Chapter 3

BENEFITS AND RISKS OF COVID-19 VACCINATION

THE KEY INFLUENTIAL PLAYERS IN THE COVID-19 PANDEMIC

Because the current COVID-19 pandemic is such a unique event in human history, particularly from a sociopolitical point of view, the key influential players in the politics of this pandemic need first to be considered to better understand its dynamics and evaluate the data on the risks and benefits of COVID-19 vaccination in order to make better educated decision.

This general preliminary consideration can be summarized in one question, how much should a reasonable person trust and rely on the key influential players in this pandemic, which are the good old medical profession, the corrupted and fraudulent vaccine industry and the complicit governments and large corporate media?

The Good Old Medical Profession

How trustworthy shall we be of the good old medical profession whose roots are still embedded in the heroic practice of medicine, which still acts as if disease processes, such as fever* or inflammation, needs to be combated;† whose ethical values didn't prevent it from supporting the tobacco industry for many decades in the first half of the twentieth century,[1] or from waging a vicious war against the more effective, safe and wise alternative medical approaches;[2]‡ or for its inertia regarding the insufficiency

---

* "For COVID-19, many public health organizations have advised treating fever with medicines such as acetaminophen or ibuprofen. Even though this is a common practice, lowering body temperature has not improved survival in laboratory animals or in patients with infections. Blocking fever can be harmful because fever, along with other sickness symptoms, evolved as a defense against infection." (Wrotek, Sylwia, et al. "Let fever do its job: the meaning of fever in the pandemic era." *Evolution, medicine, and public health* 9.1 (2021): 26-35.)

† A brief overview of the heroic practice of medicine is presented in the third section of this book, which is entitled *A Very Brief Overview of the Evolution of the Different Paradigms in Medicine*.

‡ See the Epilogue at the end of this book, which is entitled *Lessons That Failed to Be Learned From the 1918-1919 Spanish Flu Pandemic*.

of nutrition education in medical curricula,[3] iatrogenic diseases,* big pharma's infringement on everyday clinical practice and medical education,[4] on disease mongering and the increased use of prescription drugs,[5,6,7,8] the promotion of an economy of sickness and waste,† the development of antimicrobial resistance infectious diseases[9,10,11,12,13,14,15,16,17,18,19,20,21,22,23] and the pollution of the environment from all the excreted drugs used in conventional medicine?[24,25,26,27,28,29]

Further, populations that have invested their trust in conventional medicine are now facing epidemics of chronic diseases, including cardiovascular diseases,[30,31] diabetes,[32] obesity,[33] osteoporosis,[34] cancer,[35] autoimmune diseases[36] and psychiatric disorders.[37]

How trustworthy shall we be of pediatricians of the conventional medical community who as a whole have categorically said to parents that the changes they have witnessed in personality, behavior and neurodevelopment in their child, often following a high fever and a night of prolonged loud shrieking throughout the night after having received a series of vaccines, have nothing to do with vaccination?

Such a blanket denial by a whole profession is not only unscientific, but breeds distrust.

To make things worse, in April 2019, the American Academy of Pediatric released reports advising its members to dismiss unvaccinated children as patients.[38]

How trustworthy shall we be of a conventional medical profession that forbids physicians to treat COVID-19 patients in the absence of official protocols at the risks of being penalized?

How trustworthy shall we be of the conventional medical profession that does not condemn one of its most influential medical journals when it published a letter signed by

---

* Iatrogenic diseases are likely the first cause of mortality in the more medicalized societies. A review about the realm of iatrogenic diseases is presented in the third section of this book, which is entitled *A Very Brief Overview of the Evolution of the Different Paradigms in Medicine*.

† In January 2018, the American Medical Association published a report entitled *The National Economic Impact of Physicians*, which concluded that the practice of medicine generated $2.3 trillion to the US economy every year. However, award-winning journalist Shannon Brownlee had estimated in her 2010 book *Overtreated: Why Too Much Medicine is Making Us Sicker and Poorer* that one-third to half of what is done in American medicine is waste. It was pointed out in view of that 2018 AMA report that the waste of a minimum estimate of six million jobs and over $1 trillion in economic activity should in fact not be the cause of any celebration by the AMA to the contrary. (John Weeks. The American Medical Association Exposes Barriers to Integrative Health in Economic Impact Paper... plus more. *Integrative Medicine: A Clinician's Journal* 17.3 (2018): 30.)

twenty-seven scientists, who said they had no conflict of interest while strongly supporting the natural origin of SARS-CoV-2 rather than the one from a laboratory, but without providing any scientific evidence to support their assertion, while all the evidence has since pointed out to the opposite?[39]

It was said of this letter, "*The Lancet* statement effectively ended the debate over COVID-19's origins before it began."[40]

Experts in the field asked how *The Lancet* managed to overlook such an enormous conflict of interest, as it was difficult to "imagine a lead investigator with more vested interests!"[41]

To top it all, complicit governments have given full reign to conventional medicine that has been known for a long time to be inept to effectively address virally sick people, like it was during the Spanish flu pandemic and is the case in the current COVID-19 pandemic, which has engendered great fears and anxieties and has not only led to high morbidity and mortality from COVID-19, but also to all the devastating lockdowns, vaccine mandates and shutting down of economies.

The current helplessness displayed by conventional medicine to effectively deal with this pandemic has spread such fears about COVID-19 that it has activated society's behavioral immune system in high alert,* which in turn has led bureaucrats and politicians to dictate mandates and how medicine should be practiced.

For instance, in many places in the world, including North America, patients who were in the early stages of COVID-19 were sent back home from the hospital without receiving any treatment and were told not to return unless they would experience extreme difficulty breathing and at the same time that many physicians who attempted to treat these patients have been admonished at the risk of losing their medical license.

Since when physicians should not treat acutely ill people and wait until they are in severe acute respiratory distress to intervene?

---

* Behavioral immune system is the behavior, which animals and humans adopt by all means to protect the group from sickness. (see Norman Doidge. Know Thy Immunity. Tablet Magazine. https://www.tabletmag.com/sections/science/articles/doidge-plague-journal-immunity)

The overwhelming burden of the public healthcare systems with overcrowded acute care clinics, emergency rooms and intensive care units and the reason for restraining mandates are greatly the result of the ineptitude of the medical system to effectively deal with patients with viral infections, especially in their earlier stages.

Just over a century ago, during the Spanish flu epidemic, it was clear that the conventional medical approach to patients with viral pneumonia was not only ineffective but was in fact dangerous,* while alternative medical approaches proved to be quite effective were being suppressed. Not much has changed since and obviously many lessons have failed to be learned from the Spanish flu pandemic.†

Because of this profound ineptitude of conventional medicine to effectively deal with virally sick people, the entire campaign to fight what appears to be a man-made gain-of-function virus epidemic was focused on vaccines that the industry and some governmental agencies had already been preparing for some years while the virus was being manipulated in the lab and have since been secretive and far from being transparent about it.[42,43,44,45]

People are currently being coerced to receive unsafe vaccines and without receiving informed consent, which is in disregard of the Nuremberg Code.‡

Informed consent is the process in which a healthcare provider educates a patient about the risks, benefits, and alternatives of a given procedure or intervention. The patient must be competent to make a voluntary decision about whether to undergo the procedure or intervention. Informed consent is both an ethical and legal obligation of medical practitioners and originates from the patient's right to direct what happens to their body. “The following are the required elements for documentation of the informed consent discussion: 1) the nature of the procedure, (2) the risks and benefits and the procedure, (3) reasonable alternatives, (4) risks and benefits of alternatives, and (5) assessment of the patient's understanding of elements 1 through 4.”[46]

---

* See the answer to Dr. Steven Novella’s question, *What Do You Consider to Be the Best Clinical Evidence Supporting the Efficacy of Homeopathy for Any Indication?* https://www.homeopathy.ca/debates/

† See the Epilogue at the end of this book, which is entitled *Lessons That Failed to Be Learned From the 1918-1919 Spanish Flu Pandemic*.

‡ See Simon Stilgoe. A letter from a doctor to a health minister. https://cmnnews.org/story/letter-from-a-doctor-to-a-health-minister-T7iSvHSp3c1aADxdwCvoD

Three of the five elements (2, 3 and 4) of informed consent are absent in the current discussion about COVID-19 vaccines, likely due to the state of panic and emergency that have been engendered by the helplessness and ineptitude of conventional medicine.

In these circumstances, the behavioral immune system doesn't accept dissent, including freedom of speech, freedom of choice and open public and scientific debates, as it is in fascist regimes.

How free and democratic societies could have remained calm in the advent of this pandemic and have deployed effective prophylactic and therapeutic means to deal with it, have been described in the Epilogue of this book.

Unfortunately, the public is not told that there exists more effective and safer means to prevent infectious diseases and treat virally infected people than the ones used by conventional medicine with the unfortunate official approbation of governments.*

To add insult to injury, the ineptitude and helplessness of conventional medicine to deal effectively with COVID-19 have far-reaching repercussions for our society from an avoidable amazingly high morbidity and mortality from infection and vaccines, to the panic it created, to the betrayal of the most fundamental institutions and principles of free and democratic societies, to media censorship, including scientific debates, to the polarization and fragmentation of society, families and friendship, to rising

* See the second book of this two-volume series, *The Use of Medicines to Prevent Epidemic Diseases. Scientific Evidence of the Efficacy and Effectiveness of Belladonna to Prevent the Smooth Type of Scarlet Fever—A Systematic Review with Its Documentation and Narratives*.

unemployment,* to destruction of business, to the financial indebtedness societies now have toward an industry that they had greatly funded and finally to an economy of immense waste.

How can any reasonable person who objectively evaluates the performance of conventional medicine and the governments that support it not agree with Shakespeare's Macbeth who already over four hundred years ago didn't want any part of it?, "Throw physic to the dogs, I'll none of it."[47]

In fact, if conventional medicine would request to be regulated in a newly formed country and would honestly state right from the beginning that it is currently the first cause of death in the most medicalized countries, would any government regulate such a profession?

A Corrupted and Fraudulent Vaccine Industry

How much should a reasonable person trust the drug industry in general and the vaccine industry in particular that are tainted with greed, corruption, collusion and fraudulent marketing?

* One of the indirect effects of the current pandemic politics is that is for every 1% rise in unemployment there is an increase of 40,000 deaths in the US population, which is a "good rule of thumb" according to Dr. Harvey Brenner, a public health and epidemiology researcher, who holds professorship at three different universities and who conducted numerous studies that focused on the relationship between economic well-being and community health, including a recent large one for the European Union. This would mean that for the approximate 10% unemployment rate increase in July 2020 that was due to the pandemic politics,* it potentially led to 400,000 deaths that were not directly related to the virus, but to the politics dictated by a helpless and fear-based medical system. (M. Harvey Brenner. *The Impact of Unemployment on Heart Disease and Stroke Mortality in European Union Countries*. European Commission. May 2016.) On another hand, it hindsight it was found that lockdowns have had little to no effect or a 0.2% average reduction on COVID-19 mortality in Europe and the United States. (Herby, Jonas, Lars Jonung, and Steve Hanke. "A Literature Review and Meta-Analysis of the Effects of Lockdowns on COVID-19 Mortality." *Studies in Applied Economics* 200 (2022).) It is interesting to note that when this study conducted by researchers at Johns Hopkins University was published it was ignored by the large media outlets and it was asked, "So why did so many American mainstream media outlets *ignore* a reputable university's study that lockdowns didn't work? New York Times, Washington Post, ABC, NBC and CBS all failed to run the story because they 'have their own narrative written' on the effectiveness of COVID lockdowns. (Melissa Koenig et al. So why did so many American mainstream media outlets. Daily Mail.Com. February 3, 2022. https://www.dailymail.co.uk/news/article-10474269/Mainstream-news-outlets-IGNORE-Johns-Hopkins-study-COVID-lockdowns-reduced-deaths-0-2.html)

In a document published by Global Justice Now and entitled, *The Horrible History of Big Pharma. Why We Can't Leave Pharmaceutical Corporations in the Driving Seat of the Covid-19 Response*, it was stated, "Across the world, governments are handing responsibility for Covid-19 solutions over to big pharmaceutical firms, who have a long track record of prioritizing corporate profit over people's health. ... The current pharmaceutical model is actually deeply flawed, with its drive to make sky-high returns to shareholders, not a healthier population. The pursuit for very high returns incentivises the most appalling behavior."[48]

In recent years the biggest vaccine companies had to pay out over 33 billion in criminal and civil fines for *falsifying data*, bribing doctors and *lying to the public*.[49]

More specifically, Pfizer has been a habitual offender, persistently engaging in illegal and corrupt marketing practices, bribing physicians, conducting trials on African children without their parents' consent and after which some of the children died, manipulating studies, withholding information that its products caused cancer, fraudulent marketing and, most pertinently for the current pandemic, *suppressing adverse trial results*.[50,51,52,53,54,55,56,57,58,59,60,61,62,63]

In the first two published studies of Pfizer on their COVID-19 vaccine trials, 84% of their authors have conflicts of interest.[64,65,66]

It has been known for a long time that sponsorship of drug studies by the manufacturing company tends to be biased with the reporting more favorable efficacy results and conclusions than sponsorship by other sources.[67]

A culture of collusion, as greed is the main incentive, exists in the industry, which controls much of the medical research, education and thinking. Their agenda is not public health, but money for their shareholders.

A leading US editor of a specialist journal estimated that 33% of articles submitted to his journal were ghostwritten by drug companies, but signed by respected scientists.[68]

The well-known author and psychiatrist, Dr. Norman Doidge wrote recently, “These impostures don’t get adequately investigated by Congress because the pharmaceutical and health industries are now the highest-paying lobby in the country, having doled out at least $4.5 billion in the last two decades to politicians of both parties.”[69]

“Pfizer’s political action committee has been the most active, sending 548 checks to various lawmakers and other industry groups—more checks than the actual number of elected officials in the House and Senate.”[70]

In a nutshell, big pharma is corrupted, fraudulent and corrupting and we are asked to put our health, which is our most precious possession, in the trust of a syndicate of criminals and their sociopathic industry.[71]

Lastly, vaccine manufacturers have an easy sail, as they are not liable for adverse events, even deaths. If something goes wrong, people are on their own to obtain disability support.

