27 truths and myths about COVID-19, from Christian healing to Bill Gates conspiracy theories

Due to popular demand (well, two polite requests, actually), I have decided to create a clean version of my post about COVID-19 myths. If you don't mind (or in fact prefer) the sweary version, please go read that one.

Here we go again. Another rabbit hole, and another long post that no one will likely read, care about, or both. In case you don't know exactly what I'm talking about, I went about busting 76 of the most common vaccine myths I see on social media just over a year ago, so if you haven't read that post, I'd strongly suggest ignoring it completely unless you enjoy bashing your head against a wall repeatedly, because reading that would probably hurt quite a bit more.

[Editor's note: Doc Bastard is the pseudonym of a trauma and general surgeon.]

Anyway, if you think this post strongly resembles that one, there's a very good reason for that, and it sounds something like COPY PASTE. I have no intention of reinventing the wheel, and that one seems to have worked out rather splendidly, so here we are with a lookalike (and possibly soundalike) post.

Let us begin.

If you've landed on this page, one of two things has happened:

- 1. You've been a loyal reader, got an email notification, and you excitedly clicked the link thinking you'd finally get your first stupid patient story in over 6 months, or
- 2. I or (hopefully) someone else referred you here from Twitter (or (hopefully) elsewhere) because you propagated some stupid myth or outright lie about COVID-19.

If it is #1, then I apologise in advance for your current state of profound disappointment. However, if it's #2, there is at least a 99.91% chance (I calculated it) that you have already clicked back over to Twitter or Facebook or Natural News or greenmedinfo or Children's Health Defense or Infowars or whatever your source of conspiracy theories may be. And if that is the case, then why on Earth am I still talking to you.

But on the off chance that you are still reading, and I sincerely hope you are, then please do read on to find out exactly why your myth is a myth.

I was temporarily suspended on Twitter at the end of April for reasons only known to Twitter. I had been in the middle of explaining why the #FilmYourHospital trend was nonsense (more on that later) when Twitter decided to shut me down, because apparently they don't care about medical misinformation being strewn about. At least that's what I think happened, though I have no proof since Twitter didn't bother to explain why my account had been suspended. I appealed (of course), and after about three weeks I got this reply:

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Which, of course, explains exactly nothing. In those intervening three weeks, I missed out on a lot of snake oil salesmen peddling their snake oil, so without further ado, please allow me to bust some COVID-19 myths.

Unlike my usual mythbusting, there may be some opinion here. Unfortunately SARS-CoV-2 is still a new virus and COVID-19 is still a new disease, so while scientists have discovered plenty, the information coming out is often confusing, contradictory, or both.

Once again I will place a handy alphabetised and clickable table below with all the myths I'll be busting.

<u>5G</u>	Bill Gates	Boost immune system
COVID name	Death certificates	Emergency doctors
Empty hospitals	Event 201	Fake
Flu shot increased risk	Hand sanitiser	<u>Hydroxychloroquine</u>
<u>Jesus</u>	Just the flu	Lockdown worse than disease
Manufactured virus	Masks don't work	Media panic
Only old & sick die	Oxygen	Plandemic
Rights	Stanford study	Sweden
Temperature kills virus	Weakens immune system	World Health Organisation

And with that out of the way, let's get started.

1) The virus doesn't exist.

Yes, we'll start with the one that should be easiest to correct: it's all completely fake and there is no virus.

WRONG. Hey look, here it is!

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And here is a transmission electron micrograph of it!

Image not found or type unknown

Science! The virus has been <u>isolated</u>, <u>sequenced</u>, and extensively studied including <u>how it infects cells</u>
It exists.

2) Ok, the virus exists but it's basically just the flu.

It would be incredibly easy to just say "No it isn't just the flu", but that would never satisfy you. Actually, nothing will actually satisfy you, but I'll go through the motions anyway.

Unfortunately many smart and/or famous people made this same comparison, including Dr. Drew Pinsky (who <u>retracted</u>, <u>corrected</u>, <u>and apologised</u>) and paediatrics and vaccine expert <u>Dr. Paul Offit</u>, who also notably minimised COVID-19 in mid-March when there were fewer than 100 deaths in the US (now just about 100,000).

To start, COVID-19 is far more infectious than the flu. Unfortunately I'll have to pause this explanation by explaining R0. It is an infectious disease's infectiousness, the average number of people who will contract a disease from someone who has it. As an example, measles (the most highly infectious infectious disease) has an R0 of 12-18, meaning on average 12-18 non-immune people who come into contact with someone with measles will catch measles. For influenza, the R0 is about 1.5. For COVID-19, it is between 2 and 3. This means that COVID-19 is up to twice as infectious as flu.

So what? you say? Well the lower the R0, the higher the likelihood the outbreak will burn itself out. That's why flu epidemics tend to fizzle, but also why Ebola outbreaks die out (people tend to die quickly before getting the chance to infect others).

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COVID-19 spreads more easily and kills more people. It is NOT just the flu.

