer in men. And those claims are just drawn from the health headlines this week.

The media inundate us daily with studies that seem show modern life is increasingly risky. Most of those stories must be false, given that life expectancy for American men and women respectively has risen from 71.8 and 78.8 years in 1990 to 76.3 and 81.1 years now. Apparently, we are suffering through an epidemic of bad epidemiology.

When it comes to separating the wheat of good public health research from the chaff of studies that are mediocre or just plain bad, Albert Einstein College of Medicine epidemiologist Geoffrey Kabat is a national treasure. "Most research findings are false or exaggerated, and the more dramatic the result, the less likely it is to be true," he declares in his excellent new book Getting Risk Right. Kabat's earlier book, the superb Hyping Health Risks, thoroughly dismantled the prevalent medical myths that man-made chemicals, electromagnetic fields, radon, and passive smoking were significant causes of such illnesses as cancer and heart disease. His new book shows how scientific research, particularly epidemiology, so often goes wrong—and, importantly, how hard it is for it to go right.

Kabat first reminds readers that finding a correlation between phenomena X and Y does not mean that X causes Y. Nevertheless many researchers are happy to overinterpret such findings to suggest causation. "If researchers can slip into this way of interpreting and presenting results of their studies," observes Kabat, "it becomes easier to understand how journalists, regulators, activists of various stripes, self-appointed

³² Patrick, Aaron, "Did Daniel Andrews cherry-pick his modellers?", *Australian Financial Review*, 16 September 2020. https://www.afr.com/policy/health-and-education/did-daniel-andrews-cherry-pick-his-modellers-20200914-p55vjz

³³ "Professors' message for Daniel Andrews: redo the coronavirus modelling", The Australian, 12 September 2020, https://www.theaustralian.com.au/nation/politics/professors-message-for-daniel-andrews-redo-the-coronavirus-modelling/news-story/5cf65533b11cce3ef23f3cfedd247143

health gurus, promoters of health-related foods and products, and the public can make the unwarranted leap that the study being reported provides evidence of a causal relationship and therefore is worthy of our interest."

From there he moves to some principles that must be kept in mind when evaluating studies. First and foremost is the toxicological maxim that the dose makes the poison. The more exposure to a toxin, the greater the harm. Potency matters greatly too. Often very sensitive assays show that two different compounds can bind to same receptors in the body, but what really matters biologically is how avidly and how strongly one binds compared to the other.

Another principle: Do not confuse hazard, a potential source of harm, with risk, the likelihood that exposure to the hazard will cause harm. Consider bacon. The influential International Agency for Research on Cancer declared bacon a hazard for cancer last year, but the agency does not make risk assessments. Eating two slices of bacon per day is calculated to increase your lifetime risk of colorectal cancer from 5 to 6 percent. Put that way, I suspect most people would continue to enjoy cured pork products.

Kabat also argues that an editorial bias skews the scientific literature toward publishing positive results suggesting harms. Such findings, he notes, get more attention from other researchers, regulators, journalists, and activists. Ever since Rachel Carson's 1962 book Silent Spring wrongly linked cancer to exposures to trace amounts of pesticides, the American public has been primed to blame external causes rather than personal behaviors for their health problems. Unfortunately, as Kabat notes, the existence of an alarmed and sensitized public is all too useful to scientists and regulators. He quotes an honest but incautious remark in the air pollution researcher Robert Phalen's testimony to the California Air Resources Board: "It benefits us personally to have the public be afraid, even if these risks are trivial."

Kabat suggests that the precautionary principle—"better safe than sorry"—is largely an ideological ploy to alarm the public into supporting advocate's policy preferences. He also decries "the simplistic notion that the 'consensus among scientists' is always correct." He notes that the scientific consensus once held that ulcers were caused by spicy foods and stress instead of bacteria, and that estrogen-progestin therapy protected post-menopausal women against heart disease instead of increasing their risk of breast cancer. "The history of medical science is littered with long-held dogmas that, when confronted by better evidence, turned out to be wrong," Kabat observes.

Kabat then offers two case studies in how epidemiology has been misused. The first involves cell phones. After a couple of decades of research, the bulk of epidemiological evidence has found that cell phones have not increased the incidence of brain cancer, although a recent experiment reported that exposure to cell tower radio waves for nine hours per day boosted cancer in male, but not female, rats. Despite the overwhelming evidence that cell phones are safe to use, the city council of Berkeley, California succumbed to activist scaremongering and passed an ordinance last year requiring cell phone retailers to warn consumers not to carry their cell phones in pants or shirt pockets or tucked into bras.

Kabat's second example involves "endocrine disruption," an idea attributing ill effects to man-made substances, such as the plastic softener Bisphenol A (BPA), that supposedly mimic the behavior of hormones like estrogen and testosterone. Exposure to such substances has allegedly produced epidemics of lower sperm quality and hypospadias, in which the opening of the urethra is on the underside of the penis.

This hypothesis developed after the discovery that women who took therapeutic doses of the synthetic estrogen DES to prevent miscarriages were associated with higher risk of vaginal cancer in their daughters. To make a long story short, BPA also binds with estrogen receptors, but the amount of DES to which people were exposed was 100,000 times greater than average BPA exposure today. On top of that, BPA's potency is 10,000 times lower than that DES, which means that the estrogenic effects of current exposures to BPA is 1 billion times lower than the exposures to DES that were associated with increased risks of cancer.

In the face of such minuscule exposures and weak effects, proponents of the endocrine-disruption theory throw away the maxim that the dose makes the poison. Instead, they propose the novel notion that small doses might actually have bigger effects than larger doses. They even claim to have experiments to prove this. Unfortunately, nobody outside of their insular world has been able to replicate their studies. In a 2013 review article, a group of toxicologists damningly concluded, "Taking into account the large resources spent on this topic, one should expect that, in the meantime, some endocrine disruptors that cause actual

human injury or disease should have been identified." Yet "with the exception of natural or synthetic hormones, not a single, man-made chemical endocrine disruptor has been identified that poses an identifiable, measurable risk to human health."

What about falling sperm counts and the alleged increase in deformed penises? Kabat reports that the research has not actually found that sperm counts are down. A 2010 review concluded that "the epidemiologic data on this issue amassed to date clearly demonstrates that the bulk of evidence refutes claims for an increase in hypospadias rates."

Turning from the cell phone and endocrine disruption scares, Kabat shows how good epidemiology can identify the real causes of real diseases. He traces how researchers linked renal failure in Belgian women to a Chinese herbal weight loss concoction mistakenly adulterated with the Aristolochia plant, which contains a toxin peculiarly damaging to kidneys. An American researcher then connected the Belgian cases to an epidemic of renal failure among farmers in the Balkans. It turns out that the farmers ate bread made from their own wheat, which was grown in fields infested with Aristolochia.

Kabat also recounts how researchers determined that human papilloma virus (HPV) is the chief cause of cervical cancer. This process began when a physician in the 1960s figured out that a type of lymphoma afflicting African children must be associated with some infectious disease. Kabat traces the epidemiological and experimental work that led to the finding that HPV causes about 5 percent of all cancers in the world. A woman infected with HPV is at a 100- to 500-fold greater risk of getting cervical cancer than a woman without such an infection. (By comparison, a smoker is at a 20- to 50-fold greater risk for lung cancer than a nonsmoker.) Thanks to these discoveries, there is now a vaccine that can prevent this scourge. Given the risks, any parent who does not have his or her children vaccinated against HPV is a fool.

"As we have seen," concludes Kabat, "the landscape in which health risks are studied and in which findings are disseminated is pervaded by false claims, oversold results, biases operating at the level of observational studies as well as psychological and cognitive biases, and professional and political agendas." Getting Risk Right is a potent antidote to the toxic misinformation polluting our public health discourse.

8.5 After Repeated Failures, It's Time To Permanently Dump Epidemic Models, Michael Fumento 18 April 2020

After Repeated Failures, It's Time To Permanently Dump Epidemic Models

he ... crisis we face is unparalleled in modern times," said the World Health Organization's assistant director, while its director general proclaimed it "likely the greatest peacetime challenge that the United Nations and its agencies have ever faced." This was based on a CDC computer model projection predicting as many as 1.4 million deaths from just two countries.

So when did they say this about COVID-19? Trick question: It was actually about the Ebola virus in Liberia and Sierra Leone five years ago, and the ultimate death toll was under 8,000.

With COVID-19 having peaked (the highest date was April 4), despite the best efforts of the Centers for Disease Control and Prevention to increase numbers by first saying any death with the virus could be considered a death from the virus and then again this week by saying a positive test isn't even needed, you can see where this is going.

Since the AIDS epidemic, people have been pumping out such models with often incredible figures. For AIDS, the Public Health Service announced (without documenting) there would be 450,000 cases by the end of 1993, with 100,000 in that year alone. The media faithfully parroted it. There were 17,325 by the end of that year, with about 5,000 in 1993. SARS (2002-2003) was supposed to kill perhaps "millions," based on analyses. It killed 744 before disappearing.

Later, avian flu strain A/H5N1, "even in the best-case scenarios" was to "cause 2 (million) to 7 million deaths" worldwide. A British professor named Neil Ferguson scaled that up to 200 million. It killed 440. This same Ferguson in 2002 had projected 50-50,000 deaths from so-called "Mad Cow Disease." On its face, what possible good is a spread that large? (We shall return to this.) But the final toll was slightly over 200.

In the current crisis the most alarming model, nay probably the most influential in the implementation of the draconian quarantines worldwide, projected a maximum of 2.2 million American deaths and 550,000 United Kingdom deaths unless there were severe restrictions for 18 months or until a vaccine was developed. The primary author: Neil Ferguson. Right, Mad Cow/Avian Flu Fergie.

Then a funny thing happened. A mere nine days after announcing his model, Ferguson said a better number for the U.K. would be only 20,000. The equivalent would be fewer than 80,000 American deaths. Technically, that U.K. number was buried in a table in the report under what might be called "a fantastic case scenario." But could that reduction possibly reflect a mere nine days of restrictions? No.

Soon all the numbers were tumbling. Yet as late as March 31, the New York Times declared: "White House Projects Grim Toll from Virus" citing White House Coronavirus Task Force head Deborah Birx and director of the National Institutes of Allergies and Infectious Diseases Anthony Fauci, who in turn cited a model showing deaths up to 240,000. Still awful, but Birx explicitly backed off the Ferguson projection for which she had previously been the Grey Lady's pompom girl.

Then suddenly Fauci announced a flat figure of "more like 60,000," the same number the CDC says died of flu two years ago. Probably not coincidentally, until quite recently the agency said there were 80,000 flu victims that year, before lowering it to 61,000 – presumably because people were using that figure to compare to COVID-19 deaths. In any event, the 1968-1969 "Hong Kong flu" killed an estimated 100,000 Americans, or 165,000 adjusted to today's population.

Moreover, as noted, the CDC now encourages coding a death of anyone "if the circumstances are compelling" even though they haven't been tested at all. Yeah, wow; it's not a "conservative myth." During flu season, that means a lot of flu victims have magically become COVID-19 victims in addition to people who would have otherwise had cause of death listed as heart attack, diabetes, and other co-morbid conditions.

One reason Italy had so many "coronavirus deaths" seems to be coding, even though it's still far more strict than the new CDC guidelines. Re-evaluation of death certificates by the country's National Institute of Health showed only "12% with direct causality from coronavirus, while 88% of patients who have died have at least one pre-morbidity – many had two or three."

Then Fauci finally said it. "I've spent a lot of time on the models. They don't tell you anything." A few days later CDC Director Robert Redfield also turned on the computer crystal balls. "Models are only as good as their assumptions, obviously there are a lot of unknowns about the virus" he said. "A model should never be used to assume that we have a number."

Which, of course, is exactly how both a number of public health officials and the media have used the them.

Only one significant model appears to have been correct. But wasn't. The University of Washington's Institute for Health Metrics and Evaluation has actually been dramatically reduced and reduced.

Model defenders declare the plummets were based on the success of severe restrictions of civil liberties. "It just means we won," declared an article in The Atlantic. Wrong. The bottom range of the models presumes the best-case scenario. If the low end is 100,000, that's the low end.

If epidemic models were just haphazardly wrong, we would expect about half the time they would be too low. Instead, they're almost universally vastly too high. This isn't happenstance but intentional. The single most cynical model is probably one regarding Sweden. Released online after the Swedish epidemic had already peaked, and with deaths at about 1,300, it nonetheless predicted a median of 96,000 Swedish COVID-19 deaths with a maximum of 183,000. WTH?

Basically the Swedes have shown dictatorial methods aren't needed and thereby pose an incredible threat to all those who claim otherwise. This was apparently (yet another) desperate effort to convince the Swedes to lock down like everyone else – never mind that it comes after their epidemic has already crested.

The only "model" with any success is actually quite accomplished and appeared in 1840, when a "computer" was an abacus. It's called Farr's Law, and is actually more of an observation that epidemics grow fastest at first and then slow to a peak, then decline in a more-or-less symmetrical pattern. As you might guess from the date, it precedes public health services and doesn't require lockdowns or really any

interventions at all. Rather, the disease grabs the low-hanging fruit (with COVID-19 that's the elderly with co-morbid conditions) and finds it progressively harder to get more fruit.

That's not proof that public health interventions are worthless; merely that since the Plague of Athens four centuries B.C. and before, epidemics have risen and fallen quite on their own. Nobody needed Big Brother looking over their shoulder and cracking a whip; nobody needed to implode their

economies and leave their citizens with

tops reading: "I survived the 'worst epidemic in history' and all I have left is this crummy t-shirt."

The models essentially have three purposes: 1) To satisfy the public's need for a number, any number; 2) To bring media attention for the modeler; and 3) To scare the crap out of people to get them to "do the right thing." That can be defined as "flattening the curve" so health care systems aren't overridden, or encouraging people to become sheeple and accept restrictions on liberties never even imposed during wars. Like Ferguson, all the modelers know that no matter what the low end, headlines will always reflect the high end.

Assuming it's possible to model an epidemic at all, any that the mainstream press relays will have been designed to promote panic. Take it from Fauci, who early on so eagerly employed them – they are to be ignored. Now and forever.

Michael Fumento is a former Investor's Business Daily National Issues reporter and is also an attorney, author, and freelance journalist who has been writing about epidemic hysterias for 35 years. His website is www.fumento.com.

8.6 Modelers Were 'Astronomically Wrong' in COVID-19 Predictions, Says Leading Epidemiologist—and the World Is Paying the Price - Jon Miltimore - 2 July 2020

and later interview re. Covid-19 predictions (2/7/20):

https://fee.org/articles/modelers-were-astronomically-wrong-in-covid-19-predictions-says-leading-epidemiologist-and-the-world-is-paying-the-price/

Dr. John Ioannidis became a world-leading scientist by exposing bad science. But the COVID-19 pandemic could prove to be his biggest challenge yet.

Ioannidis, the C.F. Rehnborg Chair in Disease Prevention at Stanford University, has come under fire in recent months for his opposition to state-ordered lockdowns, which he says could cause social harms well beyond their presumed benefits. But he doesn't appear to be backing down.

In a wide-ranging interview with Greek Reporter published over the weekend, Ioannidis said emerging data support his prediction that lockdowns would have wide-ranging social consequences and that the mathematical models on which the lockdowns were based were horribly flawed.