Complicit Governments

Governments that are supposed to represent and protect the public make up the third arm of this sociopathic beast of greed, collusion and corruption that has been controlling decision-making in this COVID-19 pandemic.

To begin with, it was a grave mistake for society to have permitted vested interests to influence the regulation, education and practice of the art and science of medicine.

In a free and democratic society, what is best for the people and the planet, as a whole, cannot be left to the mercy of vested interests.

Greed corrupts to no end, even politicians, who are supposed to be the trusted representatives of the people.

It has been demonstrated how conflicts of interest permeates the US FDA, CDC and NIH, including the large number of key regulators and administrators who went through the revolving door to get high-paying jobs in the drug industry.[72]

It is totally incomprehensible how the CDC, which has the mandate to develop, improve, purchase, implement and distribute vaccines, and evaluate vaccine effectiveness and provides leadership in vaccine science,[73] can say that vaccines are *safe* in all the vaccines they recommend, including the COVID-19 vaccines,[74] as the word "safe" is defined in the Merriam-Webster dictionary as being "*free* from harm or risk*,*"[75] and no vaccine has ever been *free* from harm and risk.

This is such an obvious travesty of the truth, which, unlike the Emperor who paraded without wearing any clothes on, is far from being funny, as it is misleading people about health, and life and death issues.

We can only assume that complicit governments that firmly believe in the unchallenged, untouchable and deeply ingrained dogma that the benefits of vaccination far outweigh the risks have taken up the license to lie to the public about the safety of vaccines in order not to scare people away from vaccines.

How dangerous each vaccine is, is generally unknown, as there is no solid science on the exact short and long-term effects of each vaccine, or their combination, or in combination with suppressive drugs, in part because it would not be in the best interests of the industry to seek out their adverse effects, which is even more problematic when regulators own vaccine patents, as it is the case with the mRNA vaccines.*

Also it is likely assumed that any knowledge about adverse events from vaccines creates more public distrust toward vaccines, which is further assumed to endanger society.

Five weeks after the head of the CDC Rochelle Walensky admitted that COVID-19 vaccines didn't provide immunity and didn't stop people from getting COVID-19 or transmitting the virus,[76] the CDC changes its definition of vaccine from being "a product

---

* Barney S. Graham, Olubukola M. Abiona and Geoffrey B. Hutchinson of the US NIH are stated as being inventors on the US Patent Application No. 62/972,886 entitled "2019-nCoV Vaccine". (Corbett, Kizzmekia S., et al. "SARS-CoV-2 mRNA vaccine design enabled by prototype pathogen preparedness." *Nature* 586.7830 (2020): 567-571.)

that stimulates a person's immune system to produce immunity to a specific disease, protecting the person from that disease,"[77] to "a preparation that is used to stimulate the body's immune response against diseases,"[78] so there is no more mention of immunity or protection against a disease, which "looks like fraud."[79]

As "the benefits of vaccines far outweigh the risks" is such an absolute and entrenched dogma, there is little interest or need to investigate all the short and long-term and transgenerational effects of vaccines, which is in fact unscientific and unethical.

Because many of steps in the normal 5 to 10 years that it takes to develop vaccines, from animal studies to phase I, II and III safety and efficacy trials, have been skipped in this pandemic, how bitter will be the surprise when the rabbit is finally pulled out of the hat?

Complicit Large Corporate Media

The large corporate media represent the fourth limb to this sociopathic beast. Free and independent media is one of the cornerstones of democratic societies.

However, the integrity of the media to serve public interests and the democratic process is compromised when it becomes subservient to vested interests, which inevitably leads to corporate censorship.

One of the reasons that most of the information in this book doesn't appear in the main media is in part related to the powerful grip the drug industry has on the media. For instance, "Brought to you by Pfizer" sponsorship includes but is not limited to ABC Good Morning America, CBS Health Watch, Anderson Cooper 360, ABC News Nightline, Making a Difference, CNN Tonight, Early Start, Erin Burnett Out Front, ABC This Week with George Stephanopoulos, CBS Sports Update, Meet the Press, CBS This Morning and CBS 60 Minutes.[80]

About 20 years ago, I was interviewed by a journalist, who regularly wrote large pieces for *The New York Times* and *The New Yorker,* on the potential of homeopathy and other alternative medical practices for improving the quality of life of people through the prevention of disease, the recovery of health and health optimization.

After about a two-hour interview and the sharing of many documents, I asked her whether she would publish some of this information in the NYT and she answered no, as no editor would accept to publish on this subject. I asked her why, and she answered because it would be too controversial and the editor that would let this pass would be fired and the journalist would be blacklisted.

I asked again her why. She thought about it, and answered, perhaps because the NYT receives $85 million annually from the drug industry.

Such media censorship, if it really exists, supports a narrow view of reality that impedes the flow of valuable information to reach people and stalls progress.

The Trusted News Initiative

The activation of the behavioral immune system in this pandemic led to massive media censorship at the time of the introduction of the COVID-19 vaccines when on December 10, 2020, a media summit, the Trusted News Initiative,* that was chaired by the BBC agreed to focus on "combatting the spread of harmful vaccine disinformation."[81]

The suppression of a free access to unbiased information is unprecedentedly dangerous in supposedly free and democratic societies, because if there were safer and more effective approaches to vaccines and to the treatment of the COVID-19 patient, the public would remain uninformed, which can only please the vaccine industry.

The need of the pro-vaccine advocates for declaring victory at all cost is marked by major breaches in scientific and public debates, which are vital for scientific progress and the health of free and democratic societies.

The lack of transparency and the open exchanges of information about the short and long-term safety issues of vaccines and about alternative approaches to prevention and treatment options prevent people from making the best decision for themselves which is a denial of one of their fundamental rights to life.

---

* Partners within the Trusted News Initiatives include the AP, AFP, BBC, CBC/Radio-Canada, European Broadcasting Union (EBU), Facebook, Financial Times, First Draft, Google/YouTube, The Hindu, Microsoft, Reuters, Reuters Institute for the Study of Journalism, Twitter and The Washington Post. https://www.bbc.com/mediacentre/2020/trusted-news-initiative-vaccine-disinformation

COVID-19 VACCINE BENEFITS

Many COVID-19 vaccines have been approved by health agencies and each of them has been found to have different degrees of effectiveness on a number of different parameters, including infection, symptomatic disease, transmission, hospitalization and mortality, which are dependent on many factors, such as the timeline of vaccine reception, number of doses, demographics and viral variants, which makes it difficult to fully evaluate the overall benefits obtained by any single vaccine on a population over a prolonged period of time.

However, if we try to summarize the data about the benefits obtained by COVID-19 vaccines, we can look at the UK which has kept good records of overall effectiveness of COVID-19 vaccines to prevent infection, symptomatic disease, transmission, hospitalization and mortality, the following points were retained:

1- Protection from COVID-19 from symptomatic infection, hospitalization or mortality takes some time to develop and reaches its optimal level at about the third week and begins to fade after the tenth week after vaccination.[82]

2- Up until September 19, 2021, it had been estimated that around 261,500 hospitalizations had been prevented in the UK in those aged 45 years and over.[83]

3- Up until September 24, 2021, it was estimated that 127,500 deaths and 24,144,000 infections have been prevented as a result of the COVID-19 vaccination programs.[84]

4- Protection effectiveness increases with each succeeding doses of the vaccine or booster, but only for a quite limited time.[85]

5- However, vaccination may reduce the risk of infection and accelerates viral clearance by a few days, fully vaccinated people with breakthrough infections still have peaked viral load similar to the ones of unvaccinated people and can similarly transmit the virus in household settings, including to fully vaccinated contacts.[86]

6- Vaccine effectiveness at the time of the Delta variant was about 72% to prevent infection, 77% for symptomatic disease, 90% for hospitalization and 95% for mortality.[87]

7- However with the Omicron variant, vaccine effectiveness against symptomatic disease was about 60% two to four weeks after reception of a booster shot and dropped to 40% after the tenth week.[88]

8- At week fifteenth of having received the second dose of an AstraZeneca vaccine, vaccine effectiveness dropped close to 0% and after week twentieth vaccinees appear to become more susceptible to COVID-19 infection than unvaccinated people.[89]

9- After week twentieth of the second dose of an mRNA vaccine, vaccine effectiveness dropped close to 0%.[90]
10- Recent data out of California and New York showed that surviving a previous infection during the Alpha and Delta phases of this pandemic protects better against reinfection with very low risk of hospitalization, which is *increasingly* better than in the ones who were vaccinated and with no previous history of COVID-19 infection.[91]
11- Primary immunization with two doses of an mRNA or viral vector vaccine provided no or limited protection against symptomatic disease with the Omicron variant. However, a booster with an mRNA vaccine after either course of two vaccines significantly increased protection.[92]
12- In a CDC document released on July 29, 2021, it was stated, "Important to update communications describing breakthrough cases as 'rare' or as a 'small percentage' of cases,"[93] which didn't correspond to reality, as a paper that was published at about the same time reported that in a medical center in Israel 24% of a highly vaccinated staff and patients with a median of 25 weeks post vaccination developed COVID-19 despite wearing face masks, which led to fourteen out of the twenty-three patients to become severely sick or died and clearly pointed to waning immunity and increased risk for infection similar to the unvaccinated population.[94]
13- In the last week of 2021 during a peaking time for the Omicron variant infection, there was an average of 144k cases per day in the UK, which is more than double the highest number of COVID-19 cases previously recorded in a single day, which was 68K cases on January 8, 2021, despite the fact that by December 19, 2021, 98.4% of the UK adult population had antibodies to COVID-19 and 22.7% had antibodies from infection alone.[95]
14- This means that the Omicron variant is substantially capable of escaping the specific antibodies induced by vaccination and from prior Delta or other variant infection.

RISKS ASSOCIATED WITH COVID-19 VACCINES

As of December 17, 2021, fifty-three weeks* into the vaccination campaign for COVID-19, the US Vaccination Adverse Events Reporting System (VAERS)* reported that

---

* The Covid-19 vaccination campaign began in the United States on December 14, 2020, and it was reported that a New York nurse, one of the first health workers to receive the jab, said, "I feel like healing is

34,615 people became permanently disabled, 23,404 had experienced a life-threatening event and 20,622 had died after receiving a CODID-19 vaccine.[96]

In Canada, as of December 17, 2021, 6,829 serious adverse events associated with the COVID-19 vaccines have been reported by Health Canada, which includes 171 cases of autoimmune diseases (111 cases of Guillian-Barré Syndrome and 70 cases of thrombocytopenia syndrome), 1,691 serious cardiovascular events (including 39 cardiac arrest, 38 cardiac failure, 1,516 cases of myocarditis/pericarditis), 1,097 serious vascular events (including 375 cases of pulmonary embolism and thrombosis elsewhere in the body, including the brain), 46 cases of acute kidney injury, 30 cases of liver injury, 913 cases of nerves and central nervous system injuries (including 694 cases of Bell's, 179 strokes, 40 transverse myelitis), 705 cases of anaphylaxis, 61 spontaneous abortions, and 254 deaths.[97]

As of December 15, 2021, the UK Yellow Card system was reporting 1,889 deaths, 429 cases of thrombocytopenia syndrome, 1,434 cases with myocarditis or pericarditis and 575 cases of Guillain-Barré Syndrome following the administration of a COVID-19 vaccine.[98]

Of course in these three data banks, reported adverse events only have a temporal association with the reception of a vaccine and are not necessarily due to the vaccine, as VAERS, Health Canada and the UK Yellow Card are passive reporting systems, which means that they rely on individuals to send in reports of their experiences without benefitting from an analysis of the data.

For instance, anyone in the US can report an adverse event to VAERS, but health care professionals are required to report *"certain"* adverse events, while the vaccine manufacturers are required to report *all* adverse events that come to their attention.[99]

However, passive monitoring systems are not adequate tools to evaluate the full short and especially the long-term impact of vaccines on populations.

---

coming." (BBC. Covid-19: First vaccine given in US as roll-out begins. https://www.bbc.com/news/world-us-canada-55305720 (Accessed November 6, 2021)

* VAERS is co-managed by the United States Centers for Disease Control and Prevention and the US Food and Drug Administration.

On the one hand, a number of cases of adverse events reported on a passive reporting systems may have very little to do with the vaccine recently received except for its temporal association.

On the other hand, adverse events from vaccines tend to be greatly underreported in passive reporting systems.

As mentioned earlier, a study that was conducted by Harvard Pilgrim Health Care between June 2006 and October 2009 during which every individual receiving a vaccine was automatically identified in an electronic database and followed for 30 days. Within those 30 days the individual's diagnostic codes, lab tests, and prescriptions were evaluated to recognize any potential adverse event. During that limited time of 30 days only, there were 376,452 individuals who were vaccinated, of which, 35,570, or 9.5%, of the vaccinees were identified to have experienced an adverse event.

The authors of this study concluded, "Adverse events from drugs and vaccines are common, but underreported. Although 25% of ambulatory patients experience an adverse drug event, less than 0.3% of all adverse drug events, and 1-13% of serious events, are reported to the Food and Drug Administration. *Likewise, fewer than 1% of vaccine adverse events are reported*."[100]

Underreporting of adverse effects from vaccines is intrinsic to passive reporting systems and it doesn't appear to be any different in the current COVID-19 pandemic.