3) But that number is inflated! Stanford study!

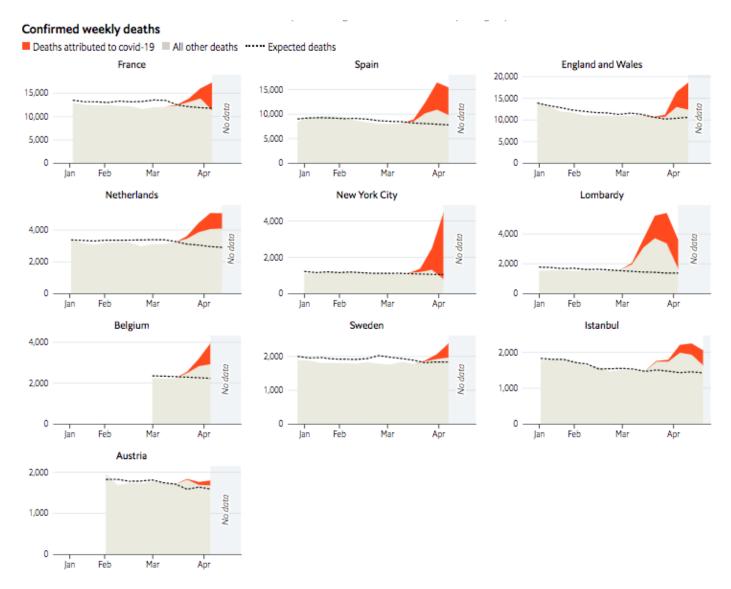
I'll give this one a C- for accuracy, because there definitely is some validity to this argument, though not nearly as much as you hoped. The currently reported case fatality rate will almost certainly fall as more tests are done, because it is known that there are many asymptomatic cases that haven't been factored in. The "Stanford study" essentially offered volunteers free COVID antibody tests (when such tests were scarce), and based on their results the authors claimed that there are so many asymptomatic patients that they estimated 50-85 times as many people who had been tested actually had been infected. This theoretically means the death rate should be 50-85 times lower.

Well, no. Not really. There are so many things wrong with this paper (which as of this writing is still in preprint and has not been peer reviewed), all of which are detailed by this Columbia statistician here. If you think about it another way, the current number of deaths (again as of this writing) in New York City is over 16,000. If every single New Yorker had been infected, this would be a case fatality rate of 16,000 divided by 8.4 million (the current population of NYC), which would be 0.19%. Again, that would be the CFR IF EVERY PERSON IN THE CITY HAD GOTTEN IT. Which they have not. Yet.

So is the CFR 6% as it stands right now? Of course not. But is it higher than flu? Yes, much higher. How much higher will not be known for quite some time, perhaps even years.

4) Ok, it isn't just the flu, but it isn't that dangerous. It's all just media panic

The easiest way to explain that it isn't just all panic is by showing how many more people are dying compared to the expected number of deaths.



In case you can't read or understand the graph, the red area is the number of deaths over the historical average in France, Spain, UK, Netherlands, New York City, Lombardy, Belgium, Sweden (more on Sweden later), Istanbul, and Austria. Notice anything striking? Yeah – lots more people are dying all over the world. There are similar graphs for other countries in South America and Southeast Asia, but hopefully by now you get the point – people are dying of this disease. Lots of them. *Hundreds of thousands of them*. There are a few other related claims, like BUT HOSPITALS ARE EMPTY, which I will cover below.

5) Yeah! Hospitals are empty!

Some of them, sure. Like this one, for example. Does this prove you're right?

YES!

No. This was an idle cruise terminal that had been transformed into a makeshift hospital at a time when hospital utilisation in the city was incredibly high, including over 3,000 patients in intensive care. The city

was preparing for the worst, and fortunately efforts to contain the disease finally began to be successful, and new cases began to fall, rendering the temporary facility unnecessary. All this proves is that the city was prepared. If your smoke alarm battery dies because it never went off, do you consider the smoke alarm useless? If your airbag in your car never goes off because you don't get into an accident, do you consider them a waste? No. It's called preparedness, and it is generally a Very Good Thing.

Now if you're talking about the #FilmYourHospital movement, slow the hell down and use your damned brain. People were walking through empty hospital corridors or filming outside hospitals and shouting about the lack of business. As someone who has walked through many hospital corridors over many years, I can tell you that patients aren't treated in the hallways, they are treated in treatment areas. Those people typically walking in the halls are visitors. Nearly all of them. And these people were filming these hospitals at a time when they were *closed to visitors*. Parking lots were empty because there were no visitors allowed. Cafeterias were closed because . . . that's right, no visitors allowed. And hospitals were generally slow during that time anyway because elective surgeries were cancelled to make room for COVID-19 patients. At my hospital, for example, 2/3 of the hospital wards were converted to COVID only, and they were full. The ICU was full of COVID-19 patients. The hospital was NOT empty.