Ioannidis also said a comprehensive review of the medical literature suggests that COVID-19 is far more widespread than most people realize.

"There are already more than 50 studies that have presented results on how many people in different countries and locations have developed antibodies to the virus," Ioannidis, a Greek-American physician, told Greek Reporter. "Of course none of these studies are perfect, but cumulatively they provide useful composite evidence. A very crude estimate might suggest that about 150-300 million or more people have already been infected around the world, far more than the 10 million documented cases."

Ioannidis said medical data suggest the fatality risk is far lower than earlier estimates had led policymakers to believe and "is almost 0%" for individuals under 45 years old. The median fatality rate is roughly 0.25 percent, however, because the risk "escalates substantially" for individuals over 85 and can be as high as 25 percent for debilitated people in nursing homes.

"The death rate in a given country depends a lot on the age-structure, who are the people infected, and how they are managed," Ioannidis said. "For people younger than 45, the infection fatality rate is almost 0%. For 45 to 70, it is probably about 0.05-0.3%. For those above 70, it escalates substantially..."

Because of this, Ioannidis sees mass lockdowns of entire populations as a mistake, though he says they may have made sense when experts believed the fatality rate of COVID-19 was as high as 3-5 percent.

In March, in a widely read STAT article, Ioannidis said it was uncertain how long lockdowns could be maintained without serious consequences.

"One of the bottom lines is that we don't know how long social distancing measures and lockdowns can be maintained without major consequences to the economy, society, and mental health," Ioannidis wrote. "Unpredictable evolutions may ensue, including financial crisis, unrest, civil strife, war, and a meltdown of the social fabric."

Nearly three months after that interview, the world has seen unemployment levels unseen since the Great Depression, mass business closures, spikes in suicide and drug overdose, and social unrest on a scale not seen in the US since the 1960s.

Join us in preserving the principles of economic freedom and individual liberty for the rising generation "I feel extremely sad that my predictions were verified," Ioannidis said. He continued:

"Major consequences on the economy, society and mental health" have already occurred. I hope they are reversible, and this depends to a large extent on whether we can avoid prolonging the draconian lockdowns and manage to deal with COVID-19 in a smart, precision-risk targeted approach, rather than blindly shutting down everything. Similarly, we have already started to see the consequences of "financial crisis, unrest, and civil strife." I hope it is not followed by "war and meltdown of the social fabric." Globally, the lockdown measures have increased the number of people at risk of starvation to 1.1 billion, and they are putting at risk millions of lives, with the potential resurgence of tuberculosis, childhood diseases like measles where vaccination programs are disrupted, and malaria. I hope that policymakers look at the big picture of all the potential problems and not only on the very important, but relatively thin slice of evidence that is COVID-19."

Ioannidis did not spare modelers who predicted as many as 40 million people would die, or those who claimed the US healthcare system would be overrun.

"The predictions of most mathematical models in terms of how many beds and how many ICU beds would be required were astronomically wrong," Ioannidis said. "Indeed, the health system was not overrun in any location in the USA, although several hospitals were stressed."

Conversely, he added, these actions had detrimental effects on the US health care system, which was "severely damaged" because of measures taken.

Only time will tell if Ioannidis is proven correct in his assessments. But if he's even half right, it would suggest that the experts did indeed fail again.

There's little question that the lockdowns have caused widespread economic, social, and emotional carnage. Evidence that US states that locked down fared better than states that did not is hard to find.

Though not yet certain, the COVID-19 pandemic may well turn out to be another example of central planning gone wrong.

As I previously noted, it's a sad irony that many of the greatest disasters in modern history—from Stalin's "kolkhoz" collective farming system to Mao's Great Leap Forward and beyond—are the result of central planners trying to improve the lot of humanity through coercive action.

During the coronavirus pandemic, experts may have unintentionally brought about one of the most serious human disasters in modern history by removing choice from individuals with superior local knowledge.

"This is not a dispute about whether planning is to be done or not," Hayek wrote in The Use of Knowledge in Society. "It is a dispute as to whether planning is to be done centrally, by one authority for the whole economic system, or is to be divided among many individuals."

8.7 Forecasting for COVID-19 has failed - John P.A. Ioannidis et. al

Forecasting for COVID-19 has failed

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ABSTRACT

Epidemic forecasting has a dubious track-record, and its failures became more prominent with COVID-19. Poor data input, wrong modeling assumptions, high sensitivity of estimates, lack of incorporation of epidemiological features, poor past evidence on effects of available interventions, lack of transparency, errors, lack of determinacy, looking at only one or a few dimensions of the problem at hand, lack of expertise in crucial disciplines, groupthink and bandwagon effects and selective reporting are some of the causes of these failures. Nevertheless, epidemic forecasting is unlikely to be abandoned. Some (but not all) of these problems can be fixed. Careful modeling of predictive distributions rather than focusing on point estimates, considering multiple dimensions of impact, and continuously reappraising models based on their validated performance may help. If extreme values are considered, extremes should be considered for the consequences of multiple dimensions of impact so as to continuously calibrate predictive insights and decision-making. When major decisions (e.g. draconian lockdowns) are based on forecasts, the harms (in terms of health, economy, and society at large) and the asymmetry of risks need to be approached in a holistic fashion, considering the totality of the evidence.

1. Initial position

COVID-19 is a major acute crisis with unpredictable consequences. Many scientists have struggled to make forecasts about its impact.¹ However, despite involving many excellent modelers, best intentions, and highly sophisticated tools, forecasting efforts have largely failed.

Experienced modelers drew early on parallels between COVID-19 and the Spanish flu² that caused >50 million deaths with mean age at death being 28. We all lament the current loss of life. However, as of June 18, total fatalities are ~450,000 with median age ~80 and typically multiple comorbidities.

Brilliant scientists expected 100,000,000 cases accruing within 4 weeks in the USA.³ Predictions for hospital and ICU bed requirements were also entirely misinforming. Public leaders trusted models (sometimes even black boxes without disclosed methodology) inferring massively overwhelmed health care capacity (Table 1).⁴ However, eventually very few hospitals were stressed, for a couple of weeks. Most hospitals maintained largely empty wards, expecting tsunamis that never came. The general population was locked and placed in horror-alert to save health systems from collapsing. Tragically, many health systems faced major adverse consequences, not by COVID-19 cases overload, but for very different reasons. Patients with heart attacks avoided hospitals for care,⁵ important treatments (e.g. for cancer) were unjustifiably delayed,⁶ mental health suffered.⁷ With damaged operations, many hospitals started losing personnel, reducing capacity to face future crises (e.g. a second wave). With massive new unemployment, more people may lose health insurance. Prospects of starvation and of lack of control for other infectious diseases (like tuberculosis, malaria, and childhood communicable diseases where vaccination is hindered by COVID-19 measures) are dire.^{8,9}

Modeling resurgence after reopening also failed (Table 2). E.g. a Massachusetts General Hospital model¹⁰ predicted over 23,000 deaths within a month of Georgia reopening – actual deaths were 896.

Table 3 lists some main reasons underlying this forecasting failure. Unsurprisingly, models failed when they used more speculation and theoretical assumptions and tried to predict long-term outcomes, e.g. using early SIR-based models to predict what would happen in the entire season. However, even forecasting built directly on data alone fared badly, 11,12 failing not only in ICU bed predictions (Figure 1) but even in *next day* death predictions when issues of long-term chaotic behavior do not come into play (Figures 2 and 3). Even for short-term forecasting when the epidemic wave waned, models presented confusingly diverse predictions with huge uncertainty (Figure 4).

Failure in epidemic forecasting is an old problem. In fact, it is surprising that epidemic forecasting has retained much credibility among decision-makers, given its dubious track record. Modeling for swine flu

predicted 3,100-65,000 deaths in the UK.¹³ Eventually 457 deaths occurred.¹⁴ Models on foot-and-mouth disease by top scientists in top journals^{15,16} were subsequently questioned¹⁷ by other scientists challenging why up to 10 million animals had to be slaughtered. Predictions for bovine spongiform encephalopathy expected up to 150,000 deaths in the UK.¹⁸ However, the lower bound predicted as low as 50 deaths,¹⁸ a figure close to eventual fatalities. Predictions may work in "ideal", isolated communities with homogeneous populations, not the complex current global world.

Despite these obvious failures, epidemic forecasting continued to thrive, perhaps because vastly erroneous predictions typically lacked serious consequences. Actually, erroneous predictions may have even been useful. A wrong, doomsday prediction may incentivize people towards better personal hygiene. Problems start when public leaders take (wrong) predictions too seriously, considering them crystal balls without understanding their uncertainty and the assumptions made. Slaughtering millions of animals may aggravate animal business stakeholders – but most citizens are not directly affected. However, with COVID-19, espoused wrong predictions can devastate billions of people in terms of the economy, health, and societal turmoil at-large.

Let's be clear: even if millions of deaths did not happen this season, they may happen with the next wave, next season, or some new virus in the future. A doomsday forecast may come handy to protect civilization, when and if calamity hits. However, even then, we have little evidence that aggressive measures focusing only on few dimensions of impact actually reduce death toll and do more good than harm. We need models which incorporate multicriteria objective functions. Isolating infectious impact, from all other health, economic and social impacts is dangerously narrow-minded. More importantly, with epidemics becoming easier to detect, opportunities for declaring global emergencies will escalate. Erroneous models can become powerful, recurrent disruptors of life on this planet. Civilization is threatened from epidemic incidentalomas.

Cirillo and Taleb thoughtfully argue¹⁹ that when it comes to contagious risk, we should take doomsday predictions seriously: major epidemics follow a fat-tail pattern and extreme value theory becomes relevant. Examining 72 major epidemics recorded through history, they demonstrate a fat-tailed mortality impact. However, they analyze only the 72 most-noticed outbreaks, a sample with astounding selection bias. For example, according to their dataset, the first epidemic originating from sub-Saharan Africa did not occur until 1920 AD, namely HIV/AIDS. The most famous outbreaks in human history are preferentially selected from the extreme tail of the distribution of all outbreaks. Tens of millions of outbreaks with a couple deaths must have happened throughout time. Probably hundreds of thousands might have claimed dozens of fatalities. Thousands of outbreaks might have exceeded 1,000 fatalities. Most eluded the historical record. The four garden variety coronaviruses may be causing such outbreaks every year.^{20,21} One of them, OC43 seems to have been introduced in humans as recently as 1890, probably causing a "bad influenza year" with over a million deaths.²² Based on what we know now, SARS-CoV-2 may be closer to OC43 than SARS-CoV-1. This does not mean it is not serious: its initial human introduction can be highly lethal, unless we protect those at risk.

A heavy tail distribution ceases to be as heavy as Taleb imagines when the middle of the distribution becomes much larger. One may also argue that pandemics, as opposed to epidemics without worldwide distribution, are more likely to be heavy-tailed. However, the vast majority of the 72 contagious events listed by Taleb were not pandemics, but localized epidemics with circumscribed geographic activity. Overall, when a new epidemic is detected, it is even difficult to pinpoint which distribution of which known events it should be mapped against.

Blindly acting based on extreme value theory alone would be sensible if we lived in the times of the Antonine plague or even in 1890, with no science to identify the pathogen, elucidate its true prevalence, estimate accurately its lethality, and carry out good epidemiology to identify which people and settings are at risk. Until we accrue this information, immediate better-safe-than-sorry responses are legitimate, trusting extreme forecasts as possible (not necessarily likely) scenarios. However, caveats of these forecasts should not be ignored^{1,23} and new evidence on the ground truth needs continuous reassessment. Upon acquiring solid evidence about the epidemiological features of new outbreaks, implausible, exaggerated forecasts²⁴ should be abandoned. Otherwise, they may cause more harm than the virus itself.

2. Further thoughts - analogies, decisions of action, and maxima

The insightful recent essay of Taleb²⁵ offers additional opportunities for fruitful discussion.

2.1 Point estimate predictions and technical points

Taleb²⁵ ruminates on the point of making point predictions. Serious modelers (whether frequentist or Bayesian) would never rely on point estimates to summarize skewed distributions. Even an early popular presentation²⁶ from 1954 has a figure (see page 33) with striking resemblance to Taleb's Figure 1.²⁵ In a Bayesian framework, we rely on the full posterior predictive distribution, not single points.²⁷ Moreover, Taleb's choice of a three-parameter Pareto distribution is peculiar. It is unclear this model provides a measurably better fit to his (hopelessly biased) pandemic data¹⁹ than, say, a two parameter Gamma distribution fitted to log counts. Regardless, either skewed distribution would then have to be modified to allow for the use of all available sources of information in a logically consistent fully probabilistic model, e.g. via a Bayesian hierarchical model (which can certainly be formulated to accommodate fat tails if needed). In this regard, we note that examining the NY daily death count data studied in ref. 12, these data are found to be characterized as stochastic rather than chaotic.²⁸ Taleb seems to fit an unorthodox model, and then abandons all effort to predict anything. He simply assumes doomsday has come, much like a panic-driven Roman would have done in the Antonine plague, lacking statistical, biological, and epidemiological insights.

2.2 Should we wait for the best evidence before acting?

Taleb²⁵ caricatures the position of a hotly debated mid-March op-ed by one of us,²⁹ alluring it "made statements to the effect that one should wait for "more evidence" before acting with respect to the pandemic", an obvious distortion of the op-ed. Anyone who reads the op-ed unbiasedly realizes that it says exactly the opposite. It starts with the clear, unquestionable premise that the pandemic is taking hold and is a serious threat. Immediate lockdown certainly makes sense when an estimated 50 million deaths are possible. This was stated emphatically in multiple occasions these days in interviews in multiple languages for examples see refs. 30-32. Certainly, adverse consequences of short-term lockdown cannot match 50 million lives. However, better data can recalibrate estimates, re-assessing downstream the relative balance of benefits and harms of longer-term prolongation of lockdown. That re-appraised balance changed markedly over time.⁹

Another gross distortion propagated in social media is that supposedly the op-ed²⁹ had predicted that only 10,000 deaths in the USA. The key message of the op-ed was that we lack reliable data, i.e. we don't know. The self-contradicting misinterpretation as "we don't know, but actually we do know that 10,000 deaths will happen" is impossible. The op-ed discussed two extreme scenarios to highlight the tremendous uncertainty absent reliable data: 10,000 deaths in the US and 40,000,000 deaths. We needed reliable data, quickly, to narrow this vast uncertainty. We did get data and did narrow uncertainty. Science did work eventually, even if forecasts, including those made by one of us (confessed and discussed in Box 1), failed.

2.3 Improper and proper analogies of benefit-risk

Taleb²⁵ offers several analogies to assert that all precautionary actions are justified in pandemics, deriding "waiting for the accident before putting the seat belt on, or evidence of fire before buying insurance".²⁵ The analogies assume that the cost of precautionary actions are small in comparison to the cost of the pandemic, and that the consequences of the action have little impact on it. However, precautionary actions can backfire badly when they are misinformed. In March, modelers were forecasting collapsed health systems, e.g. 140,000 beds would be needed in New York, when only a small fraction were available. Precautionary actions damaged the health system, increased COVID-19 deaths,³³ and exacerbated other health problems (Table 4).