For instance, as of January 18, 2021, a total of 17,524,676 doses of mRNA vaccines had been administered in the US and the CDC had so far identified 66 case reports received by VAERS that met the Brighton Collaboration case definition criteria for anaphylaxis (levels 1, 2 or 3), which ends up to a reporting rate of 3.7 cases per million doses of administered mRNA vaccines.[101]

As of December 17, 2021, 8,596 cases of anaphylactic reaction (including anaphylactic and anaphylactoid shock) following COVID-19 vaccines had been reported to VAERS[102] after the administration of 505,123,128 doses of COVID-19 vaccines, which makes the rate of anaphylaxis in the raw data of VAERS, which includes all vaccines and is without having been evaluated by the Brighton Collaboration case definition criteria, to be about 17 incidents per million doses of administered vaccines.[103]

As of December 17, 2021, 705 cases of anaphylaxis had been reported to Health Canada following a COVID-19 vaccine,[104] which was after the administration of 64,197,951 doses of COVID-19 vaccines. This would make the rate of anaphylaxis at about 11 cases per million doses of administered COVID-19 vaccines in Canada.[105]

However, in a prospective study of 52,805 employees of the Mass General Brigham, severe allergic reactions consistent with anaphylaxis occurred in 16 persons after receiving an mRNA vaccine, which is a rate of 247 per million doses of administered vaccines,[106] which is 15 times more than the unanalyzed cases reported on VAERS, 23 times more than the number reported to Health Canada and 66 times more than the one estimated by the CDC that was based on the cases reported on VAERS that had met the Brighton Collaboration case definition criteria.[107]

It was also suggested that succeeding injections will not only cause even larger numbers of anaphylactic reactions,[108] but an increase of other severe adverse events as well.[109,110,111,**112**,**113**,114]

For instance, out of 436,000 military male personal who received two doses of a COVID-19 vaccine, three were diagnosed with vaccine-induced myocarditis after the first dose of a vaccine, but 20 others after the second dose, which is over 1,900 times more than the highest real world expectation of 22 per 100,000 person-years.[115]

It is interesting to note that in their November 2020 application to the European Medicines Agency for marketing authorization and their December 2020 publication of their safety and efficacy study, Pfizer never mentioned incidences of myocarditis as a potential adverse of their mRNA COVID-19 vaccine.[116,117]

On September 29, 2021, Ontario Public Health estimated the risk of myocarditis for young men 18-24 to be 36 incidents per million doses of the Pfizer vaccine and 200 per million doses for the Moderna vaccine.[118] Neither vaccine was banned, but earlier in the year, the AstraZeneca vaccine was banned because of a risk of clotting side effects in 17 cases per million doses, which was then considered to be too high.[119]

In a population-based cohort study, Danish scientists reported that absolute rates of 63 incidents of myocarditis or myopericarditis per million vaccinated men within 28 days of vaccination and 20 for women. In this study, myocarditis was defined as a combination of a hospital diagnosis of myocarditis, increased troponin levels, and a hospital stay lasting more than 24 hours.[120]

However, in June 2021, in a report submitted to the Israeli Ministry of Health, it was estimated that the rates of myocarditis was from 167 to 333 cases per million men ages 16 to 24 who received the Pfizer vaccine.[121]

Overall, this rate of myocarditis following vaccination appeared to be 5–25 times higher than the background rate.[122]

Further, the rates of subclinical myocarditis and their effects over a lifetime remain unknown, which could have great repercussions especially in athletes, as the mortality from myocarditis following a viral infection is 22% within the first 6.5 years.[123]

For instance, on November 5, 2021, a list of more than 75 athletes who had "suddenly unexpectedly" died within the prior 5 months was assembled with the following statement, "Since mid-2021 there has been a strikingly high number of 'sudden and unexpected' deaths in sport. In full activity, even 13-year-old children with heart problems are already falling. ... On Wikipedia there are lists of athletes who died during the game. The list dates back to 1889 and is long at first glance, but in the end it shows that even in the 'disaster years' between 5 and 8 such deaths were recorded. Many of them have to do with heart problems."[124]

Eight days later, on November 13, 2021, an Israeli news site released an analysis of the number of the members of the International Football Association (FIFA) who had died suddenly on the field over the past 20 years and the average number between the years 2000-2020 was 4.2 deaths per year, but it was already 21 or 5 times the yearly average in the first ten months of 2021.[125]

Also, in a paper whose access has since been removed by their authors, an unexpected rise of excess mortality among the 20 to 49-year-olds was observed in Israel during the months of February and March 2021. The authors of this report pointed out, "Noteworthy, excess mortality within those young age groups is scarcely observed, with low number of deaths that are usually caused by wars. We examined whether COVID-19 could account for this excess mortality. Inconsistency between the overall excess deaths and the number of reported COVID-19 deaths in this age group led to consider other potential causes: accident and vaccination. In fact, the surge in mortality coincides with the beginning of the Israeli vaccination campaign, which has reached more than 75% of individuals within this age group. Such unexpected rise in excess mortality in young adults was also found in two other countries, the United Kingdom

and Hungary, which have in common with Israel to have massively injected their populations."[126]

The power of prospective study to pick up adverse events from vaccines is clearly demonstrated in a study conducted among German healthcare workers, in which *severe side effects that required medical attention were reported in 6 out of 599 participants or in 1% or 10,000 severe incidents per millions vaccinees*.[127]

It would be extremely pertinent to have similar prospective studies being conducted in less healthy population than in the one of health care workers, such as in an aged population with multiple comorbidities. Why has it not been done as some of the first trials of vaccines, as it is this population that is most vulnerable to COVID-19?

In a retroactive study of 1,736 randomized individuals, a number of serious adverse events were identified, including six cases who were admitted into the hospital due to severe hypotension, generalized body aches, shortness of breath, and a fever greater than 39°C, four others who experienced acute hypertension with blood pressure exceeding 210/105 mm Hg, two others who experienced severe chest pain for six-day duration and one case who had acute hyperglycemia.[128] This is an incidence of severe adverse reactions of 7,489 per million doses of vaccines.

Since patients with autoimmune diseases were mostly excluded from COVID-19 vaccine trials,[129] and they affect an increasing segment of the population, as it was 12% in 2002, 16% in 2012[130] and 20% in 2020 in the US,[131,132] it is unknown how many of these will experience an exacerbated of their original condition after vaccination.

In an observational study in Israel, it was found out that 1.2% of the patients with autoimmune inflammatory rheumatic diseases developed herpes zoster after receiving a COVID-19 vaccine, which suggests that vaccines are immunosuppressant and can reactivate latent virus.[133]

Cases of reactivation of MS or new onset of MS and neuromyelitis have also been reported after COVID-19 vaccination.[134,135,136,137]

In April 2021, the FDA examined the number of cases of idiopathic thrombocytopenia purpura (ITP) that had been reported into VAERS and concluded: "The number of thrombocytopenia cases reported to VAERS does not suggest a safety concern attributable to mRNA COVID-19 vaccines at this time."[138]

In one study published in the *BMJ* on June 24, 2021, it was reported that 24% of ITP patients experienced a median to severe decrease in platelets and with new bleeding symptoms within 2–5 days post vaccination.[139]

In another study, 8% of the ITP patients clinically relapsed after the first COVID-19 injection and another 4% after the second dose.[140]

Shall we be surprised that in their report to the European Medicines Agency, Pfizer never mentioned thrombotic events as potential adverse events of their vaccine?[141,142]

Cerebral venous sinus thrombosis occurs very rarely under normal life conditions, but its incidence has been reported to be one case per million doses of a COVID-19 vaccine, of which one third led to death.[143]

Here is a partial list of serious adverse events that have so far been reported in the scientific literature following the administration of a COVID-19 vaccine: acute onset diabetes,[144] aseptic meningitis,*[145] cerebral venous sinus, Bell's palsy, acute transverse myelitis, acute disseminated encephalomyelitis, acute demyelinating polyneuropathy, herpes zoster,[146] intracerebral bleeding with ventricular rupture,[147] intracerebral bleeding with aphasia,[148] IgA nephropathy and nephritis/vasculitis, ANCA glomerulonephritis/vasculitis, anti-glomerular basement membrane nephritis, granulomatous vasculitis, acute tubulointerstitial nephritis, scleroderma renal crisis, IgG4-related disease nephritis, and primary membranous nephropathy,[149] Stevens-Johnson syndrome,[150] generalized lichenoid skin eruptions,[151] bullous pemphigoid,[152] cerebral venous thrombosis,[153] thrombotic thrombocytopenia, deep vein thrombosis,[154,155] disseminated intravascular coagulation,[156] systemic capillary leak syndrome,[157] severe exacerbations of systemic capillary leak syndrome,[158] stroke, cerebral hemorrhage, acute myocardial infraction, pulmonary embolism, heart failure and heart arrest,[159] myocarditis, pericarditis and cardiomyopathy,[160,161,162,163,164,165,166,167,168,169,170,171,172,173,174,175,176] hypertension,[177] adult-

* Aseptic meningitis has also been reported following mumps, measles, rubella, and influenza vaccines, and its pathophysiology is yet to be understood. (Ahmad, Shwan A., et al. "Aseptic meningoencephalitis after COVID-19 vaccination: A case report." *Annals of Medicine and Surgery* (2021): 103028.)

onset Still's disease,[178] anaphylaxis, paroxysmal ventricular arrhythmia, hemolytic anemia,[179] acute macular neuroretinopathy, central serous retinopathy, ocular thrombosis, uveitis, multiple evanescent white dot syndrome, Graves' Disease,[180] retinal detachment multifocal choroiditis, acute zonal occult outer retinopathy, optic neuritis, arteritic anterior ischemic optic neuropathy, herpes zoster ophthalmicus, abducens nerve palsy,[181] adult-onset multisystem inflammatory syndrome-like illness,[182,183,184] appendicitis,[185] exacerbations of myasthenia gravis,[186] relapse of class V lupus nephritis,[187] Vogt-Koyanagi-Harada disease reactivation,[188] and a long list of pathophysiological changes, including a consistent increase in HbA1c, electrolyte imbalance (significant decrease in serum potassium and sodium levels even after 90 after the first inoculation), long-term (28 and 42 days) shorter or longer prothrombin and thromboplastin times, elevated blood cholesterol levels at days 7, 28, elevated total bile acid levels, renal dysfunction up to 90 days post vaccine with significantly higher serum creatinine levels, reduced eGFR, dramatic alterations in gene expression of almost all immune cells after vaccination, such as decreases in contents of CD4+ regulatory T cells (CD4.Treg), CD8+ T cells (CD8.T), and proliferating CD8+ cells.[189]

Very little is now known about the adverse effects that can appear later or the ones that may take quite some time to detect.

Vaccine supporters, including government officials, will often say: "There's not been a serious side effect in history that hasn't occurred... within six weeks of getting the dose."[190]

However, the reader is reminded that it took nine months to detect the 1,300 people who developed narcolepsy in 2009 after a particular influenza vaccine.[191]

Actually, Martin Kulldorf, Professor of Medicine at Harvard Medical School, said in an interview on September 30, 2021, about the ling term adverse events of vaccines, "Whenever we have a new vaccine we don't know about adverse reactions until about two or three years after it comes on the market."[192]

The Emergence of More Transmissible, Virulent or Resistant Variants, as a Risk of Vaccination

Another risk associated with vaccination is the emergence of more transmissible, virulent or resistant variants that can be accelerated before the second week and after the tenth week after having received a vaccine due to suboptimal immunity.[193]

In a 2015 paper entitled, *Imperfect Vaccination Can Enhance the Transmission of Highly Virulent Pathogens*, evolutionary microbiologist Andrew Read wrote, "Vaccines that keep hosts alive but still allow transmission could thus allow *very* virulent strains to circulate in a population."[194]

It is interesting to note that all the new SARS-CoV-2 variants of concern that have appeared before the beginning of mass vaccination campaign were first detected in those countries where vaccine trials were being conducted.

For instance, the first variant of concerns was Alpha, which was detected in the UK in September 2020[195] where vaccine trials had begun in April 2020.[196]

The Beta variant was first discovered in South Africa in October 2020[197] where vaccine trials had begun in June 2020.[198]

The Delta variant was first detected in India in October 2020,[199] where vaccine trials had begun in July 2020.[200]

The Gamma variant was first detected in Japan in early January 2021 from people who arrived from Brazil where vaccine trials had begun in June 2020.[201]

The Lambda variant was first identified in Peru in December 2020[202] where vaccine trials had begun in October 2020.[203]

The Mu variant was first discovered in Colombia in January 2021 where two vaccine trials had been conducted, one in August 2020[204] and the other in September 2020.[205]

Similarly, immunosuppressed patients, like the ones on steroids or other immunosuppressing drugs, can also facilitate the rapid evolution of the virus and shed them for the duration of many months.[206,207]

It is interesting to note that when one of these immunosuppressed patients was given an infusion of convalescent plasma, it led to rapid shifts in the frequency of the different variants.[208]

Even though COVID-19 vaccines trigger the production of high levels of neutralizing antibodies it has been shown to be *insufficient* to destroy the virus but sufficient enough to put an evolutionary pressure on the virus, which can enhance the development of more fitted variants.

It is likely that mass vaccination in the midst of this pandemic will likely perpetuate it by the creation of new more transmissible variants that have an enhanced capacity to escape vaccinal antibodies, which can only benefit the industry.

DISCUSSION ON THE BENEFITS AND RISKS OF COVID-19 VACCINATION

The elements for a perfect storm came together in this pandemic, which were, while governmental agencies sponsored the gain-of-function research of coronaviruses, the vaccine industry was developing coronavirus vaccines, this was followed by a man-made gain-of-function virus that either escaped from the lab or was intentionally released during an era in human history when governments and the large corporate media were complicit and at the mercy of a helpless, inept and often dangerous system of medicine and a corrupted and fraudulent drug industry, all of which led to much fear around the world about the danger of an approaching pandemic, which triggered society's behavioral immune system and the declaration of an international state of emergency, leading to restraining measures of mobility, business activity, public gatherings, work or school attendance, accessibility to unemployment insurance and freedom of expression, and above all it led to great morbidity and mortality and much suffering.