If your local hospital is slow or relatively empty, then consider yourself lucky that the virus hasn't hit your area very hard. But claiming that that means the pandemic is a hoax is like saying that global temperatures aren't rising (they are) because it's cold at your house.

6) But doctors are inflating the death numbers so hospitals get paid more!

This is a two-pronged myth: 1) doctors are putting COVID-19 on the death certificate no matter what the cause of death was, and 2) hospitals are getting paid more if they say a patient has COVID-19. The source of this was a doctor and US state senator Dr. Scott Jensen, who said,

"Right now Medicare has determined that if you have a COVID-19 admission to the hospital, you'll get paid \$13,000. If that COVID-19 patient goes on a ventilator, you get \$39,000, three times as much. Nobody can tell me after 35 years in the world of medicine that sometimes those kinds of things impact on what we do."

Interesting. The problem is that Medicare, the US federal insurance program for people 65 and older, pays hospitals to care for patients, and the amount paid for respiratory ailments with comorbidities in 2017 was . . . \$13,000. And Medicare pays more for more complicated cases, ie need for a ventilator.

Oh, and it gets worse. In a later interview, Jensen "clarified" his statement:

"Do I think people are misclassifying? No."

The problem he had was that the CDC guidance on classifying deaths constituted, as he put it, "less precise standards". Well let's just look at the CDC guidance, shall we?

In cases where a definite diagnosis of COVID-19 cannot be made, but it is suspected or likely (e.g., the circumstances are compelling within a reasonable degree of certainty), it is acceptable to report COVID-19 on a death certificate as "probable" or "presumed." In these instances, certifiers should use their best clinical judgement in determining if a COVID-19 infection was likely. However, please note that testing for COVID-19 should be conducted whenever possible.

It says quite clearly that COVID-19 should be listed as "probable" or "presumed" if the patient was presumed to have it within a a reasonable degree of certainty. It does not say "Just put COVID on there no matter what, whatever". Anyone who has filled out a death certificate (as I have) without a solid cause of death knows how difficult it can be to put a diagnosis on there without being sure. We do the best we can with the information at hand, and that sometimes means being wrong. But your argument that doctors can just put COVID-19 as the cause of death even if the patient died in a car accident is 1) unfounded, and 2) assumes the doctors caring for these patients around the world would act unethically. In other words, it just doesn't hold water.

What is more likely is that deaths are being undercounted.

7) It was manufactured by China

This one just smacks of racism, though I reserve the right to be wrong. Though considering the current geopolitical landscape (yes, I just used the term "geopolitical landscape" in my stupid blog"), I am not at all surprised to see it rear its very ugly head.

Anyway, the genetic sequence of SARS-CoV-2 has been extensively studied by people who understand viral genetics much better than you and I, and their conclusion is so impossible to misinterpret that I feel no need to elaborate: No credible evidence supporting claims of the laboratory engineering of SARS-CoV-2. The author further states that there is no evidence the virus escaped from the lab in Wuhan either, so you can put that nonsense away too.

Another claim that the virus was man-made because it has HIV sequences in it, but this was also roundly destroyed by an HIV virologist. Once again, the title of the paper is impossible to misunderstand: HIV-1 Did Not Contribute to the 2019-nCoV Genome.

8) It doesn't matter, because hydroxychloroquine something something cures it something something game changer.

Hydroxychloroquine is a very old (first synthesised in the 1940's), very cheap, very safe, and very effective

drug which is used to treat various autoimmune diseases (such as lupus and rheumatoid arthritis) as well as malaria. It also has been shown to have some antiviral and anti-inflammatory activity, which prompted its investigation into the treatment and/or prevention of COVID-19. The first report was written by French microbiologist Didier Raoult regarding the supposed "100% cure" of 80 patients. There were several, ah, problems with this:

- no control arm
- 92% of patients had mild disease
- only 15% of patients had a fever, which is a hallmark of COVID-19
- only 15% of patients required oxygen

In other words, the overwhelming majority of the patients had mild disease and would have recovered anyway. Add no control arm, and this is a small, poorly done study. I won't even go into Raoult's track record of academic fraud, but feel free to look it up.

Once that study was produced and a certain demagogue promoted it as a "game changer", hydroxychloroquine became the go-to medicine (with or without azithromycin (an antibiotic) and zinc), mostly because clinicians had no other real treatment. A few small trials showed some promise, but more recent larger trials, including a multinational registry analysis of over 96,000 patients in over 600 hospitals on 6 continents have shown 1) no positive effect of hydroxychloroquine, and 2) increased risk of death. Randomised trials are underway, but the results have not yet been published as of this writing.

In short, hydroxychloriquine does not appear to work, and it appears to increase the risk of death due to the well-known side effect of QT prolongation of both hydroxychloroquine and azithromycin.

9) But those two emergency doctors say COVID isn't so bad!

