How Did A Disease With No Symptoms Take Over The World?

Description

Biologists tell each other stories. These stories might involve lots of acronyms and use strange and wonderful verbs and nouns but, unlike say mathematics, the mechanism by which biologists convey their science is at heart through the use of language.

But unlike works of creative writing, the language used by biologists needs to be precise because bad English can lead to bad science. Which is why it jarred so much when I first read the following statement:

> *A third of people with COVID-19 have no symptoms.*

The more technically correct statement (assuming that “a third” is accurate) is:

> *A third of people infected with [more correctly, testing positive for] the SARS-CoV-2 coronavirus have no symptoms.*

So why did the first statement raise my biological hackles so much when at first glance these two statements might appear to be essentially very similar? It is because from a biological perspective they are profoundly different. The first statement asserts the existence of a disease with no symptoms *i.e., a sickness that is indistinguishable from being healthy*, while the second statement *asserts that a viral infection does not necessarily result in a disease.*

It is not a question of semantics but accuracy and mixing these two concepts up is the sort of thing that

would have resulted in an ‘F’ if I were to have submitted it in an essay to one of my professors. Yet, this is exactly the inaccurate language that has been used throughout the COVID-19 pandemic and not by students learning their discipline, but by experienced senior scientists who, one assumes, are well aware of what they are saying.

One could argue that this is unimportant as surely the point is to convey the idea that you could be infectious with coronavirus and be unaware of it and the first statement is an easy way to do this for the layman. Not only does this assumption treat the public as if they were children unable to understand the nuances of infection and disease, but I’d argue that the second statement is just as easy to understand as the first.

No, the reason to create a disease with no symptoms is based on a profound decision, one that I believe was made with the intention of ensuring compliance but has, since its inception, grown to dominate our entire response to COVID-19.

First, let’s see why defining having a disease based purely on the presence of a pathogen is a flawed concept. This is best illustrated by reference to another virus, Epstein-Barr Virus or EBV. You’ll be forgiven if you’ve never heard of this virus, but it could be argued to be one of the most successful human pathogens because almost everyone is infected by it. Most people are infected early in life and if this happens then EBV takes up residence in your B-cells (the cells in your immune system responsible for making antibodies) where it quietly persists throughout your life.

Every now and then the virus goes into active replication and makes copies of itself which get shed into your mouth, a process that you are blissfully unaware is happening. The problems with EBV generally occur if you don’t get infected early in life but avoid infection until you’re much older.

Now when you get infected with EBV, you can develop a disease called infectious mononucleosis or, more commonly, *glandular fever*. This often happens in young adults when they become interested in close physical contact with members of the opposite (or same) sex… which is why glandular fever is sometimes referred to as “*the kissing disease*”.

Now let’s apply the new asymptomatic COVID-19 orthodoxy to EBV where we define having a disease purely through the presence of a viral genome. So, according to this definition, almost everyone in the U.K. (and the world) is suffering from a new disease, asymptomatic glandular fever, and if we were to do a large-scale mass screening campaign *we’d discover that there were millions of ‘cases’ of asymptomatic glandular fever in the U.K. alone!*

Of course, this is complete nonsense. We aren’t all ‘suffering’ from asymptomatic glandular fever. Glandular fever requires infection by EBV, but EBV infection does not necessarily lead to glandular fever.

The same is true of COVID-19 and SARS-CoV-2 *and so the concept of asymptomatic COVID-19 as a disease is as ridiculous as that of asymptomatic glandular fever.*

But as is the case with EBV, being infected with SARS-CoV-2 means that you can still pass it on even if you aren’t sick. However, it is a matter of degrees and the reason that people can be healthy carriers is simply because they have less viral replication and a lower viral load, which is why they aren’t sick.

Of course, if the lower levels of SARS-CoV-2 in an asymptomatic individual were sufficient to mean such an individual was as infectious as someone with symptoms, then from an infectivity perspective the distinction between asymptomatic carriers and people with COVID-19 is unimportant and our statement would need to read:

> *A third of people infected with the SARS-CoV-2 coronavirus have no symptoms but are just as infectious as those with COVID-19.*

However, this situation would mean that the R number for SARS-CoV-2 would likely be much greater than it is, and that coronavirus infection and COVID-19 would have crashed through the population in one huge tsunami at the start of last year.

This wasn't the case, and all the evidence is that healthy, asymptomatic carriers (and pre-symptomatic sufferers) are much less infectious than those with symptoms and a disease (see Will Jones's summary of COVID-19 facts for links to supporting evidence).

Given that this is all so blindingly obvious to anyone who has ever been near a biology textbook, the only reasonable conclusion we can draw about the creation of an asymptomatic disease is that it wasn't done by a biologist but instead by individuals (probably on the Scientific Pandemic Insights Group on Behaviours (SPI-B)) *whose agenda is not to convey accurate information to the public but something different: fear and uncertainty.*

The effect of the asymptomatic disease is to blur the lines between being healthy and being sick and means that people will consciously, or subconsciously, transfer some of their understanding of symptomatic COVID-19 and apply it to asymptomatic COVID-19. The implication being that the absence of symptoms is somehow not relevant and that just because you feel fine, *you are in fact suffering from a deadly disease.*

This naturally creates fear, fear for oneself (what if I have it?) and fear of everyone else (they look O.K., but what if they have it?). This fear is useful if you now want to control the behaviour of people and drive compliance with policies designed to limit the spread of COVID-19, but the problem is that having created the asymptomatic monster as a mechanism to ensure compliance, it soon starts to consume everything *because you now need to manage this disease with no symptoms.*

The first thing asymptomatic disease needs is a way of identifying who has it. By definition, asymptomatic individuals have no symptoms and so in order to identify who is sick we need a test. Not only do we need a test, but because anyone who is healthy could be silently suffering from this illness, we will need a lot of tests. And because healthy people can become sick without any change in how they feel or look, then *the testing needs to be endless.*

Also, because the disease is only defined by the presence of the virus, then positive screening results (real or false positives) naturally become ‘cases’, confirming the ongoing presence of the asymptomatic disease. *Testing begets more testing.*

The whole host of non-pharmaceutical interventions – including lockdowns – can also be seen as logical steps to take in fighting an asymptomatic disease. If sick people have no symptoms, then we need to employ strategies in everyday life to manage them.