To top it all, there is no evidence that the more a population is vaccinated the less COVID-19 cases there will be, to the contrary it appears to be the opposite, as it was recently pointed out by Harvard scientists. They examined the data provided by 68 countries in the world and 2,947 US counties. They found out that the higher is the percentage of a population that is fully vaccinated the higher the number of COVID-19

cases per one million people.[209]

The sole reliance on vaccination as a primary strategy to mitigate COVID-19 has shown to be flawed from the beginning. For example, originally Pfizer sold their vaccines with trial efficacy of 96%,[210] while the Israel Ministry of Health reported real world effectiveness after two doses of the Pfizer vaccine to prevent COVID-19 infection at only 39%,[211] which is below the acceptable benchmark of 50% originally set up by the FDA.[212]

It is only for a period of less than 17 weeks after each dose of a vaccine or booster that Covid-19 vaccines have been found to be effective to diminish morbidity and mortality in older populations with a high level of comorbidities that rely on a helpless and inept system of medicine to effectively deal with viral infections such as COVID-19.

For this population, the benefits of vaccination seem to clearly outweigh the risks, as long as the short and long-term effects on the entire population remain mostly unknown.

It would be similar to lauding the slowing of tumor growth in cancer patients in a chemotherapy trial, but without considering that there was a decrease in the quality and length of life in the treated group.

Buried in the finest print of the supplementary appendix to Pfizer's placebo-controlled trial of the vaccine for persons 16 years of age or older who received two doses of either the vaccine or a placebo 21 days apart, it was reported that 0.51% more participants in the vaccine group reported either solicitedly in the week following each dose or *unsolicitedly*[*] up six months after the second dose of the vaccine a *severe* adverse reaction and 0.1% reported serious adverse events, which is a rate of 5,100 mostly *unsolicited* severe adverse events and 1,000 serious adverse events per one million vaccinees.

Further, there were five deaths from cardiac arrest or heart failure and one death from COVID-19 in the ones who received the vaccines versus one death with cardiac arrest and two from COVID-19 in the placebo group. It was stated by the authors of this Pfizer's sponsored study, "Safety monitoring will continue for 2 years after administration of the second dose of vaccine," but how do they justify *unsolicited*

[*] Those reported by the participants without prompts from the electronic diary.

reporting, when it is already known that there were serious adverse event resulting in twice as many deaths from heart arrest or failure and COVID-19 in the vaccinated group than in the unvaccinated group?[213,214]

The real overall benefits of vaccination become muddled when there is such a high rate of mostly *unsolicited* adverse events occurring after only the first six months of the first two vaccines. Would long-term study with active health monitoring* of vaccinees, including subclinical levels, still show overall benefits after further doses of vaccines and always within the perspective of a system of medicine that can't offer effective treatment for the virally infected people?

Verification of subclinical changes would include changes in the person energy level, elevation in inflammatory markers, copper-zinc ratio (one of the most sensitive predictors of all causes of mortality from disease),[215] D-dimer for evidence of enhanced coagulation and clotting, cardiac and liver enzymes, claudin and occulin for evidence of enhanced barrier permeability, proteinuria and creatinine for evidence of kidney damage, blood glucose, blood pressure, hormonal changes, amyloid-beta and phosphorylated tau for evidence of increased predisposition to Alzheimer's disease, HMGB1, CXCL13 and Dickkopf-1 for evidence of an increased disposition to autoimmune disease, etc.[216]

Pfizer's COVID-19 Vaccine Trials Are Not Only Misleading, Unscientific and Unethical, But Are Fraudulent

It is also important to point out that trials conducted by Pfizer were not representative of the demographics of the people most susceptible to die from COVID-19, as the great majority of the deaths from COVID-19 have occurred in people who are 70 years and

---

* We have to remind that adverse events from vaccination are better investigated in active monitoring system. For instance, the incidence of post-vaccinial myocarditis/pericarditis associated with smallpox vaccination had never been examined until recently, and its true incidence had been significantly underestimated by general surveillance method. The first prospective study on the onset of cardiac events following smallpox vaccination was conducted only in 2015. 1,081 healthy military personal with no prior history of cardiac diseases, diabetes, uncontrolled hypertension or specific medical exclusion for immunization were followed prospectively following smallpox vaccination. It was found out that 10.6% of vaccinees experienced new onset of chest pain, dyspnea, and/or palpitations. Five of these 1,081 vaccinees were eventually diagnosed with probable post-vaccinial myocarditis/pericarditis, and 31 vaccinees without specific cardiac symptoms were found to have over 2 fold increases in cardiac specific troponin-T from baseline during the window of risk for clinical myocarditis/pericarditis that met the proposed case definition for possible subclinical myocarditis, which is an incidence rate that is 10 times greater than the one from the physician surveys and *240-times greater than with passive surveillance*. (Renata J.M. Engler, et al. A prospective study of the incidence of myocarditis/pericarditis and new onset cardiac symptoms following smallpox and influenza vaccination. *PLoS One* 2015; 10 (3): e0118283.)

older,* while only 3.9% Pfizer's trials were conducted in person 75 or older,† and only 42% of the participants had comorbidities,[217] while more than 60% of the people above 60 years old have comorbidities.[218]

As of January 6, 2022, the CDC reported that about 95% of the ones who had so far died from COVID-19 had on average *four* comorbidities.[219]

It is also important to point out that the Pfizer trials were conducted among "healthy individuals," and excluded many important demographic groups, such as individuals currently working in occupations with high risk of exposure to SARS-CoV-2 (e.g., health care workers, emergency response personnel), pregnant and breastfeeding women, women who are not using "an appropriate method of contraception," people with receipt or anticipated receipt within 14 days of any seasonal or pandemic influenza vaccine, people with history of adverse reactions to vaccine and residents of long-term facilities.[220]

This is a big problem, because when designing a trial for the safety and efficacy of the COVID-19 vaccine, the focus should have been on the target population that could most benefit from it, but by choosing for the trial a younger and healthier population with less comorbidities and susceptibilities who is less likely to experience serious adverse events and less likely to benefit from a vaccine in the real world and will show greater immune response to the vaccine is therefore *misleading*, *unscientific* and *unethical*, as the final outcomes of the vaccination campaign are more likely to be *less* efficacious and come with more adverse events in the general population than they were reported in the trials.[221,222]

In the first study published by Pfizer in *the New England Journal of Medicine* on December 31, 2020, it was reported that only eight COVID-19 cases occurred in the vaccine group and 162 in the placebo group, which resulted in a 95% relative risk

---

* Out of the 30,042 deaths from COVID-19 that had been reported in Canada by December 31, 2021, 24,720 or 82% were 70 years old, another 3,167 or 10,5% were between 60 and 69 years old, 1,334 or 4.4% were between 50 and 59 years old, 486 or 1.6% were between 40 and 49 years old, 226 or 0.8% were between 30 and 39 years old, 89 or 0.3% were between 20 and 29 years old, 9 or 0.03% were between 12 and 19 years old and 11 or 0.04% were between 0 and 11 years old. (Statista. **Number of COVID-19 deaths in Canada as of December 30, 2021, by age.** https://www.statista.com/statistics/1228632/number-covid-deaths-canada-by-age/ accessed January 8, 2022)

† 905 or 3.9% of the 23,040 of the ones who received the vaccines were 75 years old or older. (Polack, Fernando P., et al. Supplementary appendix to "Safety and efficacy of the BNT162b2 mRNA Covid-19 vaccine." *New England Journal of Medicine* (2020).)

reduction to develop COVID-19.[223]

However, in their FDA briefing document of December 10, 2020, for complying to their November 20, 2020, request for an emergency use authorization for their mRNA vaccine, Pfizer had reported, “Among 3,410 total cases of suspected but unconfirmed COVID-19 in the overall study population, 1,594 occurred in the vaccine group vs. 1,816 in the placebo group. Suspected COVID-19 cases that occurred within 7 days after any vaccination were 409 in the vaccine group vs. 287 in the placebo group.”

Peter Doshi, a senior editor at the *British Medical Journal,* commented about these not well-publicized facts, “With 20 times more suspected than confirmed cases, this category of disease cannot be ignored simply because there was no positive PCR test result. Indeed this makes it all the more urgent to understand. A rough estimate of vaccine efficacy against developing COVID-19 symptoms, with or without a positive PCR test result, would be a relative risk reduction of 19%[*]—far below the 50% effectiveness threshold for authorization set by regulators.[†] Even after removing cases occurring within 7 days of vaccination (409 on Pfizer’s vaccine vs. 287 on placebo), which should include the majority of symptoms due to short-term vaccine reactogenicity, vaccine efficacy remains low: 29%. If many or most of these suspected cases were in people who had a false negative PCR test result, this would dramatically decrease vaccine efficacy. But considering that influenza-like illnesses have always had myriad causes[‡]—rhinoviruses, influenza viruses, other coronaviruses, adenoviruses, respiratory syncytial virus, etc.— some or many of the suspected COVID-19 cases may be due to a different causative agent. But why should etiology matter? If those experiencing ‘suspected COVID-19’ had essentially the same clinical course as confirmed COVID-19, then ‘suspected plus confirmed COVID-19’ may be a more clinically meaningful endpoint than just confirmed COVID-19.”[224]

Even though the underpowered adolescent Pfizer study wasn’t actually designed to find serious adverse events, including death, with an occurrence rate of 1/800, as there were only 1,005 adolescents who received the vaccine, it did in one case.[225]

---

[*] Calculations in this article are as follows: 19% = 1 – (8+1594)/(162+1816); 29% = 1 – (8 + 1594 – 409)/(162 + 1816 – 287). I ignored denominators as they are similar between groups. (Peter Doshi. "Peter Doshi: Pfizer and Moderna’s “95% effective” vaccines—we need more details and the raw data." *The BMJ Opinion* (2021).)

[†] FDA. Development and Licensure of Vaccines to Prevent COVID-19. https://www.fda.gov/media/139638/download

[‡] Makela, Mika J., et al. "Viruses and bacteria in the etiology of the common cold." *Journal of clinical microbiology* 36.2 (1998): 539-542.

M. d. G., a 12-year-old Pfizer trial participant, developed a serious reaction after her second dose and was hospitalized within 24 hours. She developed gastroparesis, nausea and vomiting, erratic blood pressure, memory loss, brain fog, headaches, dizziness, fainting, seizures, verbal and motor tics, menstrual cycle issues, lost feeling from the waist down, lost bowel and bladder control and had a nasogastric tube placed because she lost her ability to eat. She was wheelchair bound and fed with a tube for the ten months prior to the report, and visited the emergency room in nine occasions and was hospitalized three times for a total of two-month duration during that period of time.[226]

However, in their report to the FDA, Pfizer described M. d. G.'s injuries as "functional abdominal pain."[227]

How many other adverse events have been suppressed or misrepresented by Pfizer and other vaccine companies known to be corrupted and fraudulent? For instance, I was told that a translator for the Moderna's trial in Latin America reported that adverse events were being suppressed.

On October 26, 2021, the FDA estimated that there will be an incidence of 1-6 cases of myocarditis per million doubly vaccinated 5-11 children,[228] even though Ontario Health had estimated one month earlier the risk to be between 36 and 200 incidents per million doses after an mRNA vaccine in young men 18-24.[229]

One of the 18 members of the FDA advisory panel who voted to approve the Pfizer vaccine for children 5-11 was Dr. Eric Rubin, who is the editor-in-chief of the *New England Journal of Medicine* and the publisher of the two Pfizer trial studies, actually said during a recorded meeting of the FDA advisory committee held on October 26, 2021, "We are never going to learn about how safe this vaccine is, unless we start giving it. And that is just the way it goes. That is the way we found out about the rare complications of other vaccines, like to rotavirus vaccines. I do think we should vote to approve it."[230]

One week later an article about a whistleblower appeared in *British Medical Journal*, in which it was reported by a regional director of one of Pfizer vaccine trials in Texas, "The company falsified data, unblinded patients, employed inadequately trained vaccinators, and was slow to follow up on adverse events reported in Pfizer's pivotal phase III trial. Staff who conducted quality control checks were overwhelmed by the volume of problems they were finding," ... and superiors were informed of "poor laboratory

management, patient safety concerns, and data integrity issues." ... and three directors of the company were "not able to quantify the types and number of errors they were finding when examining the trial paperwork for quality control."[231]

This regional director whistleblower notified the FDA in September 2020, but was fired the same day. In Pfizer's briefing document submitted to an FDA advisory committee meeting held on December 10, 2020, to discuss Pfizer's application for emergency use authorization of its COVID-19 vaccine, the company never disclosed any problem at the Texas site and the next day the FDA issued the authorization of the vaccine.[232]

Several former employees of this regional testing site who either left or were fired from the company confirmed those allegations and one saying, "Everything that you complained about was spot on."[233]

In August 2021, after the full approval of Pfizer's vaccine, the FDA published a summary of its inspection of the company's pivotal trial sites, but Texas site was not visited.[234]

Pfizer has since hired that same research firm of the Texas site to run four more COVID-19 clinical trials. [235]

It's clear that Pfizer and governmental agencies overseeing these trials failed to follow established, high quality safety and efficacy protocols right from the beginning and the journal that published the Pfizer studies failed scientific integrity.

Peter Doshi pointed out in January 2022 that the data of the COVID-19 vaccines and drug trials were still not made available to independent reviewers, "Pfizer's pivotal COVID-19 vaccine trial was funded by the company and designed, run, analyzed, and authored by Pfizer employees." However, this lack of access to data was consistent across all the COVID-19 vaccine manufacturers.[236]

Why would Pfizer indicate that it will not *begin entertaining* requests for trial data until May 2025, 24 months after the primary study completion date?