You're referring to Drs. Dan Erickson and Artin Massihi who made a viral video claiming that COVID-19 is no worse than the flu. They based their conclusions on the tests they had performed in their walk-in clinic that they own. Oh, you thought they were emergency doctors working in a hospital? Nope. They own and operate several walk-in clinics in California, and they were testing people who literally walked into their clinic. Concluding the seriousness of a disease based on the symptoms of people who are well enough to walk into a clinic is like concluding the endurance of all people by testing the riders at the Tour de France.

In fact, Erickson and Massihi's statements were so outrageous ludicrous that it prompted the American College of Emergency Physicians and American Academy of of Emergency Medicine to release a joint statement:

The American College of Emergency Physicians (ACEP) and the American Academy of Emergency Medicine (AAEM) jointly and emphatically condemn the recent opinions released by Dr. Daniel Erickson and Dr. Artin Massihi. These reckless and untested musings do not speak for medical societies and are inconsistent with current science and epidemiology regarding COVID-19. As owners of local urgent care clinics, it appears these two individuals are releasing biased, non-peer reviewed data to advance their personal financial interests without regard for the public's health.

COVID-19 misinformation is widespread and dangerous. Members of ACEP and AAEM are first-hand witnesses to the human toll that COVID-19 is taking on our communities. ACEP and AAEM strongly advise against using any statements of Drs. Erickson and Massihi as a basis for policy and decision making.

Ouch.

10) Only the old and sick are dying.

First of all, is there some reason you don't care about the elderly or infirm? Second and more importantly, while it is true that 1) the overwhelming majority of deaths are people over age 65 and/or people with comorbidities, and 2) cases in children tend to be mild with fewer symptoms, there are previously healthy children and young adults who have died of COVID-19. One of the techs with whom I've worked for over a decade, who helped me take care of hundreds if not thousands of my trauma patients and was young and completely healthy, is now dead, having caught COVID-19 from a patient.

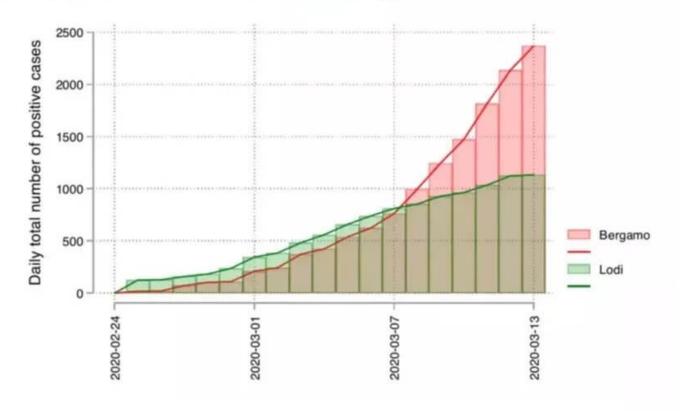
There are now multiple reports of children with a multisystem inflammatory syndrome similar to <u>Kawasaki</u> <u>disease</u> <u>has now been described</u> in multiple countries around the globe. It is still quite rare, but at the same time quite worrisome.

The bottom line is that who the virus is killing matters less than the number of people who are dying, which is about 350,000 so far.

11) But lockdowns don't work and are making everything worse. The 'cure' is worse than the disease! Open up!

Do lockdowns work? Well let's take a look at a tale of two cities in Italy, which saw its first case on February 21, that treated this a bit differently. Lodi went into lockdown two days later, the same day Bergamo, another city in the same region, reported its first case. However, unlike Lodi, Bergamo waited to enforce a lockdown until March 8. Just over a week later, Lodi (locked down) had fewer than 1400 cases while Bergamo had over over 3700. Though Bergamo has a population almost 3 times that of Lodi, their curves look very different indeed – Lodi leveled off rather quickly while Bergamo's cases continued to rise just as quickly:

Note: data used is CONFIRMED cases only



Still not conviced? The chart below (<u>from Financial Times</u>) plots the daily death toll for various countries around the world at their point of lockdown versus 10 days after their 50th death. As you can see, the longer countries wait to impose a lockdown, the higher their death toll tends to be.

lock

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Studies out of both <u>China</u> and <u>Hong Kong</u> have shown the same thing – lockdown = fewer cases, and <u>taking a look at countries around the EU</u>, the data again seems clear – waiting longer to lock down means more deaths.

Is that definitive evidence that lockdowns work? No. There are <u>other studies</u> that show lockdowns do work, and <u>others that say</u> they don't. There are also <u>opinion pieces</u> by economists that seem to waver somewhere in between. My take on this issue of lockdowns is quite simple: we don't know yet, but the hypothesis and early evidence certainly seems to support the idea.

The next question deals with the economic aftermath of such lockdowns. Germany has already entered a recession, and the US economy has taken a decided and harsh downturn. I have heard the argument that more people will die of starvation because of the lockdown than would have died of COVID-19 had the lockdown never happened, but this is of course impossible to prove unless you happen to have a TARDIS or specially equipped DeLorean handy. However, if these strict measures had not been put in place and the disease had been left to spread unabated, there is a very good chance that hospitals and indeed entire countries' medical systems could have been overwhelmed, leading to even more deaths. And when medical systems collapse, that leads to even more poverty and even more deaths. The main point was to flatten the curve, not necessarily to bring the pandemic to an end.