Seat belts cost next to nothing to produce in cars and have unquestionable benefits. Despite some risk compensation and some excess injury with improper use, eventually seat belts prevent ~50% of serious injuries and deaths.³⁴ Measures for pandemic prevention equivalent to seat belts in terms of benefit-harm profile are simple interventions like hand washing, respiratory etiquette and mask use in appropriate settings: large proven benefit, no/little harm/cost.^{35,36} Even before the COVID-19 pandemic, we had randomized trials showing 38% reduced odds of influenza infection with hand washing and (non-statistically significant, but possible) 47% reduced odds with proper mask wearing.³⁵ Despite lack of trials, it is sensible and minimally disruptive to avoid mass gatherings and decrease unnecessary travel. Prolonged draconian lockdown is not equivalent to seat belts. It resembles forbidding all commute.

Similarly fire insurance offers a misleading analogy. Fire insurance makes sense only at reasonable price. Draconian prolonged lockdown may be equivalent to paying fire insurance at a price higher than the value of the house.

2.4 Mean, observed maximum, and more than the observed maximum

Taleb refers to the Netherlands where maximum values for flooding, not the mean, are considered.²⁵ Antiflooding engineering has substantial cost, but a favorable decision-analysis profile after considering multiple types of impact. Lockdown measures were decided based on examining only one type of impact, COVID-19. Moreover, the observed flooding maximum to-date does not preclude even higher future values. Netherlands aims to avoid devastation from floods occurring once every 10,000 years in densely populated areas.³⁷ A more serious flooding event (e.g. one that occurs every 20,000 years) may still submerge the Netherlands next week. However, prolonged total lockdown is not equivalent to building higher sea walls. It is more like abandoning the country - asking the Dutch to immigrate, because their land is quite unsafe.

Other natural phenomena also exist where high maximum risks are difficult to pinpoint and where new maxima may be reached. E.g., following Taleb's argumentation, one should forbid living near active volcanoes. Living at the Santorini caldera is not exciting, but foolish: that dreadful island should be summarily evacuated. Same applies to California: earthquake devastation may strike any moment. Prolonged lockdown zealots might barely accept a compromise: whenever substantial seismic activity occurs, California should be temporarily evacuated until all seismic activity ceases.

Furthermore, fat-tailed uncertainty and approaches based on extreme value theory may be useful before a potentially high-risk phenomenon starts and during its early stages. However, as more data accumulate and the high-risk phenomenon can be understood more precisely with plenty of data, the laws of large numbers may apply and stochastic rather than chaotic approaches may become more relevant and useful than continuing to assume unlikely extremes. Further responses to Taleb²⁵ appear in Table 5.

3. Moving forward and learning from the COVID-19 pandemic and from our mistakes *3.1 How do we move forward to deal with the COVID-19 threat?*

The short answer is: using science and more reliable data. We can choose measures with favorable benefit-risk ratio, when we consider together multiple types of impact, not only on COVID-19, but on health as a whole, as well as society and economy.

Currently we know that approximately half of the COVID-19 deaths in Europe and the USA affected nursing home residents. 38,39 Another sizeable proportion were nosocomial infections. 40 If we protect these locations with draconian hygiene measures and intensive testing, we may avert 70% of the fatalities without large-scale societal disruption and without adverse consequences on health. Other high-risk settings, e.g. prisons, homeless shelters, meat-processing plants also need aggressive protection. For the rest of the population, we have strong evidence on a very steep age gradient with ~1000-fold differences in death risk for people >80 years old versus children. 41 We have also detailed insights on how different background diseases modify COVID-19 risk for death or other serious outcome. 42 We can use hygiene and some least disruptive distancing measures to protect people. We can use intensive testing (i.e. again, use science) to detect resurgence of epidemic activity and extinguish it early – the countries that faced most successfully the first wave, e.g. Singapore and Taiwan, did exactly that highly successfully. We can use data to track how the epidemic and its impact evolves. Data can help inform more granular models and titrate decisions considering distributions of risk (Figure 5).42 3.2 Abandon or improve epidemic forecasting?

Poorly performing models and models that perform well for only one dimension of impact can cause harm. It is not just an issue of academic debate, it is an issue of potentially devastating, wrong decisions.³⁶ Taleb²⁵ seems self-contradicting: does he espouse abandoning all models (since they are so wrong) or using models but always assuming the worst? However, there is no single worst scenario, but a centile of the distribution: should we prepare for an event that has 0.1%, 0.001%, or 0.000000000001% chance of happening? Paying what price in harms?

Abandoning all epidemic modeling appears too unrealistic. Besides identifying the problems of epidemic modeling, Table 3 also offers suggestions on addressing some of them.

To summarize here some necessary (although not always sufficient) targets for amendments:

- Invest more on collecting, cleaning, and curating real, unbiased data, not just theoretical speculations
- Model the entire predictive distribution, with particular focus on accurately quantifying uncertainty
- Continuously monitor the performance of any model against real data and either re¬adjust or discard models based on accruing evidence.
- Incorporate best epidemiological estimates on age structure and comorbidities in the modeling
- Focus on quality-adjusted life-years rather than deaths
- Avoid unrealistic assumptions about benefits of interventions; don't hide model failure behind implausible intervention effects
- Enhance transparency about the methods
- Share code and data
- Use up-to-date and well-vetted tools and processes that minimize the potential for error through auditing loops in the software and code
- Promote interdisciplinarity and make sure that the modelers' teams are diversified and solidly grounded in terms of subject matter expertise
- Maintain an open-minded approach and acknowledge that most forecasting is exploratory, subjective, and non-pre-registered research
- Beware of unavoidable selective reporting bias

Of interest, another group of researchers have reached⁴³ almost identical conclusions and their recommendations are largely overlapping. Forecasting is dangerous to hype.

Importantly, not all problems can be fixed. At best, epidemic models offer only tentative evidence. Great caution and nuance are still needed. Models that use reliable data, that are validated and continuously reappraised for their performance in real-time, and that combine multiple dimensions of impact may have more utility. A good starting point is to acknowledge that problems exist. Serious scientists who have published poorly performing models should acknowledge this. They may also correct or even retract their papers, getting credit and congratulations, not blame, for corrections/retractions. The worst nightmare would be if scientists and journals insist that prolonged draconian measures cause the massive difference between predictions and eventual outcomes. Serious scientists and serious journals⁴⁴ are unfortunately flirting with this slippery, defensive path. Total lockdown is a bundle of dozens of measures. Some may be very beneficial, but some others may be harmful. Hiding uncertainty can cause major harm downstream and leaves us unprepared for the future. For papers that fuel policy decisions with major consequences, transparent availability of data, code, and named peer-review comments is also a minimum requirement.

The possibility of calibrating model predictions for looking at extremes rather than just means is sensible, especially in early days of pandemics, when much is unknown about the virus and its epidemiological footprint. However, when calibration/communication on extremes is adopted, one should also consider similar calibration for the potential harms of adopted measures. For example, tuberculosis has killed 1 billion people in the last 200 years, it still kills 1.5 million people (mostly young and middle age ones) annually, and prolonged lockdown may cause 1.4 million extra tuberculosis deaths between 2020-2025. Measles has killed about 200 million people in the last 150 years; disrupted MMR vaccination may fuel lethal recrudescence. Use of extreme case predictions for COVID-19 deaths should be co-examined with extreme case predictions for deaths and impact from many other lockdown-induced harms. Models should provide the big picture of multiple dimensions. Similar to COVID-19, as more reliable data accrue, predictions on these other dimensions should also be corrected accordingly.

Eventually, it is probably impossible (and even undesirable) to ostracize epidemic forecasting, despite its failures. Arguing that forecasting for COVID-19 has failed should not be misconstrued to mean that science has failed. Developing models in real time for a novel virus, with poor quality data, is a formidable task and the groups who attempted this and made public their predictions and data in a transparent manner should be commended. We readily admit that it is far easier to criticize a model than to build one. It would be horrifically retrograde if this debate ushers in a return to an era where predictions, on which huge decisions are made, are kept under lock and key (e.g. by the government - as is the case in Australia).

3.3. Learning from the COVID-19 pandemic and from our mistakes

We wish to end on a more positive note, namely where we feel forecasting has been helpful. Perhaps the biggest contribution of these models is that they serve as a springboard for discussions and debates. Dissecting variation in performance of various models (e.g. casting a sharp eye to circumstances where a particular model excelled) can be highly informative and a systematic approach to the development and evaluation of such models is needed. This demands a coherent approach to collecting, cleaning and curating data, as well as a transparent approach to evaluating the suitability of models with regard to predictions and forecast uncertainty.

What we have learned from the COVID-19 pandemic can be passed to future generations that hopefully should be better prepared to deal with a new, different pandemic, learning from our failures. There is no doubt that, again, an explosive literature of models and forecasting will emerge again as soon as a new pandemic is suspected. However, we can learn from our current mistakes to be more cautious with interpreting, using, and optimizing these models. Being more cautious does not mean not to act decisively, but it requires looking at the totality of the data; considering multiple types of impact; having scientists from very different disciplines involved; replacing speculations, theories and assumptions with real, empirical data as quickly as possible; and modifying and aligning decisions to the evolving best evidence.

In the current pandemic, we largely failed to protect people and settings at risk. We could have done much better in this regard. It is difficult to correct mistakes that have already led to people dying, but we can avoid making the same mistakes in future pandemics from different pathogens. We can avoid making the same mistakes even for COVID-19 going forward, since this specific pandemic has not ended as we write. In fact, its exact eventual impact is still unknown. For example, the leader of the US task force, Dr. Anthony Fauci, recently warned of reaching 100,000 COVID-19 US cases per day. 48 Maybe this prediction is already an underestimate, because with over 50,000 cases diagnosed per day in early July 2020, the true number of infections may be many times larger. There is currently wide agreement that the number of infections in many parts of the United States is more than 10 times higher than the reported rates.⁴⁹ We do have interventions that can prevent or reduce the resurgence of the epidemic wave. Moreover, we know that 100,000 cases in healthy children and young adults may translate to almost 0 deaths. Conversely, 100,000 cases in high-risk susceptible individuals and settings may translate to many thousands of deaths. We can use science to extinguish epidemic waves, or, if this is impossible, have them spend their flare on settings where they carry minimal risk. The same forecast for the number of cases may vary 1000-fold or more in terms of outcomes that matter. We should use forecasting, along with many other tools and various types of evidence to improve outcomes that matter.

Table 1. Some predictions about hospital bed needs and their rebuttal by reality: examples from news coverage of some influential forecasts

State	Prediction made	What happened
New York (https://www.nytimes.com/2020/04/ 10/ nyregion/new-york-coronavirus-hospitals.html and https://www.forbes.com/sites/sethco hen/2020/05/26/we-all-failedthe- real-reason-behind-ny-governor- andrew-cuomos-surprising- confession/#3e700be06fa5)	"Sophisticated scientists, Mr. Cuomo said, had studied the coming coronavirus outbreak and their projections were alarming. Infections were doubling nearly every three days and the state would soon require an unthinkable expansion of its health care system. To stave off a catastrophe, New York might need up to 140,000 hospital beds and as many as 40,000 intensive care units with ventilators." 4/10/2020	"But the number of intensive care beds being used declined for the first time in the crisis, to 4,908, according to daily figures released on Friday. And the total number hospitalized with the virus, 18,569, was far lower than the darkest expectations." 4/10/2020 "Here's my projection model. Here's my projection model. They were all wrong. They were all wrong. Governor Andrew Cuomo 5/25/2020

Tennessee

(https://www.nashvillepost.com/business/health-care/article/21127025/covid19-update-hospitalization-projections-drop and

https://www.tennessean.com/story/money/industries/health-care/2020/06/04/tennessee-hospitals-expected-lose-3-5-billion-end-june/3139003001/)

"Last Friday, the model suggested Tennessee would see the peak of the pandemic on about April 19 and would need an estimated 15,500 inpatient beds, 2,500 ICU beds and nearly 2,000 ventilators to keep COVID-19 patients alive."

"Now, it is projecting the peak to come four days earlier and that the state will need 1,232 inpatients beds, 245 ICU beds and 208 ventilators. Those numbers are all well below the state's current health care capacity."

"Hospitals across the state will lose an estimated \$3.5 billion in revenue by the end of June because of limitations on surgeries and a dramatic decrease in patients during the coronavirus outbreak, according to new estimates from the Tennessee Hospital Association." 6/4/2020

California

(https://www.sacbee.com/news/california/article241621891.html_and https://medicalxpress.com/news/2020-04-opinion-hospitals-beds-non-covid-patients.html)

"In California alone, at least 1.2 million people over the age of 18 are projected to need hospitalization from the disease, according to an analysis published March 17 by the Harvard Global Health Institute and the Harvard T.H. Chan School of Public Health... California needs 50,000 additional hospital beds to meet the incoming surge of coronavirus patients, Gov. Gavin Newsom said last week."

"In our home state of California, for example, COVID-19 patients occupy fewer than two in 10 ICU beds, and the growth in COVID-19-related utilization, thankfully, seems to be flattening out. California's picture is even sunnier when it comes to general hospital beds. Well under five percent are occupied by COVID-19 patients."

Table 2. Forecasting what will happen after reopening

PREDICTION FOR REOPENING

"Results indicate that lifting restrictions too soon can result in a second wave of infections and deaths. Georgia is planning to open some businesses on April 27th. The tool shows that COVID-19 is not yet contained in Georgia and even lifting restrictions gradually over the next month can result in over 23,000 deaths."

Massachusetts General Hospital News, April 24, 2020

(https://www.massgeneral.org/news/coronavirus/COVID-19-simulator)

WHAT ACTUALLY HAPPENED

Number of deaths over one month: 896 instead of the predicted 23,000

"administration is privately projecting a steady rise in the number of coronavirus cases and deaths over the next several weeks. The daily death toll will reach about 3,000 on June 1, according to an internal document obtained by The New York Times, a 70 percent increase from the current number of about 1,750.

The projections, based on government modeling pulled together by the Federal Emergency Management Agency, forecast about 200,000 new cases each day by the end of the month, up from about 25,000 cases a day currently."

New York Times, May 4, 2020

(https://www.nytimes.com/2020/05/04/us/coronavirus-live-updates.html)

"According to the Penn Wharton Budget Model (PWBM), reopening states will result in an additional 233,000 deaths from the virus — even if states don't reopen at all and with social distancing rules in place. This means that if the states were to reopen, 350,000 people in total would die from coronavirus by the end of June, the study found."

Yahoo, May 3, 2020 (https://www.yahoo.com/now/reopening-states-will-cause-233000-more-people-to-die-from-coronavirus- according-to-wharton-model-120049573.html)

"Dr. Ashish Jha, the director of the Harvard Global Health Institute, told CNN's Wolf Blitzer that the current data shows that somewhere between 800 to 1,000 Americans are dying from the virus daily, and even if that does not increase, the US is poised to cross 200,000 deaths sometime in September.

"I think that is catastrophic. I think that is not something we have to be fated to live with," Jha told CNN. "We can change the course. We can change course today."

"We're really the only major country in the world that opened back up without really getting our cases as down low as we really needed to," Jha told CNN."