"Pharmaceutical companies are reaping vast profits without adequate independent scrutiny of their scientific claims. The purpose of regulators is not to dance to the tune of rich global corporations and enrich them further; it is to protect the health of their populations. We need complete data transparency for all studies, we need it in the

public interest, and we need it now."[237]

The Data Science Association that is a non-profit professional association of over 500 Canadian independent anonymous data scientists stated in their presentation of Level I evidence of harm from Pfizer's own trial data, "This evidence is a tool you can use. It represents a real opportunity to hold our leaders accountable, as it is not opinion, or modeling, or real-world evidence that can be dismissed or manipulated, but LEVEL 1 EVIDENCE from a randomized control trial. As such, it has high evidentiary value. ... Any government which has approved these inoculations, much less mandated them, knew or should have known from the available data that harm would be caused to its citizens. Any government that approved this medical intervention for its citizens should have ensured that the trial had used the appropriate clinical endpoints and high quality safety science. Any government official who possesses this evidence and continues to allow its citizens to be inoculated with a toxic agent is, at the very least, negligent."[238]

Scientifically there were many other flaws in the Pfizer's published studies and briefing documents, which make their outcomes and conclusions so unreliable that it should never have been accepted for publication or authorized for emergency use. Not only didn't Pfizer trials prove to be safe, but actually proved to be harmful.[239]

Governments Have Misled People

It was also misleading for governments to assure the population that the vaccines were safe for the ones with a history of adverse reactions to vaccine, people with comorbidities, residents of long-term facilities and pregnant or breastfeeding women.

Further, it was misleading for governments to lure herd immunity with the vaccines that were introduced after only two-month misleading and unscientific trials by fraudulent drug companies in the presence of a highly mutable virus that had already spread throughout the world and had already found many zoonotic reservoirs in the immediate human environment.[240]

It was misleading of governments to justify mandates on the premise that vaccinated people wouldn't transmit the virus and praising the ones who got their vaccine "for doing your part from stopping the spread," when the original trials conducted by Pfizer and Moderna didn't even test this premise.[241]

It was misleading for government to say this is only an epidemic of the unvaccinated, as in the fourth wave of the epidemic in Israel 60% of the people in severe and critical condition and 45% of the ones who died were doubly vaccinated."[242]

It was misleading of government not to recognize the protective value of natural immunity, which conferred longer lasting and stronger protection against infection, symptomatic disease and hospitalization during the Delta variant phase of epidemic than the one obtained from two-dose vaccine-induced immunity with a six fold increased risk of infection and a seven fold increased risk of symptomatic disease.[243]

It was in fact recently reported that natural immunity to SARS-CoV-2 remains strong after 20 months after infection in unvaccinated persons.[244]

It was therefore wrong of governments to force vaccines on people who were already immune through natural infection. While doubly vaccinated people were privileged by mandates, they had no protective advantage against Omicron infection beyond 31 days after their second vaccine over the unvaccinated ones, but, on the opposite, had significant *negative* vaccine effectiveness three to five months after their second dose, which translated into a 37-77% greater chance of being infected than an unvaccinated person due to a sort of immune fatigue or immunosuppression.[245,246]

It was wrong of governments to depend on multiple shot vaccination campaign when there is no study on their long-term effects on the population.

And above all, it was wrong of governments not to have recognized that this entire crisis was mainly due to the ineptitude of conventional medicine to deal with virally sick people, while there exist very effective and safe alternative medical approaches that can deal with such conditions.*

Conclusion

Indeed, when a population has access to alternative and effective means of prevention and treatment the benefits obtained from vaccination would then become quite obscured, as despite all the narratives that laud the safety of COVID-19 vaccines, like drugs, there are no safe vaccines, and all COVID-19 vaccines have so far been found to produce serious adverse effects.

---

* See the Epilogue to this book.

For the child in the fable* who watched the Emperor marching in the streets, it was obvious that the Emperor had no clothes. Similarly, COVID-19 vaccine adverse events can obviously be very serious and even fatal, and to use the word "safe" to qualify any of the COVID-19 vaccines is *unscientific* and *greatly misleading*.

Children,† people of reproductive years and the ones of all ages who have no comorbidity, follow a healthy lifestyle and have access to effective and safe preventive and therapeutic approaches to viral infections should therefore not be coerced to receive vaccines, because of the fact that the complete spectrum of short and long-term adverse events are unknown and the risks of vaccines may actually outweigh benefits and also because it would be an infringement of their freedom of choice.

One of the reasons mentioned to vaccinate children is to prevent them from infecting the most vulnerable persons. However, it is interesting to note that the viral loads and shedding have been found to be similar in infected unvaccinated and vaccinated children aged 17 years and below during the Delta and Omicron phases of the epidemic.[247]

If the art and science of medicine had not been under the control of vested interests and the best preventive and therapeutic measures had been common practices,‡ the advent of a pandemic would not have created a state of panic and there would have been no need to adopt emergency measures or dictate mandates.

However, measures would have been quickly adopted to protect the most vulnerable people.

People would be told what steps should be taken at the first sign of appearance of flu-like symptoms, including keeping in contact with their personal physician.

---

* See Mattimore Cronin. Parable: The Emperor Has No Clothes. https://medium.com/@mattimore/parable-the-emperor-has-no-clothes-ace63fef6eb8

† It is interesting to note that the viral loads were similar in infected unvaccinated and vaccinated children aged 17 years and below during the Delta and Omicron phases of the epidemic. (Elliot P, et al. Post-peak dynamics of a national Omicron SARS-CoV-2 epidemic during January 2022. Imperial College of London. https://spiral.imperial.ac.uk/handle/10044/1/93887)

‡ See the Epilogue at the end of this book, which is entitled *Lessons That Failed to Be Learned From the 1918-1919 Spanish Flu Pandemic*.

Extra home, clinic or hospital care would have been made available for the ones responding less well to early home treatment.

The medical system would not have been overwhelmed and there would have been no lockdowns and the immeasurable damage associated with them, no shutting down of economies, no bankruptcies and no enormous waste of medical resources that is currently occurring. Life would have remained undisturbed and business would have continued as usual.

It generally *appears* to be true that the benefits of vaccination outweigh the risks, as long as it is seen within the perspective of a helpless and inept system of medicine, which is, however, a paradigm that is not concordant with the best of what science can offer and should not ever be imposed to society.

In the imagined scenario presented at the end of the Epilogue of this book, in the countries that have adopted a system of medicine that is based on the best of what science can offer, morbidity remained greatly limited and mortality was quite rare throughout the current pandemic.

Once the COVID-19 pandemic is over, many hope that there will be national reconciliations and real in-depth reflections to find out what went wrong in order not to repeat the same mistakes as the ones of the Spanish flu pandemic, which are associated with immense suffering at a very high cost for society and our planet.

Two of the main questions that will need to be asked are, first, why the best that exists in medical science and specifically about what is known to be the most safe, effective and cost-effective approaches to prevent infectious diseases and treat the sick with viral infections have not been offered to the population?

And second, why society tolerates that the regulation, education and practice of the art and science of medicine are left at the mercy of vested interests?

---

[1] Gardner, Martha N., and Allan M. Brandt. ""The Doctors' Choice Is America's Choice" The Physician in US Cigarette Advertisements, 1930–1953." *American journal of public health* 96.2 (2006): 222-232.

[2] Wolinsky, Howard, and Tom Brune. "The serpent on the staff: the unhealthy politics of the American Medical Association." (1994).

[3] Crowley, Jennifer, Lauren Ball, and Gerrit Jan Hiddink. "Nutrition in medical education: a systematic review." *The Lancet Planetary Health* 3.9 (2019): e379-e389.

[4] Relman AS. The new medical-industrial complex. *New England Journal of Medicine* 1980; 303: 963-970.

[5] Moynihan R, Heath I, Henry D. Selling sickness: the pharmaceutical industry and disease mongering. *British Medical Journal* 2002; 324: 886-891.

[6] Moynihan R, Cassells A. *Selling Sickness: How the World's Biggest Pharmaceutical Companies Are Turning Us All Into Patients.* New York: Nation Books, 2005.

[7] Doran E, Henry D. Disease mongering: Expanding the boundaries of treatable disease. *Internal Medicine Journal* 2008; 38: 858–861.

[8] Ventola CL. Direct-to-consumer pharmaceutical advertising: Therapeutic or toxic? *Pharmacy and Therapeutics* 2011; 36; 669-684.

[9] Islam QT. Antimicrobial resistance: A man made crisis. J*ournal of Bangladesh College of Physicians and Surgeons* 2011; 29: 120-125.

[10] Abramson MA, Sexton DJ. Nosocomial methicillin-resistant and methicillin-susceptible *Staphylococcus aureus* primary bacteremia: At what cost? *Infection Control and Hospital Epidemiology* 1999; 20: 408-11.

[11] Cosgrove SA, Carmeti Y. The impact of antimicrobial resistance on health and economic outcomes. *Clinical Infectious Diseases* 2003; 36: 1433-1437.

[12] Smolinski MS, Hamburg MA, Lederberg J. *Microbial Threats to Health: Emergence, Detection, and Response*. Committee on Emerging Microbial Threats to Health in the 21st Century. Washington, D.C.: The National Academies Press, 2003.

[13] Antimicrobial resistance: A deadly burden no country can afford to ignore. *Canada Communicable Disease Report 2003* (Sept. 15); 29 (18): 157-64.

[14] Rafii F, Sutherland JB, Cerniglia CE. Effects of treatment with antimicrobial agents on the human colonic microflora. *Therapeutics and Clinical Risk Management* 2008; 4: 134-1357.

[15] CDC. Making Health Care Safer—Stopping C. difficile Infections. *Vital Signs* 2012 (March). Available at: http://www.cdc.gov/vitalsigns/hai/

[16] Kümmerer K. Significance of antiobiotics in the environment. *Journal of Antimicrobial Chemotherapy* 2003; 52: 5-7.

[17] Klevens RM, Edwards JR, Richards CL, Horan TC, Gaynes RP, Pollock DA, Cardo DM. Estimating health care-associated infections and deaths in US hospitals, 2002. *Public Health Reports* 2007; 122: 160-166.

[18] Köck R, Becker K, Cookson B, van Gemert-Pijnen JE, Harbarth S, Kluymans J, Mielke M, Peters G, Skov RL, Struelens MJ, Tacconelli E, Navarro Torné A, Witte W, Firedrich AW. Methicillin-resistant Staphylococcus aureus (MRSA): burden of disease and control challenges in Europe. *Euro Surveillance* 2010; 15: issue 41: 19688.

[19] de Kraker MEA, Wolkewitz M, Davey PG, Koller W, Berger J, Nagler J, Icket C, Kalenic S, Horvatic J, Seifert H, Kaasch A, Paniara O, Argyropoulou A, Bompola M, Smyth E, Skally M, Raglio A, Dumpis U, Kelmere AM, Borg M, Xuereb D, Ghita MC, Noble M, Kolman J, Grabljevec S, Turner D, Lansbury L, Grundmann H. Burden of antimicrobial resistance in European hospitals: Excess mortality and length of hospital stay associated with bloodstream infections due to *Escherichia coli* resistant to third-generation cephalosporins. *Journal of Antimicrobial and Chemotherapy* 2011; 66: 398–407.

[20] de Kraker MEA, Wolkewitz M, Davey PG, Grundmann H, BURDEN Study Group. Clinical Impact of Antimicrobial resistance in European hospitals: Excess mortality and length of hospital stay related to methicillin-resistant *Staphylococcus aureus* bloodstream infections. *Antimicrobial Agents and Chemotherapy* 2011; 55: 1598-1605.

[21] Umscheid C, Mitchell M, Doshi J, Agarwal R, Williams K, Brennan PJ. Estimating the proportion of healthcare-associated infections that are reasonably preventable and the related mortality and costs. *Infection Control and Hospital Epidemiology* 2011; 32: 101–114.

[22] Calfee DP. Crisis in hospital-acquired, healthcare-associated infections. *Annual Review of Medicine* 2012; 63: 359-371.

[23] MacPherson DW, Gushulak BD, Baine WB, Bala S, Gubbins PO, Holtom P, Segarra-Newnham M. Population mobility, globalization and antimicrobial drug resistance. *Emerging Infectious Diseases* 2009; 15: 1727-1732.

[24] Kümmerer K. Pharmaceuticals in the environment. Annual Review of Environment and Resources 2010; 35: 57-75.

[25] Health facilities flush estimated 250M pounds of drugs a year. *USA Today* 2008, September 14.

[26] Brodin T, Fick J, Jonsson M. Dilute concentrations of a psychiatric drug alter behavior of fish from natural populations. *Science* 2013; 239: 814-815.

[27] Jelic A, Gros M, Petrovic M, Ginebreda A, Barcelo D. "Occurrence and Elimination of Pharmaceuticals During Conventional Wastewater Treatment." In *Emerging and Priority Pollutants in Rivers.* Edited by H. Guasch et al. *The Handbook of Environment Chemistry* 2012: 19: 1–24.

[28] Shore L. "Effects of Steroid Hormones on Aquatic and Soil Organisms." In *Hormones and Pharmaceuticals Generated by Concentrated Animal Feeding Operations*. Emerging Topics in Ecotoxicology. Edited by LS Shore and A Pruden. New York: Springer Science and Business Media, 2009.

[29] Schultz M, Furlong ET, Kolpin DW, Werner SL, Schoenfuss HL, Barber LB, Blazer VS, Norris DO, Vajada AM. Antidepressant pharmaceuticals in two U.S. effluent-impacted streams: Occurrence and fate in water and sediment, and selective uptake in fish neural tissue. *Environment Science technologies* 2010: 44: 1918-1925.