So is it true that the treatment is worse than the disease? Maybe, but maybe not. Though I doubt it I have no real definitive answer, and neither do you.

12) But Sweden is different!

The myth here is that Sweden didn't lock down, and they have fewer cases and fewer deaths. Unfortunately for you (and more so for Sweden), that just isn't true.

The only portion of this myth with any truth is that Sweden didn't lock down as tightly as many other countries. Schools, bars, restaurants, and gyms remained open (though with distancing in place), the Swedish government issued recommendations on hand washing and social distancing, and people were recommended to work from home if possible, though gatherings of more than 50 people were banned. The hypothesis was that herd immunity would eventually kick in, mitigating the threat. And that worked, right?

swe

No.

As of today, Sweden, with a population of 10.2 million, has over 34,000 cases and over 4,100 deaths. Their <u>per capita death rate</u> is among the worst in Europe, and far worse than their Nordic neighbours. In fact, Sweden's death rate per million (392) is worse than the US (300), and far worse than neighbours Denmark (93), Finland (53), and Norway (44). <u>The Swedish experiment has failed</u>.

13) The flu shot increases risk of COVID-19.

There is no evidence that this is true in any way. Unfortunately, this myth persists, and it comes from a January 2020 study from the US regarding the 2017-18 flu shot, which looked at 6000 people who had or had not had that particular flu shot. It found no difference in general in infections from other non-influenza respiratory viruses between vaccinated and unvaccinated Department of Defense personnel, but there was a slightly higher risk of contracting certain cold viruses, including metapneumovirus and coronaviruses.

HA! SLAM DUNK!

Nope. The data from this study were collected two years before SARS-CoV-2 was even known to exist, and the coronaviruses mentioned in this study are the garden variety coronaviruses which just cause the common cold, not SARS-CoV-2 which causes COVID-19. There are literally zero studies which show that the flu shot (or any other vaccine) increases the risk of contracting SARS-CoV-2. None. Zero.

This claim is pure, unadulterated fear mongering and pure, unadulterated antivax twaddle.

14) This is all just a ploy by Bill Gates to do something nefarious.

Ok, here we go. This is the first myth that I can more accurately categorise as a conspiracy theory, and this one is DEEP. Not deep as in profound, but deep as in knee-deep in manure. There are several components or iterations of this conspiracy theory:

- Bill Gates created SARS-CoV-2 in order to create a mandatory vaccine.
- The mandatory vaccine would make Bill Gates \$200 billion in profit.
- The mandatory vaccine will include a microchip to track everyone's vaccine status and/or location.
- Bill gates owns a patent on SARS-CoV-2.
- Event 201

Lest you think I'm making any of this up, prepare to be amazed (or not).

Pay attention will ya

What the Press-titutes on Mainstream Media Won't Tell You:

- . Who said live on CNN, "we need lots and lots of testing."
 - -Bill Gates
 - -Who's behind the tests? The WHO
 - -Who helps fund the WHO? The Gates organization
- Who's behind the pandemic documentary on Netflix?
 Bill Gates
- Who has the patent for this coronavirus?

 The Gates organization.
 - —The Gates organization
- In October 2019, who ran a mock high-level pandemic exercise that eerily resembles the coronavirus at The Johns Hopkins Center, and passed out coronavirus-themed stuffed toys for attendees?
 - -The Bill and Melinda Gates Foundation (Event 201)
- Who heavily funds vaccines all over the globe?
 Bill Gates
- Who has absolutely no medical background or training?
 Bill Gates
- If you get tested for coronavirus, they have your DNA and as we learned who wants virtually as many people as possible to be tested?
 - -Bill Gates
- · What has a 98.8% recovery rate?
 - -The coronavirus
- . What did China use to recover from the coronavirus?
 - -High doses of Vitamin C through IV-No Vaccine Required!

There are two iotas of truth here – Event 201, which I will discuss later, and a vaccine "chip".

THE CHIP IS TRUE! I KNEW IT!

Slow down there, sparky. You're not nearly as correct as you think. The "microchips" are nothing remotely resembling actual microchips, which are all far too large to fit through a vaccination needle anyway. But I guess you didn't consider that little nugget of information, did you.

The technology is called biocompatible near-infrared quantum dots, and they more closely resemble an invisible tattoo that would be delivered along with a vaccine through a dissolvable needle (which is some pretty goddamned fancy science). Thus the person would carry a record that s/he had received that vaccine. Though this may sound like an evil method of ensuring everyone gets every vaccine ever conceived (or tracking your movement), the real purpose is useful and quite benign: in many places around the world there is no standardisation of record keeping, which makes tracking coverage difficult. Besides, if The Government (which one, by the way?) wants to track your movement, they'll just use your phone that you keep in your pocket or next to your bed 24/7.