Business Insider, June 10, 2020

(https://www.businessinsider.com/harvard-expert-predicts-coronavirus-deaths-in-us-by-september-2020-6)

Number of daily deaths on June 1: 731 instead of the predicted 3,000, i.e. a 60% decrease instead of 70% increase

Number of daily new cases on May 31: 20,724 instead of the predicted 125,000, i.e. a 15% decrease instead of 700% increase

Based on JHU dashboard death count, number of additional deaths as of June 30 was 5,700 instead of 233,000, i.e. total deaths was 122.7 thousand instead of 350 thousand. It is unclear also whether any of the 5,700 deaths were due to reopening rather than error in the original model calibration of the number of deaths without reopening.

Within less than 4 weeks of this quote the number of daily deaths was much less than the 800-1000 quote (516 daily average for the week ending July 4). Then it increased again. The number of actual total deaths as of September will be added here when available

8.8 Academic evaluation of epidemiological models

8.8.1 July 2020 review of model predictions

8.8.2 Nature magazine argued that it was necessary to prepare for the worst case scenario

Faced with the certainty of a new influenza virus to which a large proportion of the world's population was immunologically naive, and the uncertainty of the predictive epidemiological models, governments had little political choice but to act, anticipating something close to the worst case scenario. And the options they had at hand were somewhat limited.

Thus, it is difficult to conclude, even now, that governments that bought into preventative strategies for H1N1 made the wrong decision. Although the nature of the threat may have been overstated, the WHO, CDC and other authorities had little scientific evidence at the beginning of the H1N1 pandemic to discount the most dire predictions of fatalities. [Source]

8.8.3 WHO initially objected to the charge of fake pandemic

'Fake' swine flu pandemic? WHO slams charges

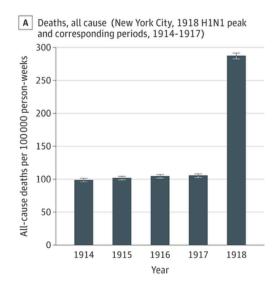
9. Blatantly fraudulent "scientific" studies

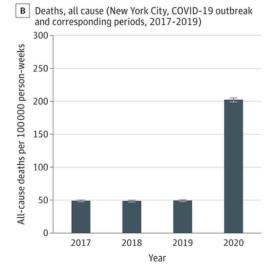
Monday, August 17, 2020

A scientific study attracted national attention last week by taking the dramatic position that the "excess deaths" from COVID-19 exceeded those observed with the Spanish Flu of 1918, at least for New York City. The absurdity of the claim is symptomatic of the imperfect understanding of the pandemic by this nation's elites. To be sure, the letter correctly notes that the state of healthcare today is far better and more advanced than that of a century ago given the widespread availability of such impressive treatments as "standard resuscitation, supplemental oxygen, mechanical ventilation, kidney replacement therapy, and extracorporeal membrane oxygenation." Indeed, those technological advances indicate that the true severity of COVID-19 is even greater than the raw numbers suggest.

With that said, the study is flawed in several key ways. The estimated number of total U.S. deaths from the Spanish Flu was 675,000 in a population of about 100 million people. Assuming there have been about 169,000 U.S. COVID-19 deaths in 2020 in a population of over 330 million people, the COVID-19 death rate is roughly one-twelfth of the Spanish Flu rate. That number could well increase before the pandemic runs its course. According to the Institute for Health Metrics and Evaluation (IHME), the U.S. death toll of COVID-19 could reach 300,000 by December, at which point the ratio would be about 7.5 to 1.

Why then is New York special? New York State has experienced over 32,000 COVID deaths, or about 20 percent of the nationwide total. Its population of 19.5 million constitutes about 6 percent of the U.S. population. The vast majority of those deaths were confined to New York City (over 23,500) and occurred before June 1. The key graphic that makes the case for the comparability of the Spanish flu to COVID-19 in New York shows major spikes in 1918 and 2020:





Nonetheless, the ostensible parallel is fatally flawed. In order to compare the two pandemics properly, the New York death rate from COVID-19 needs to be adjusted downward to account for several important variables. First, the study offers no explanation as to why the early New York numbers were so high. But the best explanation lies in the state and city's clumsy institutional responses to the virus. Perhaps most notable among the bungled decisions was the deadly order that Governor Andrew Cuomo issued on March 25 requiring ill-equipped nursing homes to take in presumably recovered COVID patients, ostensibly to free up hospital beds for an anticipated onslaught of new COVID cases which never came. Any responsible estimate should subtract out the many, often concealed, COVID deaths from that unconscionable maneuver, both in New York and other states, like Michigan, New Jersey, and Pennsylvania.

Second, with the Spanish Flu, there was an uncommonly high death rate for individuals between the ages of 20 and 40, which was at least in part due to "cytokine storms," a severe immune response that could lay waste to healthy individuals in less than a day. High death rates were also recorded for children under 5 years of age, as well as those over 65. Notably, COVID appears most severe only in those over 65. As of August 12, the CDC reports that nearly 80% of all U.S. COVID deaths have been in patients over the age of 65 (118,548 out of 149,192).

Third, persons with acute comorbidities—including cancer, diabetes and kidney failure—are often coded only as COVID fatalities, without regard to their underlying conditions. Finally, so-called "probables" are included in the COVID totals, when the "probable" symptoms are often consistent with ordinary flu or other diseases. Take these cases out and comparing the New York death rates in 1918 and 2020 will likely yield a different result from the study's conclusion.

The current of exaggeration gets even worse when we look beyond the study. A recent New York Times story touts that the full cost of COVID-19 not only includes the inflated death count of 169,000, but also about 35,000 additional deaths attributable to indirect effects. Unfortunately, the story gets the

causal connection backwards—one of the many major blunders in New York City and elsewhere was to shut down all forms of elective medical treatments in order to make way for the wave of COVID-19 cases that never occurred. How many deaths did that decision yield? Surely a significant portion of these extra deaths are attributable to misguided public policies. This means that the net deaths attributable to the virus itself should be *reduced*, *not increased*, to properly account for the consequences of eliminating elective treatments and other hardships under New York's lockdown.

Serious social consequences flow from the misattribution of deaths to COVID-19. In New York and other states, a common response to the artificially high death tolls has been to reimpose heavy sanctions in order to stem a second wave. But recently it appears that new cases are in decline. Nor has any second wave occurred in the northeast states that early experienced what still remains the highest incidence of deaths. In places like New York, the trend has been sharply downward, which should ideally lead to a general relaxation of heavy sanctions. Everyone should of course wear masks in indoor public spaces, wash hands, avoid placing their hands on their face when out, stay out of highdensity places, get lots of fresh air, and, if ill, take the tripartite treatment of hydroxychloroquine, zinc, doxycycline, as recommended by and azithromycin or Dr. Harvey Risch, to the evident consternation of his colleagues in the Yale School of Public Health.

These various precautions significantly reduce COVID-19 costs, freeing up resources for other uses. Unfortunately, the same panicked responses that led to so much unnecessary suffering in the early stages of the pandemic continue to wreak havoc today. One prescription that seems to have gained favor is the demand for the wearing of masks in outdoor public places in order to slow down the spread of the virus. Democratic Presidential nominee Joe Biden insists that "[e]very single American should be wearing a mask when they're outside for the next three months at a minimum," claiming that this "will save 40,000 lives during that period." In the same vein, the IHME claims that "if mask wearing in public increases to 95%, more than 66,000 lives could be saved," which would cut fatalities in half.

Right now, masks are already worn in the places where they are likely to do most good, where there is close and continuous contact between individuals, as in hair and nail salons. But is there any reason to think that wearing masks in public parks, where the contacts between individuals are fragmentary and fleeting at best, could produce dramatic results? It is worth asking about the trade-offs that come from the more widespread use of masks, as the Dutch government has recently done by citing the risks of wearing masks: First, masks offer people a false assurance of safety; even the best masks cannot filter out most viruses, especially when improperly worn; second, the reuse of dirty masks increases the likelihood of contamination; third, the inability to cleanly expel wastes may well reinfect persons with COVID-19 through the nose, throat, and eyes; and finally, the lack of fresh air can cause headaches and compromise the immune systems, especially for the elderly and ill who are most subject to the virus. The law of diminishing marginal returns applies to masks as it does to everything else.

Next there is the touchy subject of quarantines. Many states, including both New York and Illinois, have imposed travel restrictions on individuals that come from states with high numbers of daily coronavirus cases. The usual sanction is an order to self-quarantine for a two-week period. In New York, both Columbia and Barnard College have, as a result of the order, abandoned on-campus instruction, given that many of their students come from out-of-state. In Chicago, the order applies to any state that registers 15 new COVID cases per day per 100,000 people. The Chicago order, like all these orders, is flawed: It does not apply to people who come to Chicago from other hotspots within Illinois, but it does apply to people who come from specific areas within states that have low COVID counts. Moreover, the order fails to exempt individuals who have tested COVID-negative just before entering Chicago because these people "can develop symptoms and become contagious up to 14 days from their last exposure." At the same time, it fails to acknowledge that sick people are less likely to travel, and the rate of transmission for asymptomatic individuals seems to be lower than that for symptomatic people.

Compliance with such orders effectively kills tourism, as well as a significant amount of business activity. Yet city officials in cities like New York and Chicago do not offer estimates of the potential harms that result from allowing free movement across state lines of people who test COVID-negative, nor do they give any sense of the expected losses, possibly in the millions of dollars, from their policies. In the effort to control COVID-19, we must remember that the dangers of over-deterrence have to be weighed against those of under-deterrence.

10. Bogus PCR tests are the mainstay of fake pandemics

The Covid-19 PCR test is key to the Pandemic Fraud: 8/9/20, John O'Sullivan

The inventor of the PCR test spoke out against using it for diagnosing illnesses. PCR tests are not fit for purpose for COvid-19.

See link: https://principia-scientific.com/the-covid-19-pcr-test-is-key-to-the-pandemic-fraud/

Covid19 PCR tests are scientifically meaningless: 27/6/20, T Engelbrecht & K Demeter

Questions suitability of tests as there is no valid "gold standard' for comparison

https://off-guardian.org/2020/06/27/covid19-pcr-tests-are-scientifically-meaningless/

"Second Wave" faked on False-Positive COVID tests, citing "Pandemic is over": 23/9/20, R Lopez

Cites update from Mike Yeadon, foamier VP and CSO of Pfizer. Includes graphs for cases and deaths in different geographies.

https://www.globalresearch.ca/chief-science-officer-pfizer-says-second-wave-faked-false-positive-covid-tests-pandemic-over/5724753

NOTE: Fact checkers have disputed claims by M Yeadon - see link: https://leadstories.com/hoax-alert/2020/10/fact-check-former-pfizer-scientist-not-correct-saying-second-wave-faked-on-false-positive-covid-tests-pan.html

In relation to the COVID cases there are two major problems: a) financial incentive to report COVID "cases" (already touched upon above) and b) the unreliability of PCR tests. A review of the literature on PCR tests by Dr Sebastian Rushworth on 6 November 2020 states:

PCR positive cases are a very poor indicator of how prevalent COVID is in the population, and why we should instead be basing decisions on the rates of hospitalization, ICU admission, and death.³⁴

How far is this claim valid?

10.1.1 Long history of being unreliable and supporting hysterias

Polymerase Chain Reaction (PCR) tests have a long history of being wildly inaccurate. For instance, in 2007 a major blunder was made and a pandemic declared based on the PCR tests. Its story is described in Gina Kolata's 2007 *New York Times* article "Faith in Quick Test Leads to Epidemic That Wasn't" Extracts:

At Dartmouth the decision was to use a test, P.C.R., for polymerase chain reaction. It is a molecular test that, until recently, was confined to molecular biology laboratories.

At Dartmouth, when the first suspect pertussis cases emerged and the P.C.R. test showed pertussis, doctors believed it. The results seem completely consistent with the patients' symptoms. "That's how the whole thing got started,"

[But after eight months] "It was going on for months," Dr. Kirkland said. But in the end, the conclusion was clear: There was no pertussis epidemic.

³⁴ https://sebastianrushworth.com/2020/11/06/how-accurate-are-the-covid-tests/

³⁵ https://www.nytimes.com/2007/01/22/health/22whoop.html

"The big message is that every lab is vulnerable to having false positives," Dr. Petti said. "No single test result is absolute and that is even more important with a test result based on P.C.R."

According to Torsten Engelbrecht and Konstantin Demeter, the inventor of the PCR technology, Kary Mullis, considered the PCR test to be inappropriate for the purposes of detecting a viral infection. PCR is apparently intended to be a manufacturing technique, being able to replicate DNA sequences millions and billions of times, and is not a diagnostic tool to detect viruses.³⁶

10.1.2 No proof that PCR tests are testing SARS-CoV-2

It is understood that the: "PCR is extremely sensitive, which means it can detect even the smallest pieces of DNA or RNA – but it cannot determine where these particles came from. That has to be determined beforehand"³⁷.

Torsten Engelbrecht and Konstantin Demeter point out that the PCR tests used to identify so-called COVID-19 patients do not have a **valid gold standard** to compare the results with.³⁸ According to them, tests need to be evaluated to determine their preciseness by comparison with a "gold standard" – meaning the most accurate method available. As an example, for a pregnancy test the gold standard is the pregnancy itself.

But there is a "lack of such a clear-cut 'gold-standard' for COVID-19 testing". It seems obvious that only the virus concentrated through isolation and purification can be considered a gold standard. But in the case of PCR tests the pure form of the SARS-CoV-2 virus does not exist.

A 20 August 2020 FOI request to Public Health England confirmed that the virus has not been isolated³⁹. The CDC has also confirmed this (as at 13 July 2020):

The analytical sensitivity of the rRT-PCR assays contained in the CDC 2019 Novel Coronavirus (2019- nCoV) Real-Time RT-PCR Diagnostic Panel were determined in Limit of Detection studies. Since **no quantified virus isolates of the 2019-nCoV are currently available**, assays designed for detection of the 2019-nCoV RNA were tested with characterized stocks of in vitro transcribed full length RNA (N gene; GenBank accession: MN908947.2) of known titer (RNA copies/µL) spiked into a diluent consisting of a suspension of human A549 cells and viral transport medium (VTM) to mimic clinical specimen.⁴⁰

PCR tests are therefore currently calibrated for certain gene sequences (RNA sequences because SARS-CoV-2 is **believed – not proven –** to be a RNA virus). However, there is no proof that the RNA being used by these PCR tests is specifically from the SARS-CoV-2 virus.

If there is no virus concentrate, what is being used? Apparently "virologists at the Charité are sure that they are testing for the virus. RNA was extracted from clinical samples with the MagNA Pure 96 system (Roche, Penzberg, Germany) and from cell culture supernatants with the viral RNA mini kit (QIAGEN, Hilden, Germany)". But according to Torsten Engelbrecht and Konstantin Demeter this only "means they just assumed the RNA was viral".

It is shocking to discover that mass-testing is being done using a "test" that has not been calibrated with the real virus, nor was ever designed by its inventor for such things. And has been used in the past to create fake pandemics.

If this is true (and there is no reason that I know to suggest that this information is not true), it strikes at the very root of the usability of PCR tests.