[30] Benjamin, Emelia J., et al. "Heart disease and stroke statistics—2018 update: a report from the American Heart Association." *Circulation* 137.12 (2018): e67-e492.

[31] Davy, Kevin P., and John E. Hall. "Obesity and hypertension: two epidemics or one?." *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology* 286.5 (2004): R803-R813.

[32] Lovic, Dragan, et al. "The growing epidemic of diabetes mellitus." *Current vascular pharmacology* 18.2 (2020): 104-109.

[33] Smyth, Simon, and Andrew Heron. "Diabetes and obesity: the twin epidemics." *Nature medicine* 12.1 (2006): 75-80.

[34] S A Lanham-New. Fruit and vegetables: the unexpected natural answer to the question of osteoporosis prevention? *Am J Clin Nutr.* 2006 Jun;83(6):1254-5.

[35] Kaidar-Person, Orit, Gil Bar-Sela, and Benjamin Person. "The two major epidemics of the twenty-first century: obesity and cancer." *Obesity surgery* 21.11 (2011): 1792-1797.

[36] Nakazawa, Donna Jackson. *The autoimmune epidemic*. Simon and Schuster, 2009.

[37] Tucci, Veronica, and Nidal Moukaddam. "We are the hollow men: The worldwide epidemic of mental illness, psychiatric and behavioral emergencies, and its impact on patients and providers." *Journal of emergencies, trauma, and shock* 10.1 (2017): 4.

[38] Rose Rimly. Pediatricians Speak Out on 'Vaccine Hesitancy'. https://www.healthline.com/health-news/pediatricians-speak-out-on-vaccine-hesitancy

[39] Calisher, Charles, et al. "Statement in support of the scientists, public health professionals, and medical professionals of China combatting COVID-19." *The Lancet* 395.10226 (February 18, 2020): e42-e43.

[40] Katherine Eban. The Lab-Leak Theory: Inside the Fight to Uncover COVID-19's Origins. Vanity Fair. June 3, 2021. https://www.vanityfair.com/news/2021/06/the-lab-leak-theory-inside-the-fight-to-uncover-covid-19s-origins

[41] Jonathan Matthews. Scientists Outraged by Peter Daszak Leading Enquiry Into Possible Covid Lab Leak. GMWatch. September 23, 2020. https://gmwatch.org/en/news/latest-news/19538-scientists-outraged-by-peter-daszak-leading-enquiry-into-possible-covid-lab-leak

[42] Thacker, Paul D. "Covid-19: Lancet investigation into origin of pandemic shuts down over bias risk." (2021).

[43] Katherine Eban. The Lab-Leak Theory: Inside the Fight to Uncover COVID-19's Origins. Vanity Fair. June 3, 2021. https://www.vanityfair.com/news/2021/06/the-lab-leak-theory-inside-the-fight-to-uncover-covid-19s-origins

[44] Project DEFUSE DARPA - PREEMPT (HR001118S0017). https://drasticresearch.files.wordpress.com/2021/09/defuse-project-drastic-analysis-1.pdf

[45] Jim Bostickson et al. The October Surprise in Wuhan. https://www.researchgate.net/publication/355373689_The_October_Surprise_in_Wuhan

[46] Shah, Parth, et al. "Informed consent." (2017).

[47] William Shakespeare. Macbeth. Act V Scene III. http://www.shakespeare-online.com/plays/macbeth_5_3.html

[48] James Angel and Nick Dearden. The horrible history of Big Pharma. Why we can't leave pharmaceutical corporations in the driving seat of the Covid-19 response. https://www.globaljustice.org.uk/resource/horrible-history-big-pharma/

[49] Mary Holland. COVID-19 mRNA vaccines: The Perfect Legal Storm. February 10, 2021. https://childrenshealthdefense.org/transcripts/the-covid-vaccine-on-trial-if-you-only-knew/

[50] Evans, Robert G. "Tough on Crime? Pfizer and the CIHR." *Healthcare Policy* 5.4 (2010): 16.

[51] Data Science Association. The Pfizer inoculations for COVID-19. More harm than good. https://www.datascienceassn.org/sites/default/files/The-COVID-19-Inoculations-More-Harm-Than-Good-REV-Dec-16-2021.pdf

[52] Pfizer Unit to Settle Charges Of Lying About Heart Valve, July 2, 1994. https://www.nytimes.com/1994/07/02/business/pfizer-unit-to-settle-charges-of-lying- about-heart-valve.html

[53] Pfizer to Pay $430 Million Over Promoting Drug to Doctors. May 14, 2004. https://www.nytimes.com/2004/05/14/business/pfizer-to-pay-430-million-over- promoting-drug-to-doctors.html

[54] $60 Million Deal In Pfizer Suit over Rezulin. July 3, 2004. https://www.nytimes.com/2004/07/03/business/60-million-deal-in-pfizer-suit.html

[55] Experts Conclude Pfizer Manipulated Studies. Oct 8, 2008. https://www.nytimes.com/2008/10/08/health/research/08drug.html

[56] Pfizer to Pay $2.3 Billion for Fraudulent Marketing. Sep. 2, 2009. https://www.justice.gov/opa/pr/justice-department-announces-largest-health-care-fraud-settlement-its-history

[57] Pfizer Admits Paying $35 Million to Doctors Over Last 6 Months. April 1, 2010. https://www.news-medical.net/news/20100401/Pfizer-admits-paying-2435- million-to-doctors-over-last-6-months.aspx

[58] Pfizer Pays Out to Nigerian Families of Meningitis Drug Trial Victims. August 12, 2011. https://www.theguardian.com/world/2011/aug/11/pfizer-nigeria- meningitis-drug-compensation

[59] Pfizer Pays US$60M to Settle Allegations of Bribing Doctors. August 7, 2012. https://www.ctvnews.ca/health/health-headlines/pfizer-pays-us-60m-to-settle- allegations-of-bribing-doctors-1.906216

[60] SEC Charges Pfizer with FCPA Violations. August 7, 2012. https://www.sec.gov/news/press-release/2012-2012-152htm

[61] US High Court Leaves Intact $142 million Verdict Against Pfizer. December 9, 2013. https://www.reuters.com/article/us-usa-court-pfizer-idUSBRE9B80K020131209

[62] Pfizer Fined Record £84.2m for Overcharging NHS. December 7, 2016. https://www.bbc.com/news/business-38233852

[63] Sonofi, FSK, Pfizer, Boehringer Must Face Zantac Class-Action Lawsuits: Court. October 15, 2021. https://medicaldialogues.in/news/industry/pharma/sanofi-gsk- pfizer-boehringer-must-face-zantac-class-action-lawsuits-court-83138

[64] Data Science Association. The Pfizer inoculations for COVID-19. More harm than good. https://www.datascienceassn.org/sites/default/files/The-COVID-19-Inoculations-More-Harm-Than-Good-REV-Dec-16-2021.pdf

[65] Thomas, Stephen J., et al. "Safety and efficacy of the BNT162b2 mRNA Covid-19 vaccine through 6 months." *New England Journal of Medicine* 385.19 (2021): 1761-1773.

[66] Polack, Fernando P., et al. "Safety and efficacy of the BNT162b2 mRNA Covid-19 vaccine." *New England Journal of Medicine* (2020).

[67] Lundh, Andreas, et al. "Industry sponsorship and research outcome." *Cochrane database of systematic reviews* 2 (2017).

[68] Norman Doidge. Needle Points. Chapter III: A new plague descends. October 27, 2021. https://www.tabletmag.com/sections/science/articles/needle-points-vaccinations-chapter-three

[69] Norman Doidge. Needle Points. Chapter III: A new plague descends. October 27, 2021. https://www.tabletmag.com/sections/science/articles/needle-points-vaccinations-chapter-three

[70] Norman Doidge. Needle Points. Chapter III: A new plague descends. October 27, 2021. https://www.tabletmag.com/sections/science/articles/needle-points-vaccinations-chapter-three

[71] Angell, Marcia. *The truth about the drug companies: How they deceive us and what to do about it*. Random House Incorporated, 2005.

[72] Norman Doidge. Needle Points. Chapter III: A new plague descends. October 27, 2021. https://www.tabletmag.com/sections/science/articles/needle-points-vaccinations-chapter-three

[73] CDC. National Center for Immunization and Respiratory Diseases (CVG). https://www.cdc.gov/about/organization/cio-orgcharts/pdfs/NCIRDFS-508.pdf (Accessed November 8, 2021)

[74] CDC. Safety of COVID-19 Vaccines. https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety/safety-of-vaccines.html (Accessed November 8, 2021)

[75] Merriam-Webster. https://www.merriam-webster.com/dictionary/safe

[76] CDC Director Rochelle Walensky tells Wolf Blitzer that COVID Vaccines won't prevent transmission. August 8, 2021. https://www.youtube.com/watch?v=TKFWGvvlVLI

[77] Vaccines and drugs: similarities and differences. https://isoponline.org/wp-content/uploads/2015/10/Differences-on-drugs-and-vaccines.pdf

[78] CDC. Definition of Terms. https://www.cdc.gov/vaccines/vac-gen/imz-basics.htm

[79] Data Science Association. The Pfizer inoculations for COVID-19. More harm than good. https://www.datascienceassn.org/sites/default/files/The-COVID-19-Inoculations-More-Harm-Than-Good-REV-Dec-16-2021.pdf

[80] Brought to you by Pfizer. https://rumble.com/voz64j-brought-to-you-by-pfizer.html

[81] Trusted News Initiative (TNI) to combat spread of harmful vaccine disinformation and announces major research project. https://www.bbc.com/mediacentre/2020/trusted-news-initiative-vaccine-disinformation

[82] UK Government. COVID-19 vaccine surveillance report Week 51. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1043608/Vaccine_surveillance_report_-_week_51.pdf

[83] UK Government. COVID-19 vaccine surveillance report Week 51. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1043608/Vaccine_surveillance_report_-_week_51.pdf

[84] UK Government. COVID-19 vaccine surveillance report Week 51. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1043608/Vaccine_surveillance_report_-_week_51.pdf

[85] UK Government. COVID-19 vaccine surveillance report Week 51. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1043608/Vaccine_surveillance_report_-_week_51.pdf

[86] Singanayagam, Anika, et al. "Community transmission and viral load kinetics of the SARS-CoV-2 delta (B. 1.617. 2) variant in vaccinated and unvaccinated individuals in the UK: a prospective, longitudinal, cohort study." *The Lancet Infectious Diseases* (2021).

[87] UK Government. COVID-19 vaccine surveillance report Week 51. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1043608/Vaccine_surveillance_report_-_week_51.pdf

[88] UK Government. COVID-19 vaccine surveillance report Week 51. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1043608/Vaccine_surveillance_report_-_week_51.pdf

[89] UK Government. COVID-19 vaccine surveillance report Week 51. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1043608/Vaccine_surveillance_report_-_week_51.pdf

[90] UK Government. COVID-19 vaccine surveillance report Week 51. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1043608/Vaccine_surveillance_report_-_week_51.pdf

[91] León, Tomás M., et al. "COVID-19 cases and hospitalizations by COVID-19 vaccination status and previous COVID-19 diagnosis—California and New York, May–November 2021." (2022).

[92] Andrews, N. "Effectiveness of COVID-19 vaccines against the Omicron (B. 1.1. 529) variant of concern [Internet].[cited 2021 Dec 10]."

[93] McMorrow, Meredith, Vaccine Effectiveness Team Co-lead, and Representing EPI Task Force. "Improving communications around vaccine breakthrough and vaccine effectiveness." *EPI Task Force, Centres for Disease Control and Prevention* (2021).

[94] Shitrit, Pnina, et al. "Nosocomial outbreak caused by the SARS-CoV-2 Delta variant in a highly vaccinated population, Israel, July 2021." *Eurosurveillance* 26.39 (2021): 2100822.

[95] UK Government. COVID-19 vaccine surveillance report Week 51. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1043608/Vaccine_surveillance_report_-_week_51.pdf

[96] National Vaccine Information Center. http://www.medalerts.org/vaersdb/findfield.php (Accessed December 28, 2021).

[97] Reported side effects following COVID-19 vaccination in Canada. https://health-infobase.canada.ca/covid-19/vaccine-safety/#seriousNonSerious. Accessed December 28, 2021

[98] Coronavirus vaccine—weekly summary of Yellow Card reporting. Updated 24 December 2021. https://www.gov.uk/government/publications/coronavirus-covid-19-vaccine-adverse-reactions/coronavirus-vaccine-summary-of-yellow-card-reporting. Accessed December 28, 2021

[99] About VAERS. https://vaers.hhs.gov/about.html

[100] Ross Lazarus, et al. Electronic Support for Public Health–Vaccine Adverse Event Reporting System (ESP:VAERS). https://digital.ahrq.gov/ahrq-funded-projects/electronic-support-public-health-vaccine-adverse-event-reporting-system Accessed January 13, 2020

[101] Shimabukuro, Tom T., Matthew Cole, and John R. Su. "Reports of anaphylaxis after receipt of mRNA COVID-19 vaccines in the US—December 14, 2020-January 18, 2021." *Jama* 325.11 (2021): 1101-1102.

[102] National Vaccine Information Center. http://www.medalerts.org/vaersdb/findfield.php

[103] Our World Data. Coronavirus (COVID-19) Vaccinations. https://ourworldindata.org/covid-vaccinations?country=USA

[104] Reported side effects following COVID-19 vaccination in Canada. https://health-infobase.canada.ca/covid-19/vaccine-safety/#seriousNonSerious. Accessed December 28, 2021

[105] Reported side effects following COVID-19 vaccination in Canada. https://health-infobase.canada.ca/covid-19/vaccine-safety/#seriousNonSerious. Accessed December 28, 2021

[106] Blumenthal, Kimberly G., et al. "Acute allergic reactions to mRNA COVID-19 vaccines." *Jama* 325.15 (2021): 1562-1565.