Anyway, as for the Gates Foundation owning a patent on SARS-CoV-2, that's just a malicious lie. Such a patent does not exist.

Bill Gates does not stand to profit on this situation. At all. He has donated billions of dollars (and has promised to donate tens of billions more) and <u>has said on record</u> (back in 2019 before COVID-19 even existed, by the way) that the "profit" received from his philanthropy is through economic return:

"Helping young children live, get the right nutrition, contribute to their countries — that has a payback that goes beyond any typical financial return."

No, Bill Gates is not a doctor or a scientist. No, he has no formal training in virology or immunology. No, Bill Gates is not profiting from his philanthropy. All he does is donate tens of billions of dollars to people who do so that *they* can improve the world, and he is being demonised for it. And that is one of the saddest things I've ever heard.

15) But Event 201 proves they knew about this!

Let's be quite clear here: Event 201 happened.

HA! SLAM DUNK!

Before you start celebrating, think for one second. Just think. If this were some kind of super-secret planning meeting to create a worldwide pandemic to bring the population of Earth to its knees and usherin a New World Order, would they splash the entire thing all over the internet, including the entire 3+ hour video? Nothing is hidden, nothing is censored, and nothing is held back. You can watch the entire 5 video series here (which I'm sure you won't) in case you don't believe me, which I'm sure you don't.

Event 201 on October 18, 2019 was a joint exercise in world readiness for just this type of pandemic among the Johns Hopkins Center for Health Security, the Gates Foundation, and the World Economic Forum. There are approximately 200 infectious epidemics worldwide each year, and fortunately few of them reach pandemic proportions. Considering the recent SARS (2003) and MERS (2012) epidemics, epidemiologists and other health experts thought it would probably be a good idea to make sure the world was ready for something bigger. They modeled a fictional coronavirus pandemic after SARS and MERS (which were also both coronaviruses) and assessed the impact it would make on the world. This was simply an effort to come up with ways to protect both lives and livelihoods in such a disaster. You can read their conclusions and recommendations here.

Oh, and this was far from the first meeting designed to identify a public health risk before it happened, such as this meeting in 2018. Epidemiologists have been warning about and planning for this sort of thing for a long, long time.

Unfortunately the timing of Event 201 stinks, which is what prompted this conspiracy theory. But again, the entire meeting is freely available to watch, so knock yourself out if you really are looking for something evil. Good luck finding any heinous crime being committed or planned.

16) You can't trust the WHO because they keep changing their minds.

This virus is new. Let's just get that out of the way. This isn't measles or rotavirus which are well known, well described, and well understood. SARS-CoV-2 is brand new, and absolutely nothing was known of it when it started circulating in Wuhan, China at the end of 2019. With this in mind, nothing was known at the beginning of how (*or even if*) it was spread from person to person, nothing was known of its deadliness, how contagious it was, nothing. So on January 14, 2020, just over a month after the first patient became ill, the World Health Organisation stated that there was "no clear evidence of human-to-human transmission".



This tweet has aged incredibly poorly and looks downright egregious in hindsight. But at the time, that statement was true – the evidence of human-to-human spread was not yet clear. Keep in mind that the virus had only been identified as a coronavirus two weeks before, and the virus isolated and genome map

made public less than a week before. Officials in the Wuhan Health Commission seem to have seriously mucked this whole thing up, and this study suggests that had they acted just a few weeks earlier, this whole thing may have been mitigated or stopped before it ever began.

Once more information began coming in, the WHO changed their recommendations based on new data, just as they have done with social distancing, masks, hydroxychloroquine, and everything else having to

do with this disease. Has WHO been perfect? Absolutely not. But it's almost like the process of science where new information makes old information obsolete, and people change their minds and what they say based on prevailing evidence, right?

Right?

17) Masks don't even work.

Well that's a rather complicated statement. What kind of mask do you mean? And what do you mean by "work"?

This issue is admittedly much more complicated and much less clear than I would like. What is clear is that N95 respirators are very effective at preventing the contraction of respiratory illnesses. There is some evidence that regular masks are also effective at preventing infection, though certainly less so compared to N95. There is also evidence that both N95 and surgical masks are effective at preventing spread of respiratory viruses from infected people.

This systematic review of mask use concludes,

"The evidence suggests protection of masks in high transmission settings such as household and college settings, especially if used early, if combined with hand hygiene and if wearers are compliant. If masks protect in high transmission settings, they should also protect in crowded public spaces, including workplaces, buses, trains, planes and other closed settings."

And

"In summary, there is a growing body of evidence supporting all three indications for respiratory protection – community, healthcare workers and sick patients (source control). The largest number of randomised controlled trials have been done for community use of masks by well people in high-transmission settings such as household or college settings. There is benefit in the community if used early, and if compliant. They also found no evidence of efficacy of hand hygiene or health education, suggesting mask use is more protective than hand hygiene."

Cloth masks are most likely less effective than surgical masks, but depending on the fabric and the method of manufacturing, they can be effective.