39

https://www.whatdotheyknow.com/request/679566/response/1625332/attach/html/2/872%20FOI%20All%20records%20des~cribing%20isolation%20of%20SARS%20COV%202.pdf.html

 $^{^{36}\} https://off-guardian.org/2020/06/27/covid 19-pcr-tests-are-scientifically-meaningless/2020/06/27/covid 19-pcr-tests-are-scientifically-meaningless/2020/06/200/06/200/06/200/06/200/06/200/06/200/06/200/06/200/06/200/06/200/06/06/200/06/200/06/200/06/200/06/200/06/200/06/200/06/200/06/200/06/200/06/200/06/200/06/0$

³⁷ https://bpa-pathology.com/covid19-pcr-tests-are-scientifically-meaningless/

³⁸ https://off-guardian.org/2020/06/27/covid19-pcr-tests-are-scientifically-meaningless/

⁴⁰ https://www.fda.gov/media/134922/download

It is obligatory for the Accused to be honest and forthright about these limitations and not make panicky claims based on something which is clearly very unreliable. (In addition to the fact that mass testing is simply not acceptable for such a virus, as per the WHO's October 2019 guidelines).

10.1.3 The Australian Government doesn't consider these tests to be reliable

As at 7 November 2020, the Australian Government, Department of Health, Therapeutics Goods Administration (TGA) website notes (the information was updated on 1 October 2020):

The <u>reliability of COVID-19 tests is uncertain</u> due to the limited evidence base. Available evidence mainly comes from symptomatic patients, and their clinical role in detecting asymptomatic carriers is unclear. COVID-19 is an emerging viral infectious disease. There is limited evidence available to assess the accuracy and clinical utility of available COVID-19 tests. Due to the urgent nature of the COVID-19 pandemic, a number of SARS-CoV-2 tests have undergone an expedited assessment by the TGA to enable their legal supply in Australia. These expedited assessments are based on the limited clinical and performance data currently available. All SARS-CoV-2 tests currently approved for supply are required to provide updated evidence to support the ongoing safety and performance of the tests to the TGA.⁴¹

A 22 May 2020 version of the above website is available on archive.org.⁴²

10.1.4 Powerful reasons why PCR tests are not necessarily detecting COVID

There seem to be a few other reasons why PCR tests don't (or can't) do what they say they do:

1. Cannot distinguish whether RNA is from COVID or some other pathogen

This is what the CDC says:

Detection of viral RNA may not indicate the presence of infectious virus or that 2019-nCoV is the causative agent for clinical symptoms. The performance of this test has not been established for monitoring treatment of 2019-nCoV infection. **This test cannot rule out diseases caused by other bacterial or viral pathogens.** Positive results are indicative of active infection with 2019-nCoV but do not rule out bacterial infection or **co-infection with other viruses**. The agent detected may not be the definite cause of disease. Laboratories within the United States and its territories are required to report all positive results to the appropriate public health authorities. ⁴³

This, in my view, is a huge problem. As discussed earlier, this may be why flu and COVID are getting conflated on a mammoth scale across the world.

2. Cannot distinguish between live and dead RNA

Guidance issued by the Department of Health of the Australian Government states: "it should be noted that **PCR tests cannot distinguish between "live" virus and noninfective RNA**"⁴⁴.

So, this means just having a positive test doesn't mean one is infectious. Therefore, the test serves no real purpose medically or (therefore) for public health purposes.

3. Can give a positive result even if there is no RNA in the sample

The worst issue, as reported by Lab Tests Online, is that: "You could tweak the test to find lower levels of virus RNA but in doing so you will increase the likelihood of the test giving a positive result even if there was no RNA in the sample". 45 This has something to do with the "cycles" of refinement during the testing process.

As far as I can see, the whole thing about COVID "cases" is very suspicious, indeed.

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 $^{^{41}\} https://www.tga.gov.au/covid-19-testing-australia-information-health-professionals$

⁴² https://web.archive.org/web/20200607060454/www.tga.gov.au/covid-19-testing-australia-information-health-professionals

⁴³ https://www.fda.gov/media/134922/download

 $^{^{44}\} https://www.health.gov.au/sites/default/files/documents/2020/03/coronavirus-covid-19-information-for-clinicians.pdf$

⁴⁵ https://www.labtestsonline.org.au/learning/index-of-conditions/covid-19/how-accurate-are-covid-19-tests

<u>Reference</u>: There is more information about PCR tests in a complaint made 23 October 2020 by Danielle Burnie to the Therapeutic Goods Administration.⁴⁶

There have now been additional articles critical of PCR tests:

https://swprs.org/the-trouble-with-pcr-tests/

https://www.weblyf.com/2020/08/scientific-problem-with-covid-19-rt-pcr-testing/

https://theinfectiousmyth.com/coronavirus/RT-PCR_Test_Issues.php

https://www.thenationalnews.com/uae/science/false-negatives-and-positives-how-accurate-are-pcr-tests-for-covid-19-1.1113187

10.2 Review report Corman-Drosten et al. Eurosurveillance 2020

https://cormandrostenreview.com/ - this article (http://www.williamengdahl.com/englishNEO10Dec2020.php) summarises the report:

Coronavirus Scandal Breaking in Merkel's Germany

By F. William Engdahl

10 December 2020

The widely-praised German model of the Angela Merkel regime to deal with the COVID-19 pandemic is now engulfed in a series of potentially devastating scandals going to the very heart of the testing and medical advice being used to declare draconian economic shutdowns and next, de facto mandatory vaccinations. The scandals involve a professor at the heart of Merkel's corona advisory group. The implications go far beyond German borders to the very WHO itself and their global recommendations.

The entire case for WHO-mandated emergency lockdown of businesses, schools, churches and other social arenas worldwide is based on a test introduced, amazingly early on, in the Wuhan, China coronavirus saga. On January 23, 2020, in the scientific journal Eurosurveillance, of the EU Center for Disease Prevention and Control, Dr. Christian Drosten, along with several colleagues from the Berlin Virology Institute at Charite Hospital, along with the head of a small Berlin biotech company, TIB Molbiol Syntheselabor GmbH, published a study claiming to have developed the first effective test for detecting whether someone is infected with the novel coronavirus identified first only days before in Wuhan. The Drosten article was titled, "Detection of 2019 novel coronavirus (2019-nCoV) by real-time RT-PCR" (Eurosurveillance 25(8) 2020).

The news was greeted with immediate endorsement by the corrupt Director General of WHO, Tedros Adhanom, the first non-medical doctor to head WHO. Since then the Drosten-backed test for the virus, called a real-time or RT-PCR test, has spread via WHO worldwide, as the most used test protocol to determine if a person might have COVID-19, the illness.

On November 27 a highly-respected group of 23 international virologists, microbiologists and related scientists published a call for Eurosurveillance to retract the January 23, 2020 Drosten article. Their careful analysis of the original piece is damning. Theirs is a genuine "peer review." They accuse Drosten and cohorts of "fatal" scientific incompetence and flaws in promoting their test.

To begin with, as the critical scientists reveal, the paper that established the Drosten PCR test for the Wuhan strain of coronavirus that has subsequently been adopted with indecent haste by the Merkel government along with WHO for worldwide use—resulting in severe lockdowns globally and an economic and social catastrophe—was never peer-reviewed before its publication by Eurosurveillance journal. The critics point out that, "the Corman-Drosten paper was submitted to Eurosurveillance on January 21st 2020 and accepted for publication on January 22nd 2020. On January 23rd 2020 the paper was online." Incredibly, the Drosten test protocol, which he had already sent to WHO in Geneva on 17 January, was

⁴⁶ https://sanjeev.sabhlokcity.com/Misc/Letter-complaint-TGA.docx.pdf

officially recommended by WHO as the worldwide test to determine presence of Wuhan coronavirus, even before the paper had been published.

As the critical authors point out, for a subject so complex and important to world health and security, a serious 24-hour "peer review" from at least two experts in the field is not possible. The critics point out that Drosten and his co-author Dr. Chantal Reusken, did not disclose a glaring conflict of interest. Both were also members of the editorial board of Eurosurveillance. Further, as reported by BBC and Google Statistics, on January 21 there were a world total of 6 deaths being attributed to the Wuhan virus. They ask, "Why did the authors assume a challenge for public health laboratories while there was no substantial evidence at that time to indicate that the outbreak was more widespread than initially thought?" Another co-author of the Drosten paper that gave a cover of apparent scientific credibility to the Drosten PCR procedure was head of the company who developed the test being marketed today, with the blessing of WHO, in the hundreds of millions, Olfert Landt, of Tib-Molbiol in Berlin, but Landt did not disclose that pertinent fact in the Drosten paper either.

Certainly nothing suspicious or improper here, or? It would be relevant to know if Drosten, the Merkel chief scientific advisor for COVID-19, Germany's de facto "Tony Fauci," gets a percentage for each test sold by Tib-Molbiol in their global marketing agreement with Roche.

False Positives?

Since late January 2020, world mainstream media has inundated us all with frightening hourly updates on "the total number of coronavirus infected." Usually they simply add each daily increase to a global total of "confirmed cases," presently over 66 million. Alarming, but for the fact that, as Pieter Borger and his fellow scientific collaborators point out, "confirmed cases" is a nonsense number. Why?

The Borger report identifies what they call "ten fatal problems" in the Drosten paper of last January. Here we take up the most glaring that can easily be grasped by most laypeople.

Drosten & co. gave confusing unspecified primer and probe sequences. The critics note, "This high number of variants not only is unusual, but it also is highly confusing for laboratories. These six unspecified positions could easily result in the design of several different alternative primer sequences which do not relate to SARS-CoV-2... the confusing unspecific description in the Corman-Drosten paper is not suitable as a Standard Operational Protocol. These unspecified positions should have been designed unequivocally." They add that "RT-PCR is not recommended for primary diagnostics of infection. This is why the RT-PCR Test used in clinical routine for detection of COVID-19 is not indicated for COVID-19 diagnosis on a regulatory basis."

Amplification Cycles

But even more damning for Drosten is the fact that he mentioned nowhere of a test being positive or negative, or indeed what defines a positive or negative result! The Borger report notes, "These types of virological diagnostic tests must be based on a SOP (Standard Operational Protocol), including a validated and fixed number of PCR cycles (Ct value) after which a sample is deemed positive or negative. The maximum reasonably reliable Ct value is 30 cycles. Above a Ct of 35 cycles, rapidly increasing numbers of false positives must be expected... scientific studies show that only non-infectious (dead) viruses are detected with Ct values of 35." (emphasis added).

The WHO and Drosten recommend a Ct of 45 cycles and, reportedly, presently the German health officials do as well. Little wonder that as the number of tests is ramped up in the onset of winter flu season, PCR "positives" in Germany and elsewhere explode. As the critical authors point out, were the health authorities to specify 35 cycles maximum, the number of corona positive would be only less than 3% the present number! They note, "an analytical result with a Ct value of 45 is scientifically and diagnostically absolutely meaningless (a reasonable Ct-value should not exceed 30). All this should be communicated very clearly. It is a significant mistake that the Corman-Drosten paper does not mention the maximum Ct value at which a sample can be unambiguously considered as a positive or a negative test-result. This important cycle threshold limit is also not specified in any follow-up submissions to date." The authors add, "The fact that these PCR products have not been validated at molecular level is another striking error of the protocol, making any test based upon it useless as a specific diagnostic tool to identify the SARS-CoV-2 virus." (emphasis added).

In simple English, the entire edifice of the Gates foundation, the Merkel government, the WHO and WEF as well as the case for de facto forced untested vaccines, rests on results of a PCR test for coronavirus that is not worth a hill of beans. The test of Drosten and WHO is more or less, scientific crap.

Missing Doctor proof too?

This devastating critique from twenty three world leading scientists, including scientists who have patents related to PCR, DNA Isolation and Sequencing, and a former Pfizer Chief Scientist, is damning, but not the only problem Professor Dr. Christian Drosten faces today. He and the officials at Frankfurt's Goethe University, where he claims to have received his medical doctorate in 2003, are being accused of degree fraud. According to Dr. Markus Kühbacher, a specialist investigating scientific fraud such as dissertation plagiarism, Dr. Drosten's doctor thesis, by law must be deposited on a certain date with academic authorities at his University, who then sign a legal form, Revisionsschein, verified with signature, stamp of the University and date, with thesis title and author, to be sent to the University archive. With it, three original copies of the thesis are filed.

Kühbacher charges that the Goethe University is guilty of cover-up by claiming, falsely, Drosten's Revisionsschein, was on file. The University spokesman later was forced to admit it was not filed, at least not locatable by them. Moreover, of the three mandatory file copies of his doctor thesis, highly relevant given the global importance of Drosten's coronavirus role, two copies have "disappeared," and the remaining single copy is water-damaged. Kühbacher says Drosten will now likely face court charges for holding a fraudulent doctoral title.

Whether that is to pass, it is a fact that a separate legal process has been filed in Berlin against two people responsible for a German media site, Volksverpetzer.de, for slander and defamation, brought by a well-known and critical German medical doctor, Dr. Wolfgang Wodarg. The court case demands of the defendants €250,000 in damages for defamation of character and material damages to Wodarg by the accused in their online site, as well as in other German media, claiming they viciously and without proof, defamed Wodarg, calling him a "covid-denier," falsely calling him a right-extremist (he is a life-long former parliament member of the Social Democratic Party) and numerous other false and damaging charges.

The attorney for Dr Wodarg is a well-known German-American attorney, Dr. Reiner Fuellmich. In his charges against the defendants, Fuellmich cites in full the charges against the Drosten test for coronavirus of Dr. Pieter Borger et al noted above. This is in effect forcing the defendants to refute the Borger paper. It is a major step on the way to refute the entire WHO COVID-19 PCR testing fraud. Already an appeals court in Lisbon, Portugal ruled on 11 November that the PCR test of Drosten and WHO was not valid to detect coronavirus infection and that it was no basis to order nationwide or partial lockdowns.

If the stakes were not so deadly for mankind it would all be material for a comedy of the absurd. The world health Czar, WHO chief Tedros is no medical doctor whose WHO is financed massively by a college dropout billionaire computer manager, Gates, who also advises the Merkel government on COVID-19 measures. The Merkel government uses the Drosten PCR test and Drosten as an "all-wise" expert to impose the most draconian economic consequences outside wartime. Her Health Minister, Jens Spahn, is a former banker who has no medical degree, only a stint as a lobbyist for Big Pharma. The head of the German CDC, called the Robert Koch Institute, Lothar Wieler, is not a virologist but an animal doctor, Tierarzt. With this crew, Germans are seeing their lives destroyed by lockdowns and social measures never before imagined outside Stalin's Soviet Union. There is science and then there is science. Not all "science" is valid however.

PART III: THE STUDY OF INDIVDUAL PANDEMIC HYSTERIAS

11. The Bird flu hoax

https://twitter.com/sabhlok/status/1332783389716344832

12. The fake swine flu (H1N1) pandemic

https://twitter.com/LouiseMMallo8/status/1332780871124979714

12.1 Articles

The great global swine flu swindle

Drug companies face European inquiry over swine flu vaccine stockpiles

Report condemns swine flu experts' ties to big pharma

How the WHO created a 'Pandemic' of a Disease: 9/3/2020, Judy Wilyman PhD.

