Covidization of research: what are the risks?

Every crisis is a strong call to mobilize the entire research community to respond. The COVID-19 pandemic is no exception. Researchers, universities, funders, philanthropies, journals, and journalists have all pivoted, *en masse*, to COVID-19. Everyone is 'Covidized', and it should worry us.

Millions of dollars are being poured into COVID-19 research. Some funding agencies have done this at the cost of cancelling or delaying regular open competitions. Journals are dealing with a deluge of submissions on COVID-19. The media is hardly reporting on any research other than COVID-19.

Everything is happening with a sense of urgency, which might come at the cost of careful, deliberate discourse or scholarship. In some ways, the urgency and Covidization makes sense – research is desperately needed to fight this pandemic that, every day, is further impacting the economy and costing more lives, disproportionately impacting those living in poverty. The pace of normal scientific progress seems hard to justify in the middle of a global crisis. So, everyone is doing their best to contribute and move at warp speed.

Crisis-driven, urgent approaches have led to some successes in the past – the Ebola outbreak in West Africa did result in a massive infusion of funding and a flood of innovations within a matter of months, including new diagnostics, therapeutics and vaccines. Urgency and AIDS exceptionalism did produce new therapies for human immunodeficiency virus.

However, even as we do our best to respond to this crisis, do we, as a scientific community, have a responsibility to look beyond the immediate crisis to ask ourselves: what are the risks involved in Covidization?

Some risks have quickly become apparent. Because everything is rushed and because many people, mostly well-intentioned, are working on COVID-19, there is so much noise that everyone is struggling to separate signal from noise. We have already seen a flood of dubious and retracted research, and a lowering of normal scientific standards. Bad science, combined with poor science communication, is eroding public faith in research and is leading policymakers astray.

Entire fields of research are being lured away from their primary area of expertise to the pandemic response.

Scientists working in areas that have nothing to do with COVID-19 are expending a tremendous amount of energy pivoting their work to the response. This might result in tremendous redundancy and wastage, as shown by the hydroxychloroquine fiasco (with over 150 trials registered on just this drug, and many trials discontinued or struggling to enroll patients).

There is a big risk in pivoting to a new research field only to find the problem disappear soon after. We saw this happen with the Zika virus outbreak in 2016. We also saw that some of the products developed for Ebola after the West Africa outbreak (2014–2016) had vanished from the market when the outbreak emerged in DR Congo in 2018. It is not easy to sustain crisis-driven initiatives.

Another risk of Covidization is getting it wrong. As described by Ballantyne and Dunning (<https://blogs.scientificamerican.com/observations/which-experts-should-you-listen-to-during-the-pandemic/#:~:text=In%20philosophy%2C%20this%20phenomenon%20has,where%20they%20lack%20crucial%20competence>), by indulging in 'epistemic trespassing', wherein well-intentioned scientists with real expertise in one field intrude into another, passing judgment where they lack expert-level training and insight, we open the door to big mistakes with bad consequences.

And what happens to progress in other critical areas, if leading scientists have diverted their attention to COVID-19? It is important to remember that good health requires us to address a range of issues, from social determinants of ill health (e.g., poverty) to the growing burden of non-communicable diseases that are projected to become leading killers, even in low-income countries. Climate change is another looming threat that deserves urgent attention.

In my field, tuberculosis (TB) research, many researchers have already pivoted to COVID-19. This is a loss, since TB is the leading infectious killer and is getting even

worse because of the pandemic. The field of TB research was thin to begin with, and I worry that it might not withstand a massive diversion of scarce talent.

Scientists are at their best when they focus on their passion and do what they do best and trained for their entire lives. While the pandemic might require many researchers to pivot, at least some should stay focused on their primary mission, be it TB, cancer, mental health or something else. In other words, we need 'designated drivers' to keep the momentum going in various fields. If not, the collateral damage from the pandemic could be more devastating.

Humanity has endured many crises over centuries. The COVID-19 crisis will also pass. The appeal of a quick fix or sudden influx of funding can be mesmerizing, but it is coming at the expense of moving forward other critical areas of health research? We need a long-term vision and strategy for research and scholarship. Short-term, crisis-driven thinking is neither strategic nor sustainable.

As a scientific community, we need to acknowledge that all health research cannot be about a pandemic or infectious threats, and all infectious-disease research cannot be about COVID-19. Therefore, governments, funders, universities, journals and individual researchers should be thoughtful about the risks of Covidization and should not forget that diversity in research is critical for any society. And diversity in research will prepare us better for the next crisis (which may not be a pandemic). □

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Competing interests

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