My take is that masks probably work to varying degrees, and even if they aren't terribly effective they certainly couldn't hurt.

18) But wearing a mask decreases my oxygen and increases my carbon dioxide!

Nope. This has <u>actually been studied</u> by looking at the oxygen saturation of surgeons of various ages wearing surgical facemasks while performing surgery. The study showed a significant decrease of oxygen

saturation from . . . are you ready? 97% to 96%. That's it, even after 3-4 hours of stressful surgery. Normal oxygen saturation is anything above about 93%, so wearing a mask for 15 or 20 minutes while you pick up groceries will not affect you, unless you have a pre-existing lung condition. If you do, have someone bring your groceries to you.

As for N95 masks, they are much more tight fitting and have much smaller pores to filter out much smaller particles, including viruses. They can certainly restrict breathing much more than surgical or cloth masks, and they can make even healthy people feel like they can't breathe. They have <u>also been shown</u> to increase CO2 rebreathing. And this is why they are not recommended for the general public.

19) Ok, fine but being forced to wear a mask violates my constitutional rights!

All this proves is that you've never actually read your constitution. It doesn't even matter to which constitution you're referring (though if you made this argument, there is a 98.482% chance you mean the US Constitution), because no constitution on the planet says anything about face masks. If you could please point out where in this document it states that Congress shall make no law restricting your right not to wear a mask (or anything even close), please feel free to comment below.

But before you do, perhaps you should consult a constitutional law lawyer. Oh wait, this author already did, and you're wrong. If a restaurant can enforce "No shoes, no shirt, no service", then a grocery store can enforce "No mask, no shop". And if you still disagree, then you're still just wrong. But hey, you too still have the right to be wrong.

20) High temperatures and sunlight kill the virus.

Nope. Ok, maybe. Well probably not.

It is true that <u>heat will kill the virus</u>, but only if you get it up to 56°C (133°F) for 90 minutes or 75°C (167°F) for 30 minutes, and I don't suspect your sauna gets that high, nor would I suggest you try it. Radiation will also kill the virus, if you're willing to undergo UV radiation for 60 minutes. Which you're not, because then you'd be very dead.

As for "injecting" UV light, you mean this?

Image not found or type unknown

Yeah, that's pure nonsense despite its rather high-profile mention by the same demagogue. Ultraviolet blood irradiation was invented in the 1920's and had some popularity in the 1940's before antibiotics. However, there is simply no evidence that it is or could be effective in treating COVID-19, nor is there any physiologic mechanism whereby it could work.

21) The quarantine is weakening our immune systems since we aren't getting exposed to nature.

First of all, even though I've never seen where you live, I guaran-damn-tee you have plenty of antigens inside your home, especially if you open a window. There is plenty of opportunity for your immune system to be stimulated regularly.

Second, really? Are you *never* going outside? While decreased sunlight exposure can decrease your vitamin D level (which *can* actually weaken the immune system), are you *never* going outside? And while decreased exercise can also weaken the immune system, are you *NEVER* going outside?

Seriously, get outside. Grab a mask, get your butt outside, and go for a run. Climb a mountain. Or just take a walk. If there is no one around, take your damned mask off, especially if you're alone in your car. Seriously. Don't do this.

There is no reason whatsoever for you to stay inside your home 24 hours a day.

Oh, and while I'm on the subject, if you're wearing gloves to shop, take them off before you get into your car and touch everything. If you never take off your gloves, all you're doing is spreading contaminant onto every single damned thing you touch.

22) I'd rather boost my immune system naturally.

No you wouldn't, because that would mean you have an autoimmune disorder. And as someone who has one of those, trust me, you don't want it.

It doesn't matter how many vitamins you take, how many acai smoothies you drink, or how many herbal supplements you buy, you *can not* "boost" your immune system. You can support it by eating well and exercising, and if you are deficient in a nutrient you should absolutely take that supplement, but any other product or technique that supposedly "boosts" your immune system 1) doesn't, 2) drains your bank account, and 3) creates very expensive urine.

23) Hand sanitiser can catch fire and explode if left in a hot car.

Fortunately this isn't a dangerous myth, but one that should still be corrected.



24) "COVID-19" stands for the 19th strain of Chinese Originated Viral Infectious Disease

for 2019, the year it was discovered, not that it's the 19th strain.

Nope, that's just a stupid, racist backronym. COVID-19 stands for "COronaVIrus Disease", and 19 stands

But while we're on the subject of misnomers, COVID also does NOT stand for 666, the mark of the beast. Yes, we're now going from stupid, provably wrong nonsense to plain silly nonsense. However, I've seen this sort of meme shared too many times to ignore it.



Ok, I'll admit I just added this for comedic value. But some people do seem to believe it, so I don't feel bad at all for laughing at them.

25) Plandemic!