In effect, we have to treat the entire population as if it were ill and deploy measures across the whole of society with this in mind. This effectively leads to ‘reverse quarantine’ *where we lock up the healthy to try and protect the few genuinely sick people.*

Likewise, vaccine passports are also driven by the need to manage asymptomatic disease because it is only by proving that you’ve had a medical intervention that we can be sure that your lack of symptoms are not a cause of concern. But being immune doesn’t stop an individual from becoming infected with SARS-CoV-2, it just means their immune system more rapidly and effectively recognises and deals with this infection and as a result they may never develop symptoms.

In other words, vaccination is no protection from asymptomatic COVID-19 and suitably sensitive screening will continue to detect asymptomatic ‘cases’ amongst the immune population. Proponents of vaccine passports acknowledge this and argue (correctly) that if immune individuals are infected with coronavirus, they will carry a lower viral burden and so are less infectious.

However, they then go on to demonise unvaccinated, naïve healthy individuals because they might be asymptomatic carriers.

In reality, healthy people are healthy and even if they are carriers are unlikely to infect other people in normal social situations regardless of vaccination status. In fact, if you support the notion of asymptomatic COVID-19 ‘sufferers’ being a significant source of infection, *it could be argued that we need vaccination certificates to protect the non-vaccinated from the vaccinated!*

Finally, there is the whole question of variants. Clearly, a new, virulent more deadly strain of coronavirus that evades current immunity is a very concerning thing as it would essentially reset the clock back to the start of the pandemic: *in effect it is a new disease.*

But because we have blurred the distinction between infection and disease and our focus is on the presence (and sequence) of viral genomes, *every new variant is now treated as if it actually were a new disease.* This in turn drives the need to continue to monitor (picking up more and more new variants) and manage ‘*the spread of cases*’ irrespective of the severity of disease they cause or the prior immunity within the population.

Again, testing begets more testing in an endless cycle that will never stop unless we decide to stop it.

What all this means in practice is that the management of asymptomatic COVID-19 has become the the focus of the Government’s coronavirus policy, but if we go back to the original (mis)statement about asymptomatic COVID-19 and swap it around we get:

Two thirds of people with COVID-19 have symptoms.

Of course, this should read "*three thirds (all!) of people with COVID-19 have symptoms*" but the point I'm making is that hiding in plain sight is the fact that most people infected with SARS-CoV-2 get ill to varying degrees. We also know that people with symptoms account for the majority of onward transmission of the infection (again see Will's summary for evidence).

So, if we were designing an effective policy to manage COVID-19 *we would focus our efforts on the sick* as this is where we're going to get the most bang for the buck.

What would this mean in practice? *First, we would only need diagnostic testing capacity for the minority of the population with symptoms*, rather than the industrial-scale screening that we have had to deploy to deal with asymptomatic COVID-19.

Second, *restrictions would be focused on ill people*, and this would be much easier, not only because these individuals are easier to find, but because sick people behave as if they were, well, sick and as such may not require much encouragement to prevent others getting ill. ("*Don't come too close, I'm not very well.*") They also probably wouldn't want to go to work, or the gym, or the pub, or visit Granny.

These restrictions would be time limited *as they only apply to an individual while they are ill.*

We could use the billions of pounds saved on not destroying the economy *in a futile attempt to quarantine the entire healthy population* to ensure that these individuals were supported until they got better. We could invest in extra capacity in the healthcare system to manage any increase in hospitalisations and focus resources on improved treatments rather than testing and managing healthy people.

The need for vaccination certification becomes irrelevant because healthy people are treated as healthy people and new variants only become of concern if they make individuals sicker. Essentially, we could stop treating COVID-19 as a special case with all the collateral damage this causes to non-COVID-19 related health and manage it as we would any other potentially serious infection.

None of this is surprising as it is based on centuries of accumulated wisdom about how to manage infectious diseases. Unfortunately, the creation and focus on asymptomatic disease has drawn our eye away from the real illness and devoured huge amounts of time, effort, and money.

Being told that you are sick with a major illness can be a devastating piece of news, not just for the individual themselves but for those around them. Even if this news is couched in terms of positive treatment outcomes, it would be impossible to not be fearful and run hundreds of 'what if' scenarios through one's mind. Regardless of how you feel today, the worries are all about progression and how you will feel tomorrow.

Normally, clinicians would have a duty of care to their patients and spend time in discussing a

diagnosis and helping their patients come to terms with this news. *But for COVID-19, people receive the results of their diagnosis with no support.*

Worse through track-and-trace they might even receive this news completely unsolicited; imagine if a complete stranger phoned you to tell you that you might have cancer?

Then, rather than offer support and comfort, *we demand that individuals cut themselves off from others (self-isolate)*; you're ill but on your own. All of this has consequences, especially for those who have bought into the concept of asymptomatic COVID-19, and so is it not surprising that some people want to cling to mask wearing, social distancing and lockdowns.

In the end, it turns out that – ironically – asymptomatic COVID-19 might not be asymptomatic after all because for any number of vulnerable people the very existence of this asymptomatic disease has the potential to make them sick – *sick with fear, worry and anxiety.*

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