Innovations: not the magic wand for COVID-19

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We are in the middle of the COVID-19 pandemic and our healthcare systems have never looked so vulnerable and fragile. Humanity has put a brave face, and healthcare providers are our new warriors. From clapping for carers to lighting a diya (lights made of clay) or showering flowers on hospitals, we have given the token of appreciation to our front-line workers. But this sense of gratitude has been marred by the disturbing reports of lack of personal protective equipment at the front line. COVID-19 has just put a magnifying glass at the fault-lines within our health supplies and delivery systems, and our misplaced priorities.

Innovation often optimises costs by reducing redundancies. The most glaring pitfall of this approach was the mad rush for ventilators in early 2020. ABCDs (Ambu bag compression devices) based on a decade-old unproven and untested device design from Massachusetts Institute of Technology (MIT) became the Lego-blocks for innovators. Worldwide, between March and May of 2020, over 50 groups were creating different adaptations of an ABCD. The venerated Food and Drug Administration opened the emergency use authorisation route for ABCDs and other ventilators. The chatter around invention became a cacophony of ‘we met some doctors’, ‘our engineers made a ventilator in 48 hours flat’, ‘it is working’, ‘we have signed an agreement with manufacturers’. While well intentioned, at the time of writing this, none of these contraptions have served patients. I hope they are not needed. However, this crisis should force us to think about how we optimise products and prices. One wonders if redundancy, even though it adds to cost, is a necessity. It creates a more resilient supply chain and preserves local skill and downstream component ecosystem. A multiparty, multigeography supply chain would probably help us deal better with the next pandemic.

Innovation often depends on the availability of credible data. Credible health data are the bedrock on which evidence-based decisions are made. They serve the foundation on which one can deliver the promise of artificial intelligence. Anyone who has innovated for the developing and underdeveloped world would share the frustration in gathering health statistics. COVID-19 has exposed poor health data collection and reporting practices around the world. We have seen a scramble to publish, retract, politicise and challenge the data from governments, international bodies and research laboratories. Hopefully, once we are on the other side of the pandemic, we would get our act together and invest in credible, transparent and accessible health data collection and reporting systems.

Social distancing, which is a rather distasteful synonym for physical distancing, has aggravated the mental health problems in the world around us. While the focus of innovators traditionally has been on managing what burns—communicable and non-communicable diseases—mental health smoulders and has not seen unicorns creating life-changing solutions. It is probably time that the governments, funders and innovators turn their attention to this.

I wonder if COVID-19 should make us take notice of the obvious. Stop-gap innovations help, but in times of crisis what matters is the investments in improving our healthcare systems during the ‘good days’. I hope we will have good days again, and we would learn from our mistakes and invest in resilient, reliable and responsible healthcare systems.
To survive the next pandemic, we would no doubt need to innovate, but we would equally need to deploy what we have already invented!

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