Oh boy, I saved the worst for last. This is the idea that this pandemic is all planned and therefore a "plandemic". Ha! Such a clever portmanteau, right? It's so clever that a supposed movie by that name purportedly starring Dr. Judy Mikovits will be released in the summer of 2020. A 26 minute "preview" in the form of an interview with Dr. Mikovits was released May 4, 2020 to great (ha) fanfare, and you fell for it. How very sad.

I will not be debunking the entire video, because it has been done <u>many</u>, <u>many</u>, <u>many</u> times already. <u>The best myth busting</u> I've seen was by, not coincidentally, *Science*, which published (and then retracted) her seminal (not really) paper. I'll just give a few lowlights of her claims and why they are wrong:

Mikovits' 1991 doctoral thesis revolutionised the treatment of HIV/AIDS.

- It didn't.
 - Mikovits published a blockbuster article in Science.
- That study purported a link between a mouse retrovirus and chronic fatigue syndrome, a link that was later proved false, Mikovits' paper was retracted by *Science*, and she admitted no link exists, though she retracted her retraction later.
 - Mikovits: "And they'll kill millions, as they already have with their vaccines. There is no vaccine currently on the schedule for any RNA virus that works."
- Wrong, wrong, wrong, wrong, and wrong. There is less than no evidence that vaccines have even killed thousands, let alone millions of people. There is myriad evidence, however, showing that they have saved millions of lives. And there are many vaccines for RNA viruses, including measles, mumps, rubella, influenza, and Ebola.
 - Mikovitz hints that SARS-CoV-2 was distributed in Italy in an influenza vaccine made using dog cell cultures, and "dogs have a lot of coronaviruses".
- No evidence to support this claim exists.
 - Mikovits: Wearing the mask literally activates your own virus. You're getting sick from your own reactivated coronavirus expressions, and if it happens to be SARS-CoV-2, then you've got a big problem.
- There is no evidence whatsoever to support this claim.
 - Beaches should be open because the ocean contains "healing microbes".
- I can't even bring myself to respond because this is nothing but gibberish.

She also propagates several of the myths above, which I won't rehash here. There are many other claims she makes regarding her failed career as a researcher and her arrest (yes, really), but I won't get into those since that isn't what this is really about. What it *is* about is Mikovits promoting and drumming up interest in her new book, to which I will also most assuredly *not* link.

There is a similar video of an interview with professor Dolores Cahill from University College Dublin (to which I will also *not* link), where Dr. Cahill repeats the same myths again, including boosting the immune system, masks decrease oxygen, hydroxychloroquine, manufactured virus, and social distancing decreases immunity, as well as various generic antivax claims which I've already discussed previously. But she makes one new one:

"SARS virus circulated [since] 2003 and essentially every three or four years since, so that people are immune—so that everybody practically in the world is immune."

HAHAHA! No but seriously HAHAHAHAHAHA! If this were even partially true, then millions of people around the world wouldn't be sick or dead. I have no idea how she said that with a straight face, but she should be ashamed. Both she and Mikovits are disgraces and a stain on medicine and science.

26) Jesus will protect me from COVID-19.

That's right, a bonus myth! Huzzah!

Wait wait, I'm sure many of you think I'm just making this one up. Sadly, I am not.

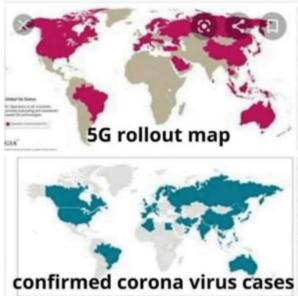
jesus



Unfortunately this is a very real claim, but even more unfortunately Jesus will not save you:

- High COVID-19 Attack Rate Among Attendees at Events at a Church Arkansas, March 2020
- Officials: 2 California Church Services Sources Of Virus Outbreaks
- More than 40 diagnosed with COVID-19 after Frankfurt church service
- Coronavirus: Pastor who decried 'hysteria' dies after attending Mardi Gras
- Virginia pastor who defiantly held church service dies of coronavirus

I take absolutely no joy whatsoever in finding and listing these stories. *None.* But there are some true believers who misguidedly think their lord and saviour will protect them, and it is my duty to inform you that you are not protected any more than anyone else.



27) 5G causes/activates COVID-19.

I nearly forgot this one, which is rather shocking since it was the ridiculous myth that prompted me to write this stupid post. Once again, this is a very simple "NO". There is no evidence whatsoever that 5G is causing COVID-19 or similar symptoms, nor is there any mechanism by which high frequency radio waves could "activate" a virus or cause such symptoms. It's just drivel. Unfortunately that hasn't stopped several True Believers from burning down 5G towers. But if that isn't good enough, then please watch this very detailed (and chock-full-of-science) video by electrical engineer Mehdi Sadaghdar on exactly why 5G isn't dangerous in any way.

That's all I have. I'm sure there are many fringe myths that are slightly too whackadoodle to address, so I apologise for ignoring them with alacrity. If I made any glaring errors or omissions, please comment below.

And most importantly no matter what you believe, no matter whom you believe, no matter which way you align politically, keep yourselves, your loved ones, and everyone around you, safe.

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