[107] Shimabukuro, Tom T., Matthew Cole, and John R. Su. "Reports of anaphylaxis after receipt of mRNA COVID-19 vaccines in the US—December 14, 2020-January 18, 2021." *Jama* 325.11 (2021): 1101-1102.

[108] Kozma, Gergely Tibor, et al. "Pseudo-anaphylaxis to polyethylene glycol (PEG)-coated liposomes: roles of anti-PEG IgM and complement activation in a porcine model of human infusion reactions." *ACS nano* 13.8 (2019): 9315-9324.

[109] Lee, Yun Woo, et al. "Adverse Reactions of the Second Dose of the BNT162b2 mRNA COVID-19 Vaccine in Healthcare Workers in Korea." *Journal of Korean medical science* 36.21 (2021).

[110] Klugar, Miloslav, et al. "Side effects of mRNA-based and viral vector-based COVID-19 vaccines among German healthcare workers." *Biology* 10.8 (2021): 752.

[111] Polack, Fernando P., et al. "Safety and efficacy of the BNT162b2 mRNA Covid-19 vaccine." *New England Journal of Medicine* (2020).

[112] Walsh, Edward E., et al. "Safety and immunogenicity of two RNA-based Covid-19 vaccine candidates." *New England Journal of Medicine* 383.25 (2020): 2439-2450.

[113] Menni, Cristina, et al. "Vaccine side-effects and SARS-CoV-2 infection after vaccination in users of the COVID Symptom Study app in the UK: a prospective observational study." *The Lancet Infectious Diseases* (2021).

[114] Hoeg, Tracy Beth, et al. "SARS-CoV-2 mRNA Vaccination-Associated Myocarditis in Children Ages 12-17: A Stratified National Database Analysis." *Medrxiv* (2021).

[115] Montgomery, Jay, et al. "Myocarditis following immunization with mRNA COVID-19 vaccines in members of the US military." *JAMA cardiology* 6.10 (2021): 1202-1206.

[116] Comirnaty. Assessment. https://www.ema.europa.eu/en/documents/assessment-report/comirnaty-epar-public-assessment-report_en.pdf

[117] Polack, Fernando P., et al. "Safety and efficacy of the BNT162b2 mRNA Covid-19 vaccine." *New England Journal of Medicine* (2020).

[118] Health Ontario. Enhanced Epidemiological Summary. Myocarditis and Pericarditis Following Vaccination with COVID-19 mRNA Vaccines in Ontario: December 13, 2020 to September 4, 2021. https://www.publichealthontario.ca/-/media/documents/ncov/epi/covid-19-myocarditis-pericarditis-vaccines-epi.pdf?sc_lang=en

[119] Data Science Association. The Pfizer inoculations for COVID-19. More harm than good. https://www.datascienceassn.org/sites/default/files/The-COVID-19-Inoculations-More-Harm-Than-Good-REV-Dec-16-2021.pdf

[120] Husby, Anders, et al. "SARS-CoV-2 vaccination and myocarditis or myopericarditis: population based cohort study." *bmj* 375 (2021).

[121] Vogel, Gretchen, and Jennifer Couzin-Frankel. "Israel reports link between rare cases of heart inflammation and COVID-19 vaccination in young men." *Science* 10 (2021).

[122] Das, Bibhuti B., et al. "Myocarditis and pericarditis following mRNA COVID-19 vaccination: what do we know so far?." *Children* 8.7 (2021): 607.

[123] Grün, Stefan, et al. "Long-term follow-up after viral myocarditis established by endomyocardical biopsy: Predictors of mortality." *Journal of Cardiovascular Magnetic Resonance* 13.1 (2011): 1-1.

[124] More than 75 athletes "suddenly" died in 5 months. https://diariodevallarta.com/en/mas-de-75-deportistas-repentinamente-fallecidos-en-5-meses/

[125] האתלטים מגיפת (An epidemic amongst athletes). https://www.rtnews.co.il/?view=article&id=49&catid=22

[126] Ohana, Steve, and Alexandra Henrion-Caude. "Young adult mortality in Israel during time of COVID-19 crisis." *Available at SSRN* (2021).

[127] Klugar, Miloslav, et al. "Side effects of mRNA-based and viral vector-based COVID-19 vaccines among German healthcare workers." *Biology* 10.8 (2021): 752.

[128] Al Khames Aga, Qutaiba A., et al. "Safety of COVID-19 vaccines." *Journal of Medical Virology* (2021).

[129] Boekel, Laura, et al. "Adverse events after first COVID-19 vaccination in patients with autoimmune diseases." *The Lancet Rheumatology* (2021).

[130] Dinse, Gregg E., et al. "Increasing prevalence of antinuclear antibodies in the United States." *Arthritis & Rheumatology* 72.6 (2020): 1026-1035.

[131] Angum, Fariha, et al. "The prevalence of autoimmune disorders in women: a narrative review." *Cureus* 12.5 (2020).

[132] American Autoimmune Related Diseases Association. Prevalence of autoimmune diseases. https://autoimmune.org/wp-content/uploads/2019/12/1-in-5-Brochure.pdf.

[133] Furer, Victoria, et al. "Herpes zoster following BNT162b2 mRNA Covid-19 vaccination in patients with autoimmune inflammatory rheumatic diseases: a case series." *Rheumatology (Oxford, England)* (2021).

[134] Khayat-Khoei, Mahsa, et al. "COVID-19 mRNA vaccination leading to CNS inflammation: a case series." *Journal of Neurology* (2021): 1-14.

[135] Havla, Joachim, et al. "First manifestation of multiple sclerosis after immunization with the Pfizer-BioNTech COVID-19 vaccine." *Journal of Neurology* (2021): 1-4.

[136] Etemadifar, Masoud, et al. "Acute relapse and poor immunization following COVID-19 vaccination in a rituximab-treated multiple sclerosis patient." *Human Vaccines & Immunotherapeutics* (2021): 1-3.

[137] Maniscalco, Giorgia T., et al. "Severe multiple sclerosis relapse after COVID-19 vaccination: a case report." *Frontiers in Neurology* 12 (2021).

[138] Welsh, Kerry J., et al. "Thrombocytopenia including immune thrombocytopenia after receipt of mRNA COVID-19 vaccines reported to the Vaccine Adverse Event Reporting System (VAERS)." *Vaccine* 39.25 (2021): 3329-3332.

[139] Kuter, David J. "Exacerbation of immune thrombocytopenia following Covid-19 vaccination." *British Journal of Haematology* (2021).

[140] van Dijk, Wobke EM, and Roger EG Schutgens. "Relapse of immune thrombocytopenia after COVID-19 vaccination." *European Journal of Haematology* (2021).

[141] Comirnaty. Assessment. https://www.ema.europa.eu/en/documents/assessment-report/comirnaty-epar-public-assessment-report_en.pdf

[142] Polack, Fernando P., et al. "Safety and efficacy of the BNT162b2 mRNA Covid-19 vaccine." *New England Journal of Medicine* (2020).

[143] Kowarz, Eric, et al. "“Vaccine-Induced Covid-19 Mimicry” Syndrome: Splice reactions within the SARS-CoV-2 Spike open reading frame result in Spike protein variants that may cause thromboembolic events in patients immunized with vector-based vaccines." (2021).

[144] Edwards, Amy E., et al. "Acute hyperglycaemic crisis after vaccination against COVID-19: A case series." *Diabetic Medicine* (2021).

[145] Ahmad, Shwan A., et al. "Aseptic meningoencephalitis after COVID-19 vaccination: A case report." *Annals of Medicine and Surgery* (2021): 103028.

[146] Garg, Ravindra Kumar, and Vimal Kumar Paliwal. "Spectrum of neurological complications following COVID-19 vaccination." *Neurological Sciences* (2021): 1-38.à

[147] Finsterer, Josef. "Lobar bleeding with ventricular rupture shortly after first dosage of an mRNA-based SARS-CoV-2 vaccine." *Brain Hemorrhages* (2021).

[148] Finsterer, Josef, and Maria Korn. "Aphasia seven days after second dose of an mRNA-based SARS-CoV-2 vaccine." *Brain Hemorrhages* (2021).

[149] Hassanzadeh, Shakiba, et al. "Kidney complications following COVID-19 vaccination; a review of the literature." *Journal of Nephropharmacology* 11.1 (2022).

[150] Elboraey, Mohamed Omar, and Emad El Said Fahim Essa. "Stevens-Johnson syndrome post second dose of Pfizer COVID-19 vaccine: a case report." *Oral surgery, oral medicine, oral pathology and oral radiology* 132.4 (2021): e139-e142.

[151] Onn, Pei-Yee, and Catherina L. Chang. "Lichenoid cutaneous skin eruption and associated systemic inflammatory response following Pfizer-BioNTech mRNA COVID-19 vaccine administration." *Respirology Case Reports* 9.11 (2021): e0860.

[152] Kong, Joyce, et al. "Bullous drug eruption after second dose of mRNA-1273 (Moderna) COVID-19 vaccine: Case report." *Journal of Infection and Public Health* 14.10 (2021): 1392-1394.

[153] Dias, Leonor, et al. "Cerebral Venous Thrombosis after BNT162b2 mRNA SARS-CoV-2 vaccine." *Journal of Stroke and Cerebrovascular Diseases* (2021): 105906.

[154] Greinacher, Andreas, et al. "Thrombotic thrombocytopenia after ChAdOx1 nCov-19 vaccination." *New England Journal of Medicine* 384.22 (2021): 2092-2101.

[155] Scully, Marie, et al. "Pathologic antibodies to platelet factor 4 after ChAdOx1 nCoV-19 vaccination." *New England Journal of Medicine* 384.23 (2021): 2202-2211.

[156] Muir, Kate-Lynn, et al. "Thrombotic thrombocytopenia after Ad26. COV2. S vaccination." *New England Journal of Medicine* 384.20 (2021): 1964-1965.

[157] Robichaud, Julie, Catherine Côté, and Fanny Côté. "Systemic capillary leak syndrome after ChAdOx1 nCOV-19 (Oxford–AstraZeneca) vaccination." *CMAJ* 193.34 (2021): E1341-E1344.

[158] Matheny, Meghan, et al. "Severe Exacerbations of Systemic Capillary Leak Syndrome After COVID-19 Vaccination: A Case Series." *Annals of Internal Medicine* (2021).

[159] Lehmann, Karla J. "Suspected Cardiovascular Side Effects of Two COVID-19 Vaccines." *Journal of Biology* 10.5 (2021): 001-006.

[160] Pepe, Salvatore, Ann T. Gregory, and A. Robert Denniss. "Myocarditis, Pericarditis and Cardiomyopathy After COVID-19 Vaccination☆." *Heart, Lung and Circulation* 30.10 (2021): 1425-1429.

[161] Shay, David K., Tom T. Shimabukuro, and Frank DeStefano. "Myocarditis occurring after immunization with mRNA-based COVID-19 vaccines." *JAMA cardiology* (2021).

[162] Dionne, Audrey, et al. "Association of Myocarditis With BNT162b2 Messenger RNA COVID-19 Vaccine in a Case Series of Children." *JAMA cardiology* (2021).

[163] Sokolska, Justyna M., Jacek Kurcz, and Wojciech Kosmala. "Every rose has its thorns—acute myocarditis following COVID-19 vaccination." *Kardiologia Polska (Polish Heart Journal)* (2021).

[164] Hughes, Sue. "Myocardites post-vaccinales: 5 études passent au crible des dizaines de cas." (2021).

[165] Snapiri, Ori, et al. "Transient Cardiac Injury in Adolescents Receiving the BNT162b2 mRNA COVID-19 Vaccine." *The Pediatric Infectious Disease Journal* (2021).

[166] Das, Bibhuti B., et al. "Myopericarditis following mRNA COVID-19 Vaccination in Adolescents 12 through 18 Years of Age." *The Journal of pediatrics* (2021).

[167] Tano, Eric, et al. "Perimyocarditis in adolescents after Pfizer-BioNTech COVID-19 vaccine." *Journal of the Pediatric Infectious Diseases Society* (2021).

[168] Starekova, Jitka, et al. "Myocarditis Associated with mRNA COVID-19 Vaccination." *Radiology* (2021): 211430.

[169] Jhaveri, Ravi, et al. "Weighing the Risks of Perimyocarditis With the Benefits of SARS-CoV-2 mRNA Vaccination in Adolescents." *Journal of the Pediatric Infectious Diseases Society* (2021).

[170] Isaak, Alexander, Andreas Feisst, and Julian A. Luetkens. "Myocarditis Following COVID-19 Vaccination." *Radiology* (2021): 211766.

[171] Mouch, Saif Abu, et al. "Myocarditis following COVID-19 mRNA vaccination." *vaccine* (2021).

[172] Patel, Yash R., et al. "Cardiovascular magnetic resonance findings in young adult patients with acute myocarditis following mRNA COVID-19 vaccination: a case series." *Journal of Cardiovascular Magnetic Resonance* 23.1 (2021): 1-8.

[173] Mansour, Joseph, et al. "Acute myocarditis after a second dose of the mRNA COVID-19 vaccine: a report of two cases." *Clinical Imaging* (2021).

[174] Schauer, Jenna, et al. "Myopericarditis after the Pfizer mRNA COVID-19 vaccine in adolescents." *The Journal of Pediatrics* (2021).

[175] Mouch, Abu. "Myocarditis: 6 case reports." *Reactions* 347.17 (1864): 2021.

[176] Mouch, Abu. "Myocarditis: 6 case reports." *Reactions* 347.17 (1864): 2021.

[177] Zappa, Martina, et al. "Blood pressure increase after Pfizer/BioNTech SARS-CoV-2 vaccine." *European journal of internal medicine* 90 (2021): 111-113.