Talks to Australia as first country to call a 'pandemic' when there were no cases of this disease in Australia on 21 January 2020.

https://www.vaccinationdecisions.net/how-the-world-health-organisation-who-created-a-pandemic-of-a-disease/

Why EU investigated WHO for "fake pandemic": 14/5/20, Christina Lin.

References 2010 investigation of WHO for creating a 'fake pandemic' during the 2009 swine flu outbreak, to create a lucrative vaccine market for big pharma. Also changes to definition of 'pandemics'

 $https://blogs.timesofisrael.com/why-eu-investigated-who-for-fake-pandemic/\#:\sim:text=According\%20to\%20a\%20Forbes\%20article\%20in\%20February\%202010, misallocation\%20of\%20resources\%20in\%20terms\%20of\%20public%20health.\%E2\%80\%9D$

also:

https://fort-russ.com/2020/04/why-the-who-faked-a-pandemic-revealing-forbes-op-ed-2010/

Lies, Damned Lies, and Medical Science: Nov 2010, David H Freedman

Explores views of Dr John Ioannidis' challenge of his peers and exposition of bad science

https://www.theatlantic.com/magazine/archive/2010/11/lies-damned-lies-and-medical-science/308269/

What's missing in pandemic models: 3/6/20, Jonathan Fuller

Explores modelling and its shortcomings

https://fee.org/articles/modelers-were-astronomically-wrong-in-covid-19-predictions-says-leading-epidemiologist-and-the-world-is-paying-the-price/

http://nautil.us/issue/84/outbreak/whats-missing-in-pandemic-models

Why short-term forecasts can be better than models for predicting how pandemics evolve: 30/6/20, David Hendry, Jennifer Castle and Jurgen Doornik

Reliability of short term forecasts based purely on current data leads to more accurate predictions.

https://medicalxpress.com/news/2020-06-short-term-pandemics-evolve.html

Forcasting efforts from prior epidemics and Covid-19 predictions: 17/7/20, P Nadella et. al

European Journal of Epidemiology (2020) 35:727–729

https://doi.org/10.1007/s10654-020-00661-0

Sanjeev, have you read the Ionnidis/ Cripps paper on Covid modeling failure? I can't link on my device, but it was published in the Journal of Forecasting, a few months ago. Title of paper: 'Forecasting for Covid-19 has failed.'

Repository of Covid-19 LSHTM publications:

https://www.lshtm.ac.uk/research/research-action/covid-19/publications

Some further news articles/blogs supporting the over-reaction to H1N1:

https://www.dailymail.co.uk/news/article-1242147/The-false-pandemic-Drug-firms-cashed-scare-swine-flu-claims-Euro-health-chief.html

https://blog.nomorefakenews.com/2020/01/25/new-china-virus-swine-flu-hoax-history-matters/

12.2 Reconstruction of a Mass Hysteria: The Swine Flu Panic of 2009

Reconstruction of a Mass Hysteria: The Swine Flu Panic of 2009

At first things did not look good for Edgar. The five-year-old boy had a high fever. He'd lost his appetite, his throat was burning and his entire body ached.

The people in the Mexican village of La Gloria were quick to blame the pigs. They had long been convinced that the animals were a curse. In the nearby town of Perote, half a million hogs were being fattened for slaughter. The wind carried the stench through the narrow streets of the surrounding villages. No one was very surprised when Edgar Hernandez fell ill.

But then, after only four days, the boy recovered. His illness disappeared as quickly as it had started. It turned out to be nothing more than the flu, and the people of La Gloria soon forgot about it.

12.2.1 'Boy Zero'

It wasn't until several weeks later that a laboratory in Canada tested a mucosal smear taken from the boy. The results made him famous. Edgar didn't have an ordinary flu, but had been infected with a new kind of pathogen, the swine flu virus. Edgar went down in history as niño cero, "boy zero," the first person to fall ill with the new plague.

The Mexican boy's infection was mild, like an overwhelming majority of the millions of cases that would occur worldwide in the coming months. The new virus would probably have attracted far less attention if it hadn't been for modern molecular medicine, with its genetic analyses, antibody tests and reference laboratories. The swine flu would have conquered the world, and no doctor would have noticed.

So the potential significance of the call was clear to Fukuda: the start of a devastating pandemic, in which, according to WHO estimates, between 2.0 and 7.4 million could die -- assuming the pandemic was relatively mild. But if the new virus proved to be as aggressive as the one that triggered the Spanish Flu in 1918, the death toll could run to the tens of millions.

"The first thing I thought was: We have to act quickly," says Fukuda. He immediately called WHO Director-General Margaret Chan, another veteran of the fight against avian flu. As Hong Kong's director of health at the time, she was the one who ordered the slaughter of all chickens in the city.

IT specialist Jered Markoff, in charge of the WHO's Strategic Health Operations Center -- also known as the SHOC room -- received a call at 3:15 a.m. Markoff activated the SHOC room from home: Using his personal computer, he issued the necessary commands to pull out the 15 monitors hidden in tables, start up the computers and switch on the large projection screens attached to the walls. Then he drove to WHO headquarters.

For the next few months, the SHOC room would serve as the center of the worldwide battle against H1N1, the swine flu virus. It was staffed 24 hours a day with three rotating shifts of WHO employees,

who used videoconferencing equipment to communicate with doctors, scientists, politicians and industry representatives around the world. News, charts, maps and statistics were constantly popping up on the projection screens.

The situation was still confusing. At first, there was talk of several dozen dead in Mexico, but soon the authorities adjusted that number downward to seven. The epidemic experts were moving in a scientific gray area, filled with contradictory information and many unanswered questions. How fast does the virus spread? Which people are at the greatest risk? Does the normal influenza vaccine provide protection? Most of all: Just how dangerous is the new virus?

To obtain the best possible assessment, WHO Director-General Chan convened the "Emergency Committee," a group of 15 carefully selected experts from around the world, for a first teleconference. "In that early phase, we still had too little information," says Australian John Mackenzie, the chairman of the committee. "But everything we knew at the time sounded alarming."

12.2.2 Worst-Case Scenarios

Does this mean that a very mild course of the pandemic was not even considered from the start? At any rate, efforts to downplay the risks were unwelcome, and the WHO made it clear that it preferred to base its decisions on a worst-case scenario. "We wanted to overestimate rather than underestimate the situation," says Fukuda.

Mackenzie, another veteran in fighting epidemics, is accustomed to smelling trouble around every corner. He worked for the Australian Biosecurity Cooperative Research Centre for several years, where he was responsible for protecting Australia from new infectious diseases. When he left the Centre in 2008, he issued an emphatic warning about the next influenza pandemic.

Most of all, however, it was probably the horrific images of the avian flu that distorted the experts' view of the idiosyncrasies of the new pathogen. The vision of a highly aggressive virus had become lodged in their minds, a virus that, once it began to spread, would lead to catastrophe.

The media also did its part in stoking fears. SPIEGEL, for example, had reported at length on the avian flu. Now it devoted a cover story to the new "global virus," a story filled with concerns that the swine flu pathogen could mutate into a horrific virus.

The pharmaceutical industry was particularly adept at keeping this vision alive. Manufacturers of flu remedies and vaccines even funded a group of scientists devoted solely to this issue: the European Scientific Working Group on Influenza, which regularly held conferences and meetings of experts. The lobbying group was headed by Albert Osterhaus of the Erasmus Medical Center in Rotterdam, who also happened to be one of the WHO's most influential advisors on influenza vaccines.

Together with Osterhaus, Johannes Löwer was asked to provide Director-General Chan with recommendations on the subject of swine flu vaccination. The then president of the Paul Ehrlich Institute (PEI), which specializes in vaccines, is now convinced that he and his fellow experts were probably too strongly influenced by the horror scenarios swirling around the avian flu. "We expected a real pandemic, and we thought that it had to happen. There was no one who suggested re-thinking our approach."

April 27, 2009: The WHO raises its pandemic warning to phase 4, meaning it has discovered human-to-human transmission of the virus in at least one country.

April 28, 2009: The first seven suspected cases of swine flu are reported in Germany.

April 29, 2009: The WHO raises its warning to phase 5, the last stage before a pandemic. Influenza researchers are elated. "A pandemic -- for virologists like us, it's like a solar eclipse in one's own country for astronomers," says Markus Eickmann, director of the BSL-4 high-security laboratory in the central German city of Marburg.

April 30, 2009: Egypt begins killing all domestic pigs in the country. French actress and animal rights activist Brigitte Bardot begs President Hosni Mubarak to stop the mass slaughter, but her appeals are unsuccessful.

May 4, 2009: In Mexico, football matches in the country's four highest-ranking leagues take place without spectators. The legislature in Germany's western state of Saarland imposes a ban on kissing as a form of greeting.

June 10, 2009: The WHO has received reports of 141 swine flu deaths. The majority of the victims have serious pre-existing conditions. In most cases, however, the course of the infection is mild. A recovered patient tells a German daily newspaper, the Süddeutsche Zeitung, "My main problem was finding someone to go shopping for me."

June 11, 2009, WHO Headquarters

The Emergency Committee convened for another teleconference. This time the discussion focused on critical questions: Should the WHO raise its warning to phase 6? Was the swine flu a pandemic?

The 15 experts scattered around the world debated for hours. After the meeting, Chan told the press that the virus was unpredictable and unstoppable. It was official: An influenza pandemic had broken out for the first time in 41 years.

"I think we did everything right," committee chairman Mackenzie says, looking back. Strictly speaking, his statement is correct.

According to the regulations, phase 6 becomes effective when a new virus is spreading uncontrollably in several regions of the world. The regulations say nothing about the severity of the disease.

In fact, the vast majority of experts on epidemics automatically associate the term "pandemic" with truly aggressive viruses. On the WHO Web site, the answer to the question "What is a pandemic?" included mention of "an enormous number of deaths and cases of the disease" -- until May 4, 2009. That was when a CNN reporter pointed out the discrepancy between this description and the generally mild course of the swine flu. The language was promptly removed.

Apparently German infectious disease experts also misunderstood the official WHO definition of phase 6. An influenza epidemic, according to Germany's national pandemic plan -- updated in 2007 -- is "a long-lasting, international situation involving substantial loss...and causing such lasting damage as to jeopardize or destroy the livelihood of large numbers of people."

The situation on June 11, 2009 did not correspond with these descriptions. Critics were already asking derisively whether the WHO had any plans to declare the latest outbreak of the common cold a pandemic. "Sometimes some of us think that WHO stands for World Hysteria Organization," says Richard Schabas, the former chief medical officer for Canada's Ontario Province.

12.2.3 'Fine-Tuning' the Definition of Pandemic

When Chan reached her decision, she knew that dozens of countries, including Great Britain, China and Japan, had warned against prematurely raising the warning phase to 6. Hong Kong's health minister had

said: "The system of pandemic levels needs to be revised." Epidemiologist Mackenzie says, in retrospect: "We need to fine-tune phase 6 so that the severity of the disease is also taken into account." In May 2009, even the WHO itself considered amending the criteria in the way Mackenzie suggested, but then it changed its mind.

The warnings faded away. Why? Because regulations are simply regulations? Because health officials decided to err on the side of caution? One thing is clear, though. A party with strong connections in Geneva had a strong interest in phase 6 being declared as quickly as possible: the pharmaceutical industry.

"The pharmaceutical industry did not influence any of our decisions," says Fukuda. But in mid-May, about three weeks before the swine flu was declared a pandemic, 30 senior representatives of pharmaceutical companies met with WHO Director-General Chan and United Nations Secretary General Ban Ki Moon at WHO headquarters. The official reason for the meeting was to discuss ways to ensure that developing countries would be provided with pandemic vaccine. But at this point in time the vaccine industry was mainly interested in one question: the decision to declare phase 6.

Everything hung on this decision. At stake was nothing less than a move to supply large segments of the world's population with flu vaccine. Phase 6 acted as a switch that would allow bells on the industry's cash registers to ring, risk-free. That's because many pandemic vaccine contracts had already been signed. Germany, for example, signed an agreement with the British firm GlaxoSmithKline (GSK) in 2007 to buy its pandemic vaccine -- as soon as phase 6 was declared. This agreement could explain why Professor Roy Anderson, one key scientific advisor to the British government, declared the swine flu a pandemic on May 1. What he neglected to say was that GSK was paying him an annual salary of more than €130,000 (\$177,000).

In mid-June, 2009, the head of GSK's German division urged Health Minister Ulla Schmidt "to confirm the delivery stipulated under the contract as soon as possible." He also asked the health minister of the eastern state of Thuringia to "promptly provide us with binding confirmation of the contractually stipulated orders of the German states." Similar letters were sent to other German states.

July 4, 2009: It's revealed that Rupert Grint has contracted swine flu. "At first I thought I was going to die," says the actor, who portrays the character Ron Weasley in the "Harry Potter" films, "but then I just got a sore throat."

July 14, 2009: In Germany, 727 people are officially infected, but no deaths have been reported.

August 2009: The Australian flu season has ended. In the absence of a vaccine, only 190 people have died by the end of the season -- a significantly smaller number than in a normal flu season.

Aug. 29, 2009: A SPIEGEL survey shows that only 13 percent of Germans want to be vaccinated.

Sept. 7, 2009, Offices of the State of Thuringia, Berlin

A special summit on Berlin's Mohrenstrasse. The state health ministers arrived, one after another. The purpose of the meeting was to decide whether more vaccine should be ordered. Everyone knew it was election season in Berlin, and Ulla Schmidt had made it abundantly clear that "everyone who wants to be vaccinated can be vaccinated. I expect that the states will live up to their responsibility." The minister was extremely careful not to create the impression that she was depriving the population of anything.

It was a warm, late summer afternoon, but the mood at the meeting was icy. "Ahead of the crisis, the federal government placed us under massive pressure to order more vaccine," says Dietrich Wersich, a

member of the conservative Christian Democratic Union (CDU) and Hamburg's health senator. "But it was clear to all of us that there was very little willingness within the population to get vaccinated."

Meanwhile, a debate had erupted over whether Germany had chosen the wrong vaccine, Pandemrix. It contained a new type of agent designed to boost its effectiveness, known as an adjuvant, which had never undergone large-scale human trials in connection with the swine flu antigen. Were millions of people about to receive a vaccine that had hardly been tested? "This is a large-scale experiment on the German people!" warned Wolfgang Becker-Brüser, publisher of the medical journal Arznei-Telegramm.

In theory, says former PEI President Löwer, it would have been possible to approve an adjuvant-free swine flu vaccine in Germany. But the contracts for Pandemrix had been signed in 2007, and they came into effect automatically when the WHO decided to declare phase 6. Germany was in a bind.

The disgruntled state health ministers pointed out that the 50 million vaccine doses that been ordered had already cost the states half a billion euros. Was it truly necessary to order more, they asked?

The ministers felt pressured from all sides. On the one hand, the media were stoking fears of the virus. The German tabloid newspaper Bild, in particular, was printing new tales of horror almost daily. On the other hand, the pharmaceutical companies were upping the pressure and constantly setting new ultimatums.

