Coronavirus and COVID-19: What We Know That Just Ain't So

A new review article published in The Lancet concludes that school closures are ineffective at controlling coronavirus epidemics. What else could be wrong with the conventional wisdom about COVID-19?

Mark Twain famously said, "What gets us into trouble is not what we don't know. It's what we know for sure that just ain't so."

How much of what we currently "know" about coronavirus is actually wrong? Perhaps quite a bit. Here's some information that came out in recent days that challenges the current conventional wisdom on COVID-19.

1) School closings may not work to slow the spread of COVID-19. The Lancet published a review article that examined 16 previous papers on coronavirus epidemics. During the SARS pandemic of the early 2000's, the authors concluded that "school closures did not contribute to the control of the epidemic." They further indicated, "Recent modelling studies of COVID-19 predict that school closures alone would prevent only 2-4% of deaths, much less than other social distancing interventions."

2) Singapore is no longer a model of infection control. Instead of going into lockdown, Singapore implemented an extensive system of contact-tracing, which earned the city-state
international admiration as it kept shops, restaurants, bars, and schools open [3]. Unfortunately, all good things come to an end. After a surge in cases, Singapore has implemented a one-month lockdown.

3) Masks work (sort of). New research [4] in *Nature Medicine* shows that masks help prevent people infected with influenza and coronavirus from spreading it to others. That isn't exactly a surprise. We've been saying that masks protect society from you, not you from society. But what is a surprise is that the CDC now recommends [5] wearing masks in public places where social distancing is difficult. That's a change in policy.

4) Children aren't as invulnerable to COVID-19 as we thought. While children are still the least likely to get a serious infection, they still can and do [6]. Tragically, a six-week-old baby [7] died in Connecticut of COVID-19.

5) Antivirals are unlikely to help once a patient is deathly ill. My colleague Dr. Josh Bloom, who in his former life was a research chemist in the development of antiviral drugs, explains that two promising antiviral drug candidates -- remdesivir [8] and N-hydroxycytidine [9] -- likely will not help people who are extremely sick. The existing data shows that, to be most effective, the drugs must be taken prophylactically or within 12 hours of being infected.

6) The European Union isn't a safe haven for member countries. What is perhaps the biggest surprise is a geopolitical development: The coronavirus may pose an existential threat to the EU. Italy feels utterly abandoned by the EU [10] -- which initially didn't provide financial or medical assistance [11] to Italy when the nation pleaded for it -- once again raising the possibility that Italy eventually will leave the Union. China has been waiting in the wings, eagerly taking advantage of divisions within Europe [12].