[178] Leone, Flavia, et al. "Adult-onset Still's disease following COVID-19 vaccination." *The Lancet Rheumatology* 3.10 (2021): e678-e680.

[179] Shrestha, Sunil, et al. "Adverse events related to COVID-19 vaccines: the need to strengthen pharmacovigilance monitoring systems." *Drugs & Therapy Perspectives* 37.8 (2021): 376-382.

[180] Ng, Xin Le, et al. "Ocular Adverse Events After COVID-19 Vaccination." *Ocular immunology and inflammation* (2021): 1-9.

[181] Lee, Yu-Kuei, and Yi-Hsun Huang. "Ocular Manifestations after Receiving COVID-19 Vaccine: A Systematic Review." *Vaccines* 9.12 (2021): 1404.

[182] Uwaydah, Ahmad Kanaan, et al. "Adult multisystem inflammatory syndrome in a patient who recovered from COVID-19 postvaccination." *BMJ Case Reports CP* 14.4 (2021): e242060.

[183] Nune, Arvind, et al. "Multisystem inflammatory syndrome in an adult following the SARS-CoV-2 vaccine (MIS-V)." *BMJ Case Reports CP* 14.7 (2021): e243888.

[184] Salzman, Mark B., et al. "Multisystem inflammatory syndrome after SARS-CoV-2 infection and COVID-19 vaccination." *Emerging Infectious Diseases* 27.7 (2021): 1944.

[185] Barda, Noam, et al. "Safety of the BNT162b2 mRNA COVID-19 vaccine in a nationwide setting." *New England Journal of Medicine* (2021).

[186] Desai, Urvi G. "Myasthenia Gravis Exacerbation Following Second Dose of mRNA-1273 Vaccine." *RRNMF Neuromuscular Journal* 2.2 (2021).

[187] Tuschen, Katharina, et al. "Relapse of class V lupus nephritis after vaccination with COVID-19 mRNA vaccine." *Kidney International* 100.4 (2021): 941-944.

[188] Ng, Xin Le, et al. "Ocular Adverse Events After COVID-19 Vaccination." *Ocular immunology and inflammation* (2021): 1-9.

[189] Liu, Jiping, et al. "Comprehensive investigations revealed consistent pathophysiological alterations after vaccination with COVID-19 vaccines." *Cell discovery* 7.1 (2021): 1-15.

[190] Norman Doidge. Needle Points. Chapter III: A new plague descends. October 27, 2021. https://www.tabletmag.com/sections/science/articles/needle-points-vaccinations-chapter-three

[191] Doshi, Peter. "Pandemrix vaccine: why was the public not told of early warning signs?." *Bmj* 362 (2018).

[192] Martin Kulldorff . Vaccine Mandates on Children, with Dr. Monica Gandhi & Dr. Martin Kulldorff. The Megyn Kelly Show. September 30, 2021. https://www.youtube.com/watch?v=GBnTEGpP-Zg

[193] Jolobe, Oscar MP. "A scientific basis for anxiety about the emergence of resistant strains of covid-19." *QJM: An International Journal of Medicine* (2021).

[194] Read, Andrew F., et al. "Imperfect vaccination can enhance the transmission of highly virulent pathogens." *PLoS biology* 13.7 (2015): e1002198.

[195] Singh, Jalen, et al. "Evolutionary trajectory of SARS-CoV-2 and emerging variants." *Virology journal* 18.1 (2021): 1-21.

[196] Coronavirus: First patients injected in UK vaccine trial. https://www.bbc.com/news/health-52394485

[197] Singh, Jalen, et al. "Evolutionary trajectory of SARS-CoV-2 and emerging variants." *Virology journal* 18.1 (2021): 1-21.

[198] Makoni, Munyaradzi. "COVID-19 vaccine trials in Africa." *The Lancet Respiratory Medicine* 8.11 (2020): e79-e80.

[199] Expert reaction to cases of variant B.1.617 (the 'Indian variant') being investigated in the UK. https://www.sciencemediacentre.org/expert-reaction-to-cases-of-variant-b-1-617-the-indian-variant-being-investigated-in-the-uk/

[200] How Bharat Biotech's Vaccine Works. https://www.nytimes.com/interactive/2021/health/bharat-biotech-covid-19-vaccine.html

[201] Trial of Oxford COVID-19 vaccine starts in Brazil. https://covid19vaccinetrial.co.uk/brazil-trial-launch

[202] Beyond Delta, These New COVID-19 Variants Are Causing Global Alarm. https://www.ndtv.com/world-news/coronavirus-variants-beyond-delta-new-covid-19-variants-lambda-covid-variant-mu-covid-variant-are-causing-alarm-2534735

[203] Chauvin, Lucien. "Peruvian COVID-19 vaccine scandal spreads." *The Lancet* 397.10276 (2021): 783.

[204] Phase III Double-blind, Placebo-controlled Study of AZD1222 for the Prevention of COVID-19 in Adults. https://clinicaltrials.gov/ct2/show/NCT04516746

[205] Johnson & Johnson begins final phase of single-shot COVID-19 vaccine study. https://www.cbc.ca/news/world/johnson-johnson-beginning-final-study-covid-19-vaccine-1.5735136

[206] Desforges, Marc, et al. "Uncertainty around the Long-Term Implications of COVID-19." *Pathogens* 10.10 (2021): 1267.

[207] Corey, Lawrence, et al. "SARS-CoV-2 variants in patients with immunosuppression." *New England Journal of Medicine* 385.6 (2021): 562-566.

[208] Kemp, Steven A., et al. "SARS-CoV-2 evolution during treatment of chronic infection." *Nature* 592.7853 (2021): 277-282.

[209] Subramanian, S. V., and Akhil Kumar. "Increases in COVID-19 are unrelated to levels of vaccination across 68 countries and 2947 counties in the United States." *European Journal of Epidemiology* 36.12 (2021): 1237-1240.

[210] Thomas, Stephen J., et al. "Safety and efficacy of the BNT162b2 mRNA Covid-19 vaccine through 6 months." *New England Journal of Medicine* 385.19 (2021): 1761-1773.

[211] Ministry of Health Israel. Two-dose vaccination data. Government of Israel; 2021. https://www.gov.il/BlobFolder/reports/vacci ne-efficacy-safety-follow-up-committee/he/files_publications_ corona_two-dose-vaccination-data.pdf.

[212] FDA. Development and Licensure of Vaccines to Prevent COVID-19. https://www.fda.gov/media/139638/download

[213] Polack, Fernando P., et al. "Safety and efficacy of the BNT162b2 mRNA Covid-19 vaccine." *New England Journal of Medicine* (2020).

[214] Polack, Fernando P., et al. Supplementary appendix to "Safety and efficacy of the BNT162b2 mRNA Covid-19 vaccine." *New England Journal of Medicine* (2020).

[215] Malavolta, Marco, et al. "Plasma copper/zinc ratio: an inflammatory/nutritional biomarker as predictor of all-cause mortality in elderly population." *Biogerontology* 11.3 (2010): 309-319).

[216] Data Science Association. The Pfizer inoculations for COVID-19. More harm than good. https://www.datascienceassn.org/sites/default/files/The-COVID-19-Inoculations-More-Harm-Than-Good-REV-Dec-16-2021.pdf

[217] Polack, Fernando P., et al. Supplementary appendix to "Safety and efficacy of the BNT162b2 mRNA Covid-19 vaccine." *New England Journal of Medicine* (2020).

[218] Statistics Canada. Proportion of adults (age 18 years and older) with at least one underlying health condition, by age https://www150.statcan.gc.ca/n1/daily-quotidien/200703/cg-a001-eng.htm

[219] CDC. COVID-19 Provisional Counts - Weekly Updates by Select Demographic and Geographic Characteristics. https://www.cdc.gov/nchs/nvss/vsrr/covid_weekly/index.htm?%20fbclid=IwAR3-%20wrg3tTKK5-9tOHPGAHWFVO3DfslkJ0KsDEPQpWmPbKtp6EsoVV2Qs1%20Q#Comorbidities (Accessed January 8, 2022).

[220] Pfizer. A phase 1 1/2/3, Placebo-controlled, randomized, observed-blind, dose-finding study to evaluate the safety, tolerability, immunogenicity, and efficacy of SARS-CoV-2 RNA vaccine candidates against COVID-19 in healthy individuals. https://cdn.pfizer.com/pfizercom/2020-11/C4591001_Clinical_Protocol_Nov2020.pdf

[221] Data Science Association. The Pfizer inoculations for COVID-19. More harm than good. https://www.datascienceassn.org/sites/default/files/The-COVID-19-Inoculations-More-Harm-Than-Good-REV-Dec-16-2021.pdf

[222] Data Science Association. The Pfizer inoculations for COVID-19. More harm than good. https://rumble.com/embed/voaxg5/?pub=qdzr7

[223] Polack, Fernando P., et al. "Safety and efficacy of the BNT162b2 mRNA Covid-19 vaccine." *New England Journal of Medicine*(2020).

[224] Doshi, Peter. "Peter Doshi: Pfizer and Moderna's "95% effective" vaccines—we need more details and the raw data." *The BMJ Opinion* (2021).

[225] Frenck Jr, Robert W., et al. "Safety, immunogenicity, and efficacy of the BNT162b2 Covid-19 vaccine in adolescents." *New England Journal of Medicine* (2021).

[226] Megan Redshaw. U.S. Sen. Johnson Holds News Conference With Families Injured by COVID Vaccines, Ignored by Medical Community. https://childrenshealthdefense.org/defender/sen-johnson-ken-ruettgers-press-conference-families-injured-covid-vaccines/

[227] FDA. Emergency Use Authorization (EUA) Amendment for an Unapproved Product Review Memorandum. https://www.fda.gov/media/148542/download

[228] FDA. FDA Briefing Document. EUA amendment request for Pfizer-BioNTech COVID-19 Vaccine for use in children 5 through 11 years of age. https://www.fda.gov/media/153447/download

[229] Health Ontario. Enhanced Epidemiological Summary. Myocarditis and Pericarditis Following Vaccination with COVID-19 mRNA Vaccines in Ontario: December 13, 2020 to September 4, 2021. https://www.publichealthontario.ca/-/media/documents/ncov/epi/covid-19-myocarditis-pericarditis-vaccines-epi.pdf?sc_lang=en

[230] Fda. Vaccines and Related Biological Products Advisory Committee – 10/26/2021 at minute 412 and 48 seconds. https://www.youtube.com/watch?v=laaL0_xKmmA&t=24751s

[231] Thacker, Paul D. "Covid-19: Researcher blows the whistle on data integrity issues in Pfizer's vaccine trial." *bmj* 375 (2021).

[232] Thacker, Paul D. "Covid-19: Researcher blows the whistle on data integrity issues in Pfizer's vaccine trial." *bmj* 375 (2021).

[233] Thacker, Paul D. "Covid-19: Researcher blows the whistle on data integrity issues in Pfizer's vaccine trial." *bmj* 375 (2021).

[234] Thacker, Paul D. "Covid-19: Researcher blows the whistle on data integrity issues in Pfizer's vaccine trial." *bmj* 375 (2021).

[235] Thacker, Paul D. "Covid-19: Researcher blows the whistle on data integrity issues in Pfizer's vaccine trial." *bmj* 375 (2021).

[236] Doshi, Peter, Fiona Godlee, and Kamran Abbasi. "Covid-19 vaccines and treatments: we must have raw data, now." *bmj* 376 (2022).

[237] Doshi, Peter, Fiona Godlee, and Kamran Abbasi. "Covid-19 vaccines and treatments: we must have raw data, now." *bmj* 376 (2022).

[238] Data Science Association. The Pfizer inoculations for COVID-19. More harm than good. https://www.datascienceassn.org/sites/default/files/The-COVID-19-Inoculations-More-Harm-Than-Good-REV-Dec-16-2021.pdf

[239] Data Science Association. The Pfizer inoculations for COVID-19. More harm than good. https://rumble.com/embed/voaxg5/?pub=qdzr7

[240] Valencak, Teresa G., et al. "Animal reservoirs of SARS-CoV-2: calculable COVID-19 risk for older adults from animal to human transmission." *GeroScience* 43.5 (2021): 2305-2320.

[241] Norman Doidge. Vaccines are a tool, not a silver bullet. If we'd allowed more scientific debate earlier in the pandemic, we might have come out with better treatments, sooner. Globe and Mail. January 22, 2022. https://www.theglobeandmail.com/opinion/article-vaccines-are-a-tool-not-a-silver-bullet-if-wed-allowed-more-scientific/

[242] John Ley. Pfizer COVID-19 vaccine delivers less long-term protection from hospitalization after four months. September 21, 2021. https://www.clarkcountytoday.com/news/pfizer-covid-19-vaccine-delivers-less-long-term-protection-from-hospitalization-after-four-months/

[243] Gazit, Sivan, et al. "Comparing SARS-CoV-2 natural immunity to vaccine-induced immunity: reinfections versus breakthrough infections." *MedRxiv* (2021).

[244] Alejo JL, Mitchell J, Chang A, et al. Prevalence and Durability of SARS-CoV-2 Antibodies Among Unvaccinated US Adults by History of COVID-19. *JAMA.* Published online February 03, 2022. doi:10.1001/jama.2022.1393

[245] Buchan, Sarah A., et al. "Effectiveness of COVID-19 vaccines against Omicron or Delta infection." *medRxiv* (2022): 2021-12.

[246] Hansen, Christian Holm, et al. "Vaccine effectiveness against SARS-CoV-2 infection with the Omicron or Delta variants following a two-dose or booster BNT162b2 or mRNA-1273 vaccination series: A Danish cohort study." *medRxiv* (2021).

[247] (Elliot P, et al. Post-peak dynamics of a national Omicron SARS-CoV-2 epidemic during January 2022. Imperial College of London. https://spiral.imperial.ac.uk/handle/10044/1/93887