'Miserable Advice' from the Health Institutes

The ministers attending the meeting in Berlin still remembered all too clearly how drug maker Roche had urged the German states to buy the flu medication Tamiflu. On April 30, at 3:28 p.m., the ministers had received an email from the Thuringia health ministry, under the subject line "Urgent: Roche offer." It read, "Roche has just informed us that it still has an inventory of 180,000 packages of Tamiflu. They are making this inventory available to the states until 4:30 p.m. today. Otherwise the inventory will be used to service other inquiries from wholesalers, etc." In fact, however, there had been no reports of any serious supply bottlenecks at any time.

The infectious disease experts at the Robert Koch Institute (RKI) and PEI were also applying pressure to the state health ministers. "We felt that we were getting miserable advice at the time," says Social Democrat Hermann Schulte-Sasse, a member of the Bremen State Council. "The institutes were no help to us in terms of preventing scaremongering."

Instead, the RKI and PEI were coming up with new alarming numbers. In June, the experts warned that Germany could expect up to 80,000 deaths, and "€15 billion to €45 billion in lost production."

One of the health ministers at the Berlin meeting was outraged that the researchers had not told them about new studies that suggested a single vaccination appeared to be sufficient for the swine flu. If it was true, the states stood to save a lot of money, because the 50 million doses they had already ordered would be enough for 50 million people, not a mere 25 million people as described in the original plan. Ordering more vaccine would be unnecessary.

All eyes were on RKI President Jörg Hacker. "The random samples have been too small up to now," he said, seeking to downplay the issue. It was a situation for which Hacker -- a scientist, not a politician -- was poorly prepared.

If a single dose was sufficient, it meant not only that the states could manage with a lot less vaccine; it was also a strong indication that the population was by no means at the mercy of the virus. The dangers of swine flu, in other words, may have been far smaller than previously thought.

But the all-clear signal didn't reach anyone in the room. The ministers reluctantly agreed to keep an option to buy 18 million more doses of vaccine from yet another pharmaceutical company, Novartis.

Oct. 9, 2009: Wolf-Dieter Ludwig, an oncologist and chairman of the Drug Commission of the German Medical Association, says: "The health authorities have fallen for a campaign by the pharmaceutical companies, which were plainly using a supposed threat to make money."

Oct. 21, 2009: A BILD newspaper headline, printed in toxic yellow, warns: "Swine Flu Professor Fears 35,000 Dead in Germany!" The professor's name is Adolf Windorfer, and when pressed, he admits that he has received payments from the industry, including GSK and Novartis. Next to the BILD headline is an ad for the German Association of Pharmaceutical Companies.

Nov. 28, 2009: The swine flu begins to subside in Germany. Hardly anyone wants to be vaccinated.

Dec. 8, 2009: English road crews run out of grit to treat the country's icy roads. Paul Flynn, a Labour MP in the British Parliament, proposes using the government's unused Tamiflu pills instead. A study by the Cochrane Collaboration has shown that the flu medication was relatively ineffective.

Jan. 7, 2010: RKI President Hacker, warning of a new wave of the flu, says: "The vaccine is still needed because the virus is still here."

Jan. 26, 2010: Wolfgang Wodarg, a member of the German parliament, tells the European Council in Strasbourg that "millions of people worldwide were vaccinated for no good reason." According to Wodarg, the WHO's classification of the swine flu as a pandemic have earned the pharmaceutical companies \$18 billion in additional revenues. Annual sales of Tamiflu alone have jumped 435 percent, to €2.2 billion.

March 5, 2010: German states propose selling 10 million doses of surplus doses of the swine flu vaccine Pandemrix to Pakistan.

Early March 2010, WHO Headquarters

The SHOC room is now being used for other emergencies, including the coordination of aid for earthquake victims in Haiti. But often the room is empty.

The mood at the WHO has grown less tense. The press office is no longer staffed around the clock. The tent set up for journalists in the employee parking lot is gone. IT specialist Jered Markoff no longer receives phone calls in the middle of the night. And influenza expert Keiji Fukuda is happy to spend time on his hobby -- playing cello -- once again.

What was this pandemic? Was it all just "good practice for an emergency," as WHO advisor and industry lobbyist Osterhaus puts it? Did the authorities do everything right, as Australian epidemiologist John Mackenzie insists?

Certainly not. No one at the WHO, RKI or PEI should feel proud of themselves. These organizations have gambled away precious confidence. When the next pandemic arrives, who will believe their assessments?

Perhaps they should have followed the example of Ewa Kopacz, the Polish health minister. The 53-year-old physician, a member of the free-market Civic Platform, has a reputation for courting controversy.

When she stepped up to the podium in the Polish parliament, the Sejm, during its vaccine debate, she wore a bright-red dress -- her combat gear. "As a doctor, my first obligation is to harm no one," she said.

For this reason, she added, Poland was not going to follow in the rest of Europe's footsteps. "We will not purchase any vaccine against the swine flu," Kopacz told the Sejm.

Politicians grumbled, but the health minister stood her ground. "Is it my duty to sign agreements that are in the interest of Poles, or in the interest of the pharmaceutical companies?" she asked.

Today, Europe can admire her steadfastness. About 170 people died of the swine flu in Poland, a much lower number than the annual death toll attributable to the seasonal flu.

A 1.3-meter (4'3") bronze statue weighing 70 kilograms now stands on the village square in La Gloria, in the mountains of Mexico -- a likeness of Edgar Hernandez, the miracle boy who first defeated the swine flu.

PHILIP BETHGE, KATRIN ELGER, JENS GLÜSING, MARKUS GRILL, VERONIKA HACKENBROCH, JAN PUHL, MATHIEU VON ROHR, GERALD TRAUFETTER

Translated from the German by Christopher Sultan

13. The fake Ebola pandemic

PART IV: THE ROLE OF SPECIFIC INDIVIDUALS

14. The case of Albert Osterhaus

https://www.spiegel.de/international/world/reconstruction-of-a-mass-hysteria-the-swine-flu-panic-of-2009-a-682613.html

https://twitter.com/sabhlok/status/1332775724017717249

14.1 WHO 'Swine Flu Pope' under investigation for gross conflict of interest

by F. William Engdahl

The man with the nickname "Dr Flu", Professor Albert Osterhaus, of the Erasmus University in Rotterdam Holland has been named by Dutch media researchers as the person at the center of the worldwide Swine Flu H1N1 Influenza A 2009 pandemic hysteria. Not only is Osterhaus the connecting person in an international network that has been described as the Pharma Mafia, he is THE key advisor to WHO on influenza and is intimately positioned to personally profit from the billions of euros in vaccines allegedly aimed at H1N1.

Earlier this year the Second Chamber of the Netherlands Parliament undertook an investigation into alleged conflicts of interest and financial improprieties of the well-known Dr. Osterhaus. Outside of Holland and the Dutch media, the only note of the sensational investigation into Osterhaus' business affairs came in a tiny note in the respected British magazine, Science.

Osterhaus's credentials and expertise in his field were not in question. What is in question, according to a short report published by the journal Science, are his links to corporate interests that stand to potentially profit from the swine flu pandemic. Science carried the following brief note in its October 16, 2009 issue about Osterhaus:

"For the past 6 months, one could barely switch on the television in the Netherlands without seeing the face of famed virus hunter Albert Osterhaus talking about the swine flu pandemic. Or so it has seemed. Osterhaus, who runs an internationally renowned virus lab at Erasmus Medical Center, has been Mr. Flu. But last week, his reputation took a nosedive after it was alleged that he has been stoking pandemic fears to promote his own business interests in vaccine development. As Science went to press, the Dutch House of Representatives had even slated an emergency debate about the matter." [1]

On November 3, 2009 it appeared that Osterhaus emerged with at least the damage somewhat under control. An updated Science blog noted, "The House of Representatives of the Netherlands today rejected a motion asking the government to sever all ties with virologist Albert Osterhaus of Erasmus Medical Center in Rotterdam, who had been accused of conflicts of interest in his role as a government adviser. But Dutch health minister Ab Klink, meanwhile, announced a "Sunshine Act" compelling scientists to disclose their financial ties to companies." [2]

The Minister, Ab Klink, reportedly a personal friend of Osterhaus, [3] subsequently issued a statement on the ministry's website, claiming that Osterhaus was but one of many scientific advisers to the ministry on vaccines for H1N1, and that the Ministry "knew" about the financial interests of Osterhaus. [4] Nothing out of the ordinary, merely pursuit of science and public health, so it seemed.

More careful investigation into the Osterhaus Affair suggests that the world-renowned Dutch Virologist may be at the very center of a multi-billion Euro pandemic fraud which has used human beings in effect as human guinea pigs with untested vaccines and in cases now emerging, resulting in deaths or severe bodily paralysis or injury.

The 'Bird Shit Hoax'

Albert Osterhaus is no small fish. He stands at the global nexus of every major virus panic of the past decade from the mysterious SARS deaths in HongKong, where current WHO Director Margaret Chan got her start in her career as a local health official. According to his official bio at the European Commission, Osterhaus was engaged in April 2003, at the height of the panic over SARS (Severe Acquired Respiratory

Syndrome) in investigation of the Hong Kong outbreak of respiratory illnesses. The EU report states, "he again showed his skill at moving fast to tackle a serious problem. Within three weeks he had proved that the disease was caused by a newly discovered coronavirus that resides in civet cats, other carnivorous animals or bats." [5]

Then Osterhaus moved on as SARS cases vanished from view, this time publicizing dangers of what he claimed was H5N1 Avian Flu. In 1997 he had already began sounding the alarm following the death in Hong Kong of a three-year-old who Osterhaus learned had had direct contact with birds. Osterhaus went into high gear lobbying across Holland and Europe claiming that a deadly new mutation of avian flu had jumped to humans and that drastic measures were required. He claimed to be the first scientist in the world to show that H5N1 could be transferred into humans. [6]

In a BBC interview in October 2005 on the danger of Avian Flu, Osterhaus declared, "...if the virus manages indeed to, to mutate itself in such a way that it can transmit from human to human, then we have a completely different situation, we might be at the start of the pandemic." He added, "there is a real chance that this virus could be trafficked by the birds all the way to Europe. There is a real risk, but nobody can estimate the risk at this moment, because we haven't done the experiments." [7] It never did manage to mutate, but he was ready to "do the experiments," presumably for a hefty fee.

To bolster his frightening pandemic scenario, Osterhaus and his lab assistants in Rotterdam began assiduously assembling and freezing samples of, well, bird shit, in an attempt to build a more scientific argument. He claimed that at certain times of the year up to 30% of all European birds acted as carriers of the deadly avian virus, H5N1. He also claimed that farmers working with hens and chickens were then exposed. Osterhaus briefed journalists who dutifully noted his alarm. Politicians were alerted. He wrote papers proposing that the far away deaths in Asia from what he termed H5N1 were coming to Europe, presumably on the wings or in the innards of deadly sick infected birds. He claimed that migratory birds were carrying the deadly new disease as far west as Rügen and Ukraine. [8] He conveniently ignored the fact that birds do not migrate east to west but rather north to south.

Osterhaus' Avian Flu alarm campaign really took off in 2003 when a Dutch veterinary doctor became ill and died. Osterhaus claimed the death was from H5N1. He convinced the Dutch government to order slaughter of millions of chickens. Yet no other infected persons died from the alleged H5N1. Osterhaus claimed that that was simply proof of the effectiveness of the preemptive slaughter campaign. [9]

Osterhaus claimed that bird feces were the source, via air bombardment or droppings, onto populations and birds below. That was the vehicle for the spread of the deadly new Asian strain of H5N1 he insisted.

There was only one problem with the now voluminous frozen samples of diverse bird excrement he and his associates had collected and frozen at his institute. There was not one single confirmed example of H5N1 virus found in any of his samples. At a May 2006 Congress of the World Organization for Animal Health (OIE), Osterhaus and his Erasmus colleagues were forced to admit that in testing 100,000 samples of their assiduously saved bird feces, they had discovered not one single case of H5N1 virus. [10]

At a WHO conference in Verona in 2008 titled "Avian influenza at the Human-Animal Interface," in a presentation to scientific colleagues undoubtedly less impressed by appeals to pandemic emotion than the non-scientific public, Osterhaus admitted that "A proper risk assessment of H5N1 as the cause of a new pandemic cannot be made with the currently available information." [11] By then, however, his sights were already firmly on other possible pandemic triggers to focus his vaccination activities.

Swine Flu and WHO corruption

When no mass wave of human deaths from Avian Flu materialized and after Roche, maker of Tamiflu, and GlaxoSmithKline had banked billions of dollars in profits from worldwide government stockpiling of their dangerous and reportedly ineffective antiviral drugs - Tamiflu by Roche and Relenza by GlaxoSmithKline - Osterhaus and other WHO advisers turned to other greener pastures.

By April 2009 their search seemed rewarded as La Gloria, a small Mexican village in Veracruz, reported a case of a small child ill with what had been diagnosed as "Swine Flu" or H1N1. With indecent haste the propaganda apparatus of the World Health Organization in Geneva went into gear with statements from the director-general Dr Margaret Chan, about a possible danger of a global pandemic.

Chan made such irresponsible statements as declaring "a public health emergency of international concern." [12] The further cases of outbreak at La Gloria Mexico were reported on one medical website as, "a 'strange' outbreak of acute respiratory infection, which led to bronchial pneumonia in some pediatric cases. According to a local resident, symptoms included fever, severe cough, and large amounts of phlegm." [13]

Notably those were symptoms which would make sense in terms of the proximity of one of the world's largest pig industrial feeding concentrations at La Gloria owned by Smithfield Farms of the USA. Residents had picketed the Smithfield Farms site in Mexico for months complaining of severe respiratory problems from the fecal waste lagoons. That possible cause of the diseases in La Gloria apparently did not interest Osterhaus and his colleagues advising the WHO. The long-awaited "pandemic" that Osterhaus had predicted ever since his involvement with SARS in the Guandgong Province of China in 2003, was now finally at hand.

On June 11, 2009 Margaret Chan of WHO made the declaration of a Phase 6 "Pandemic Emergency" regarding the spread of H1N1 Influenza. Curiously in announcing it, she noted, "On present evidence, the overwhelming majority of patients experience mild symptoms and make a rapid and full recovery, often in the absence of any form of medical treatment." She then added, "Worldwide, the number of deaths is small...we do not expect to see a sudden and dramatic jump in the number of severe or fatal infections."

It later was learned that Chan acted, following heated debates inside WHO, on the advice of the scientific advisory group of WHO, or SAGE, the Strategic Advisory Group of Experts. One of the members of SAGE at the time and today was Dr. Albert "Mr Flu" Osterhaus.

Not only was Osterhaus in a key position to advocate the panic-inducing WHO "Pandemic emergency" declaration. He was also chairman of the leading private European Scientific Working group on Influenza (ESWI), which describes itself as a "multidisciplinary group of key opinion leaders in influenza [that] aims to combat the impact of epidemic and pandemic influenza." Osterhaus' ESWI is the vital link as they themselves describe it, "between the World Health Organization (WHO) in Geneva, the Robert Koch Institute in Berlin and the University of Connecticut, USA."

What is more significant about the ESWI is that its work is entirely financed by the same pharma mafia companies that make billions on the pandemic emergency as governments around the world are compelled to buy and stockpile vaccines on declaration of a WHO Pandemic. The funders of ESWI include H1N1 vaccine maker Novartis, Tamiflu distributor, Hofmann-La Roche, Baxter Vaccines, MedImmune, GlaxoSmithKline, Sanofi Pasteur and others.

