

Global Public Health and the COVID-19 Pandemic

In Brief

- Global public health systems have faced multiple challenges since early March when COVID-19 began to spread across the world.
- Low- and middle-income countries are likely to see the worst of the pandemic as countries like India, Brazil, Colombia, Peru, and South Africa account for significant portions of the world's infections
- Issues like corruption, over-crowding, and ill-prepared health systems are just some of the challenges facing LMICs that make the pandemic particularly difficult to manage.
- The best hope for the world to emerge from the pandemic may lie in herd immunity achievable through a vaccine.

Context

The strain on global health systems resulting from the COVID-19 pandemic has been well documented since early 2020 when the virus spread across the world. However, health systems in low- and middle-income countries (LMICs) have and will continue to be challenged the most. In the chaos of the pandemic, the health systems in LMICs may not be able to keep up with the usual demand for services. South Africa, for example, [recorded over 36,000 excess deaths between May 6th and August 14th relative to recent years](#), while only 11,000 of those deaths came from COVID-19. This suggests that there may be [collateral health impacts](#) from the COVID-19 pandemic. The global focus on COVID-19 has disrupted the vaccination and treatment of diseases like [malaria, polio, and HPV](#) due to supply chain disruptions. Recent analysis suggests that roughly [three-quarters of HIV, TB, and Malaria treatment programs have been disrupted by the COVID-19 pandemic](#), which could potentially see the death toll from these diseases double from last year.

Perspectives

Latin America has [become the epicentre of the pandemic](#) since May. The emergence of the virus has been problematic for the healthcare system in Brazil, [the country in South America with the most confirmed cases of COVID-19](#). Brazilian officials, namely president Jair Bolsonaro, have [been heavily criticized](#) for failing to prepare local health systems for the pandemic. For example, [90% of cities lack an intensive care unit, and access to ventilators is scarce](#). The government has been suspected of underreporting the true extent of the COVID-19 in the country. Between January 1st and August 8th, [over 50,000 people died in Brazil from acute respiratory infections but were not listed among those having the coronavirus](#). Similarly, the Mexican government drew criticism in late May for [failing to report hundreds, if not thousands, of coronavirus deaths](#).

On the other side of the globe, India faces significant challenges containing the spread of the virus, the most obvious of which is [extreme population density](#). In a country with nearly 1.5 billion inhabitants, the social distancing measures that have effectively slowed the spread of the virus in developed countries [are nearly impossible to impose](#) without shutting the country





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down. Studies have also shown gaps in hygiene, where only [36% of Indian households use soap to wash their hands before meals](#). Most concerning, the accuracy of COVID-19 infections and deaths are questionable at best in India, where significant portions of the population live in [rural areas with unreliable health care and inadequate record-keeping](#).

Significant portions of the labour forces in LMICs are comprised of workers from the informal sector. The Indian labour force has [450 million informal sector workers](#) (roughly 90% of the labour force). In 2018, Informal workers represented [85.8%, 68.2% and 68.6% of the African, Asian, and Arabic States'](#) labour forces, respectively. Informal sector jobs are typically low paid, lack benefits like sick leave, and payment is contingent on leaving one's house. Ultimately, lockdowns and social distancing measures have [left millions of informal and migrant workers stranded](#) without income. [Fiscal space in LMICs has been limited in recent years by mounting debt](#), making response packages difficult to realize. With little financial support available, informal workers are likely to return to work and perpetuate the spread of the virus.

Policy Approaches

With considerable challenges plaguing global health systems, relief may [only be possible if herd immunity](#) can be achieved, ideally, via a vaccine for the SARS-CoV-2 virus that causes COVID-19. Innovative, although unproven, messenger RNA vaccine approaches from pharmaceutical giants like [Moderna, Pfizer and BioNTech](#), are among the candidates who are currently in phase 3 of clinical trials. A recent article in the [British Medical Journal](#) explained that messenger RNA vaccines benefit from being safe relative to traditional [vaccination](#); instead of using an attenuated virus to build immunity, mRNA vaccines use recreated spike proteins that, if effective, will provoke an immune response. The recent progress made in the pursuit of a vaccine has [sparked optimism that doses may be available early in 2021](#). [According to The Economist, the world has purchased roughly 4 billion doses of COVID-19 vaccines for delivery by the end of 2021](#).

However, many experts still believe that optimism should be cautioned. There is a belief in the medical world that the [rush to create a vaccine for COVID-19 may cause pharmaceutical manufacturers to cut corners](#) and for regulatory bodies like the FDA to fall short of the [WHO's Target Product Profile for COVID-19 Vaccines](#). The trend of vaccine nationalism – where high-income countries outspend low- and middle-income countries on vaccine R&D to corner off the market – [may limit the overall reach of a vaccine](#), leaving developing countries exposed to the virus until future doses are produced. However, efforts are being made by foundations like UNICEF [and Gavi to ensure that lower-income countries have equal access to vaccines](#). Gavi has recently agreed with the Serum Institute of India to reserve [100 million doses of eventual COVID-19 vaccines for low- and middle-income countries](#) at \$3 per dose. Such actions will be crucial in ensuring that when a vaccine becomes available that it can reach even the most vulnerable populations.

Further Reading





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