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We cannot afford to repeat these four pandemic mistakes

Many countries are declaring an end to this phase of the covid-19 pandemic, yet the underlying weaknesses that hampered our response remain unsolved, says Abraar Karan

Abraar Karan *infectious disease doctor*

For a physician, one of the hardest parts of the covid-19 pandemic was watching patients get steadily sicker and often die. At the bedside, we see past the numbers dispassionately presented on data dashboards and instead understand the real human suffering that is at the heart of a virus like SARS-CoV-2 spreading. I have also had the unique experience of working on a state pandemic response with leading decision makers; as such, I was a witness to the complex policy tradeoffs involved in trying to control a pandemic. There are always winners and losers in these decisions. Yet when we pull back on public health protections, the ensuing harms are more heavily burdened on those who often are not in a position to adequately protect themselves. As healthcare workers, they often end up as our patients—and their stories offer examples of where our pandemic response failed.

As the US joins other countries in declaring an end to this phase of the pandemic, marked by the rolling back of important guidance, including indoor masking, I am left with concerns for our future pandemic preparedness for a few key reasons.

Underlying inequities persist

First, the most vulnerable people are being left behind again. As mask mandates are quickly lifted, we physicians are still caring for patients who must remain masked because of underlying health conditions. Many wonder what will happen to them—for instance, will "one way" masking be enough to protect them from infection? Similarly, I am reminded of the beginning of the pandemic, when the people who filled our emergency departments were primarily frontline workers, often from ethnic minority communities, who did not have adequate personal or workplace protections in place. I am worried that the underlying drivers that allow pandemics to escalate have been left largely unaddressed.

If we are faced with another deadly variant or a different novel respiratory virus altogether, I expect the same groups of people will be harmed first before, eventually, disease will spread to all parts of society. We are not safe unless the most vulnerable people are prioritised. As my late mentor Paul Farmer said, "The idea that some lives matter less is the root of all that is wrong with the world." By quickly moving on from this pandemic without tackling the societal inequities it exposed, we are no more protected from global health threats than we were before, only further misdirected.

Who is answerable for misinformation?

Second, we still face an unfixed accountability problem. When pundits with large platforms opine that the pandemic is over or even that it's never posed any meaningful risk to society at all—which many have done countless times over the past two years—who is responsible when people get sick from their inaccurate advice? Censoring these irresponsible ideologues borders on violating freedom of speech, but leaving them free to spew out misinformation means people die or get sick; we as doctors are at the bedside with our patients, while these charlatans are free to keep up their proclamations. Improving the communication of accurate and clear health information to the public, while also regulating the stream of misinformation, remains a major pandemic challenge.

Evidence gaps

Third, there is still so much we do not understand about covid-19. Most importantly, we are still only now beginning to appreciate the costs of even mild infections—including on the heart and brain.[1 2] Moreover, many of our public policy decisions lack strong data one way or the other—examples of these include using six feet of distance as a reasonable "rule"; mandating outdoor masking; deeming cloth masks as sufficient for indoor spaces; or using "stay at home" orders with little enforcement. Some academics have commented that the lack of randomised trials or otherwise robust data for many policy decisions after two years has left us victim to committing to and implementing strategies that may not actually work (and represent missed opportunities to generate these data).

With the pandemic moving into an "endemic" phase until the next variant strikes, I fear that we will lose attention and any sense of urgency in gathering these data. Many of these trials cannot be quickly or effectively run during periods of low disease incidence. Moreover, during times of high disease incidence, we must invoke the precautionary principle or risk exposing millions of people to potentially catastrophic harms—meaning, we opt for strategies that we believe will optimise benefit and minimise harms, with little chance to figure out whether or how well they do (or, if they don't, how we can best improve upon them).

Adapting to an airborne virus

Fourth, there is still ongoing disagreement about the basic epidemiology of how the virus spreads. Early on, there was an outsized focus on handwashing and cleaning surfaces; eventually and appropriately, our

attention turned to airborne spread. It took months for covid-19 to be recognised at a global level as a virus that could efficiently spread through the air across long distances and periods of time.[3] The implications of this are paramount—it means that people need to wear higher filtration masks and that shared indoor public spaces need significantly better ventilation systems. It also means that transmission is a major threat—far more so than a virus that transmits primarily through bodily fluids like Ebola—and infection control requires phenomenally organised and rapidly mobilised systems of response. We have neither in most countries, and we certainly do not have enough of a movement towards getting everyone access to a ready supply of high quality masks for when we are faced with the next variant. Restructuring indoor ventilation is also challenging—including the question of who pays for it, and how quickly it can physically be done in buildings that weren't built with this task in mind.

While attention moves away from the pandemic in many wealthy countries, the underlying weaknesses that hampered our response, and which were left unaddressed even during the omicron surge, are largely the same. We must ask ourselves—are we truly prepared, or are we simply tired and ready to "move on" back to a previous normal that was unable to mount an adequate response to this pandemic?

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1 Xie Y, Xu E, Bowe B, Al-Aly Z. Long-term cardiovascular outcomes of COVID-19. *Nat Med* 2022. doi: 10.1038/s41591-022-01689-3. pmid: 35132265

2 Douaud G, Lee S, Alfaro-Almagro F, etal. SARS-CoV-2 is associated with changes in brain structure in UK Biobank. *Nature* 2022.doi: 10.1038/s41586-022-04569-5. pmid: 35255491

3 Tang JW, Marr LC, Li Y, Dancer SJ. Covid-19 has redefined airborne transmission. *BMJ* 2021;373:n913. doi: 10.1136/bmj.n913. pmid: 33853842