Not to lose the point, the world-leading virologist, official adviser on H1N1 to the governments of the UK and Holland, Dr Albert Osterhaus, head of the Department of Virology at the Erasmus Medical College of Rotterdam, also sat on the WHO's elite SAGE and served as chairman at the same time of the pharma industry-sponsored ESWI, which in turn urged dramatic steps to vaccinate the world against the grave danger of a new Pandemic they insisted could rival the feared 1918 Spanish Flu pandemic.

The Wall Street bank, JP Morgan, estimated that in large part as a result of the WHO pandemic decision, the giant pharma firms that also finance Osterhaus' ESWI work, stand to reap some €7.5 to €10 billion in profits. [14]

A fellow member of WHO's SAGE is Dr Frederick Hayden, of Britain's Wellcome Trust and reportedly a close friend of Osterhaus. Hayden also receives money for "advisory" services from Roche and GlaxoSmithKline among other pharma giants involved in producing products related to the H1N1 panic.

Chairman of WHO's SAGE is another British scientist, Prof. David Salisbury of the UK Department of Health. He also heads the WHO H1N1 Advisory Group. Salisbury is a robust defender of the pharma industry. He has been accused by UK citizen health group One Click of covering up the proven links between vaccines and an explosive rise in infant autism as well as links between the vaccine Gardasil and palsy and even death. [15]

Then on September 28, 2009 the same Salisbury stated, "There is a very clear view in the scientific community that there is no risk from the inclusion of Thiomersal." The vaccine being used for H1N1 in Britain is primarily produced by GlaxoSmithKlilne. It contains the mercury preservative Thiomersol. Because of growing evidence that Thiomersol in vaccines might be related to autism in children in the

United States, in 1999 the American Academy of Pediatrics and the US Public Health Service called for it to be removed from vaccines. [16]

Yet another SAGE member at WHO with intimate financial ties to the vaccine makers that benefit from SAGE's recommendations to WHO is Dr. Arnold Monto, a paid consultant to vaccine maker MedImmune, Glaxo and ViroPharma.

Even more, the meetings of the "independent" scientists of SAGE are attended by "observers" who include, yes, the very vaccine producers GlaxoSmithKline, Novartis, Baxter and company. One might ask if the SAGE are supposed to be the world's leading experts on flu and vaccines, why they would ask the vaccine makers to sit in.

In the past decade the WHO, in order to boost funds at its disposal entered into what it calls "public private partnerships." Instead of receiving its funds solely from member United Nations governments as its original purpose had been, WHO today receives almost double its normal UN budget in the form of grants and financial support from private industry. The industry? The very drug and vaccine makers who benefit from decisions like the June 2009 H1N1 Pandemic emergency declaration. As the main financiers of the WHO bureaucracy, naturally the Pharma Mafia and their friends receive what has been called "open door red carpet treatment" in Geneva. [17]

In an interview with Der Spiegel magazine in Germany, epidemiologist Dr. Tom Jefferson of the Cochrane Collaboration, an organization of independent scientists evaluating all flu related studies, noted the implications of the privatization of WHO and the commercialization of health:

"...one of the extraordinary features of this influenza — and the whole influenza saga — is that there are some people who make predictions year after year, and they get worse and worse. None of them so far have come about, and these people are still there making these predictions. For example, what happened with the bird flu, which was supposed to kill us all? Nothing. But that doesn't stop these people from always making their predictions. Sometimes you get the feeling that there is a whole industry almost waiting for a pandemic to occur.

SPIEGEL: Who do you mean? The World Health Organization (WHO)? Jefferson: The WHO and public health officials, virologists and the pharmaceutical companies. They've built this machine around the impending pandemic. And there's a lot of money involved, and influence, and careers, and entire institutions! And all it took was one of these influenza viruses to mutate to start the machine grinding... [18]

When asked if the WHO had deliberately declared the Pandemic Emergency in order to create a huge market for H1N1 vaccines and drugs, Jefferson replied,

"Don't you think there's something noteworthy about the fact that the WHO has changed its definition of pandemic? The old definition was a new virus, which went around quickly, for which you didn't have immunity, and which created a high morbidity and mortality rate. Now the last two have been dropped, and that's how swine flu has been categorized as a pandemic." [19]

Conveniently enough, the WHO published the new Pandemic definition in April 2009 just in time to allow WHO, on advice of SAGE and others like Albert "Dr Flu" Osterhaus and David Salisbury, to declare the mild cases of flu dubbed H1N1 Influenza A to be declared Pandemic Emergency. [20]

In a relevant footnote, the Washington Post on December 8 in an article on the severity, or lack of same, of the world H1N1 "pandemic" reported that, "with the second wave of H1N1 infections having crested in the United States, leading epidemiologists are predicting that the pandemic could end up ranking as the mildest since modern medicine began documenting influenza outbreaks." [21]

Russian Parliamentarian and chairman of the Duma Health Committee, Igor Barinow has called on the Russian Representative to WHO in Geneva to order an official investigation into the growing evidence of massive corruption of the WHO by the pharmaceutical industry. "There are grave accusations of corruption within the WHO," said Barinow. "An international commission of inquiry is urgently required." [22]

15. The case of Neil Ferguson

https://twitter.com/sabhlok/status/1332782494492491776

By mid-April almost all epidemiological models had been found to have wildly over-estimated likely deaths. For example, models reportedly based on Neil Ferguson's work had suggested that over 95,000 would die in Sweden without lockdowns⁴⁷. To date 5,893 have died.

1) Role of Neil Ferguson's modelling

It is possible that Neil Ferguson's 16 March 2020 Imperial College paper, entitled, "Impact of non-pharmaceutical interventions (NPIs) to reduce Covid-19 mortality and healthcare demand" might have had something to do with the progression of events. (Neil Ferguson was the lead author with 30 other co-authors. But as he has been the main spokesperson so, for the sake of simplicity, I will cite him as the paper's author in book.)

Although the paper was not peer-reviewed and although its model's source code was not published, his findings were treated as highly significant by the global media. For instance, the *Washington Post* reported on 18 March 2020⁴⁹:

The new forecasts, by Neil Ferguson and his colleagues at the Imperial College COVID-19 Response Team, were quickly endorsed by Johnson's government to design new and more extreme measures to suppress the spread of the virus.

The Imperial College London group reported that if nothing was done by governments and individuals and the pandemic remained uncontrolled, 510,000 would die in Britain and 2.2 million in the United States over the course of the outbreak.

It is hard to imagine a more innocuous cause of a Great Hysteria than an academic paper. It also appears that while there were a number of other, less "scary" estimates in the paper, the media chose the scariest projections which then stuck for many months in the minds of the people.

Although I was not aware of it at that stage, it is well-known among those who study such things that virtually all epidemiological models have a long history of over-estimating risks. The media obviously did not have anyone with the training of Richard Epstein⁵⁰ to ask questions, so the worst-case scenario appears to have become the most likely scenario in the minds of the people.

Johan Giesecke, the former chief scientist for the European Centre for Disease Control and Prevention, was quick to oppose Ferguson's calamitous estimates. On 28 March 2020 he said that Ferguson's model is "one of the most wrong" papers ever published⁵¹. Later, Anders Tegnell of Sweden got the model investigated by his team and has repeatedly stated in the media that he does not agree with Ferguson's findings.

⁴⁷ Miltimore, Jon, "Sweden's Actual COVID-19 Results Compared to What Modelers Predicted in April", Foundation for Economic Freedom, 28 July 2020. Short URL: https://bit.ly/3inEJMK.

⁴⁸ Ferguson, Neil M, et. al. "Impact of non-pharmaceutical interventions (NPIs) to reduce Covid-19 mortality and healthcare demand", 16 March 2020. Short URL: https://bit.ly/3cvm4O3.

⁴⁹ Booth, William, "A chilling scientific paper helped upend U.S. and U.K. coronavirus strategies", *Washington Post*, 18 March 2020. Short URL: https://wapo.st/2Sp4EZY

⁵⁰ Epstein, Richard A., "Monday, March 23, 2020 reduce COVID-19 mortality and healthcare demand", Hoover Institution, 23 March 2020. Short URL: https://hvr.co/3j56mvo.

⁵¹ Rushton, Katherine, and Foggo, Daniel, "Neil Ferguson, the scientist who convinced Boris Johnson of UK coronavirus lockdown, criticised in past for flawed research", *The Telegraph*, 28 March 2020. Short URL: https://bit.ly/33mkpXV

To get a sense of how wrong Ferguson' upper end estimate was, here's what a 29 July 2020 article reported⁵²:

On May 10, Dagens Nyheter – Sweden's biggest daily newspaper – analysed a pair of models inspired by the Imperial College of London study, which predicted as many as 40 million people could die if the coronavirus was left unchecked. The models predicted that Sweden's ICUs (intensive care units) would expire before May and nearly 100,000 people would die from COVID-19 by July.

"Our model predicts that, using median infection-fatality-rate estimates, at least 96,000 deaths would occur by 1 July without mitigation," the authors wrote.

Total COVID-19 deaths in Sweden stand at 5,700, nearly 90,000 less than modellers predicted. Hospitals were never overrun. Daily deaths in Sweden have slowed to a crawl. The health agency reports no new ICU admissions.

As at the time of writing this book, total COVID-19 deaths in Sweden now stand at 5,893. Sweden did not impose lockdowns without which Ferguson apparently thought they would face calamity. Instead, Sweden followed well-established science to flatten the curve through voluntary social distancing and age-based risk management.

Reports suggest that Sweden's overall death rate this year per million is tracking close to its average death rate for the past five years. The overall death rate in Sweden this year is also not very different to death rates in previous "bad flu" years. So much for Ferguson's upper-end estimates.

Recently, the scientist Mike Yeadon has said that "no serious scientist gives any validity" to Ferguson's model⁵³. "It's important that you know most scientists don't accept that it [Ferguson's model] was even faintly right…but the government is still wedded to the model".

But these debates among professional scientists would not have mattered had Ferguson's model not been picked up by the media. It is not possible to place the blame for the Great Hysteria on Neil Ferguson. He surely did not intend it. Like any other academic, he put out a paper. The media has much explaining to do.

It also appears that similar over-estimates were being churned within Victoria by a few well-known institutes. Any future Royal Commission must investigate whether the models used by the Victorian Government were scientifically valid. More importantly, whether Treasury officials (many of whom have significant mathematical skills) were involved in cross-checking these models, or did groupthink prevail.

, initial models (such as those based on the work of Neil Ferguson from the Imperial College) had suggested that Sweden would experience over 95,000 deaths from COVID-19 without lockdowns, with a bulk of these deaths occurring in April 2020. As at 10 November 2020, 6,022 have reportedly died in Sweden from (or with) COVID-19. And, as Sweden's State Epidemiologist Anders Tegnell regretfully admits, many, if not most of these deaths could have been averted had Sweden deployed more resources into its aged-care homes in the early days of the pandemic.

A) Professor Neil Ferguson has repeatedly put out exaggerated estimates not just for this but for many prior pandemics. He has no credibility in the scientific profession. Johan Giesecke, the former chief scientist for the European Centre for Disease Control and Prevention, has opposed Ferguson's calamitous estimates. On 28 March 2020 he said that Ferguson's model is "one of the most wrong" papers ever published⁵⁴. Later, Anders Tegnell of Sweden got the model investigated by his team and has repeatedly stated in the media that he does not agree with Ferguson's findings.

⁵² Miltimore, Jon, "Sweden's Actual COVID-19 Results Compared to What Modelers Predicted in April", Foundation for Economic Freedom, 28 July 2020. Short URL: https://bit.ly/3inEJMK.

⁵³ Lopez, Ralph, "Former Chief Science Officer for Pfizer Says 'Second Wave' Faked on False-Positive COVID Tests, "Pandemic is Over", HubPages, 1 October 2020. Short URL: https://bit.ly/2RZZV0F.

⁵⁴ Rushton, Katherine, and Foggo, Daniel, "Neil Ferguson, the scientist who convinced Boris Johnson of UK coronavirus lockdown, criticised in past for flawed research", *The Telegraph*, 28 March 2020. Short URL: https://bit.ly/33mkpXV

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⁵⁵ Miltimore, Jon, "Sweden's Actual COVID-19 Results Compared to What Modelers Predicted in April", Foundation for Economic Freedom, 28 July 2020. Short URL: https://bit.ly/3inEJMK.

⁵⁶ Lopez, Ralph, "Former Chief Science Officer for Pfizer Says 'Second Wave' Faked on False-Positive COVID Tests, "Pandemic is Over", HubPages, 1 October 2020. Short URL: https://bit.ly/2RZZV0F.

16. The case of Anthony Fauci

B) Likewise, there is **Dr Anthony Fauci**. Governor Kristi Noem of South Dakota said⁵⁷ on 15 October 2020 that Fauci had told her that she would need 10,000 beds at a time without lockdowns. But she refused to implement any lockdown and the maximum beds she needed at any point in time were just 200. Fauci is just the typical scare-monger of the type cited in the World Health Organisation's 2011 Bulletin.⁵⁸

⁵⁷ https://www.youtube.com/watch?v=R6HQm3ZzyhM

⁵⁸ https://www.who.int/bulletin/volumes/89/7/11-089086/en/

17. END NOTES

NOTES FROM IRNENE – note that I do not agree to any government funding of science, so I'll review this material later.

In contrast to the US, in Australia funding by govt for science is now mainstream (eg. bodies such as ARC, NHMRC, CSIRO). It can be argued that there should be nothing untoward about this per se – however the mechanism by which funding is allocated can been skewed towards those who may be stronger lobbyists or are performing science that supports a prevailing and consensus view (eg. Global warming is a result of human activity). Funding is extremely competitive and to that end, there is supposed to be an impartial and objective peer-review process to ensure only quality, well thought out science receives funding. However, as the reviews are generally conducted by scientists that already have funding success (irrespective of the quality of their science), this peer-review process can be slighted so that funding can be directed away from science that may challenge and question the prevailing hypotheses. In this way, funding allocation can be perverted and thus may continue to be channelled to projects that continue to perpetuate a mainstream view that may in effect be false and incorrect. Further research and resulting publications undoubtedly support the more successful academic and scientists and it will be in their own interest to perpetuate this funding-research circle (even if at times this may go against their core values).

This scenario is in effect a threat to academic freedom and individuals that speak out and challenge the mainstream, are sometimes left on the periphery with damaging consequence to themselves — see examples:

https://www.smh.com.au/national/academic-freedom-on-trial-as-sacked-professor-asks-high-court-to-decide-20200729-p55gph.html

https://www.irishtimes.com/news/ireland/irish-news/ucd-professor-asked-to-resign-from-eucommittee-over-covid-19-claims-1.4277698

Some other articles of interest about funding, academia and research:

https://explorable.com/research-grant-funding

https://www.nationalreview.com/2020/09/federal-funding-academic-science-research-needs-reform/

https://www.theguardian.com/lifeandstyle/2016/dec/12/studies-health-nutrition-sugar-coca-colamarion-nestle

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https://twitter.com/sabhlok/status/1335680424685649920

https://www.bitchute.com/video/Hmxo720ccw4V/