# New Variants Show Why the World Urgently Needs Vaccine Equity



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# Delivering more vaccines to low- and middle-income countries is vital if we want to limit the emergence of new coronavirus variants.

With lockdowns targeting the unvaccinated taking place across parts of Europe, there has been much debate about the levels of vaccine uptake in certain wealthier nations. However, this only serves to deflect from a much more critical issue, namely the staggering imbalance between vaccination levels in wealthy countries and those in lower income nations. This imbalance has been highlighted by the emergence of the new Covid-19 virus variant, Omicron. It is a sombre reminder that we need to expedite efforts to protect populations everywhere and that inward looking strategies will not work.

## **Glacial progress on global vaccinations**

In a **recent paper** published in PLOS Medicine my co-authors and I laid out some key priority actions and initiatives for achieving global equity for Covid-19 vaccines.

The estimates in the paper showed that as of June just 0.9 percent of those living in Low Income Countries (LIC) and under 10 percent in Low and Middle Income Countries (LMIC) had received one dose of a Covid-19 vaccine. This is in sharp contrast to the 43 percent figure in High Income Countries (HIC). More recent estimates (as of 25<sup>th</sup> Nov) reveal little progress in addressing this yawning gap, with only 3 percent of people in low income countries having been fully vaccinated compared to 67.2 percent in high income countries.

We need to rethink this current imbalance as a matter of urgency, for the simple reason that it puts the whole world in peril. Low levels of vaccination in LMICs increase the risk of major outbreaks taking place in specific regions, especially across Africa, Latin America and Central Asia, where underfunded health services may struggle to cope and high mortality levels could be expected.

The science is also clear that the continued presence of large unvaccinated populations around the world greatly increases the opportunities for vaccineresistant variants to develop, as we have seen in the case of Omicron. This threatens to erode the effectiveness of existing vaccines and lead to new waves of infections. It may also undermine current trust in vaccines as a viable solution to tackling the pandemic.

This is a truly global crisis, and we need to treat it as such. The simple reality is if we can get everyone vaccinated as quickly as possible, regardless of nationality or income, then we can reduce the risk of further new variants emerging. This will then allow us to focus on creating long term strategies to manage Covid-19 as an endemic virus.

## **Adjusting our priorities**

In the short term, the simplest way of addressing the current imbalance is to move the low and lower middle income countries with very limited coverage rates to the front of the queue of vaccine orders. Vaccine manufacturers have shown a willingness to change the order priority, but very few high income countries have agreed to give up their spot. This proposal is not asking that wealthier countries forego their outstanding orders and risk having insufficient doses to vaccinate their own populations. It is just asking that when they do have sufficient coverage and surplus doses (which many already do have), that they don't simply hang onto these vaccines as a reserve but help manufacturers prioritise delivery of vaccines to the LMICs.

This June, the G7 countries announced they would donate one billion vaccines to poorer nations. While this is a welcome step, there has been insufficient progress so far on actually delivering the pledged doses. In addition, the reality is that this is just a fraction of the 11 billion vaccines that the World Health Organization estimate are needed to ensure proper control of the pandemic. And as the prospect for more variant-matched vaccines increases, we may need even more.

It is therefore critically important that we find ways to ramp up vaccine manufacturing and distribution capacities to match global demand. This doesn't just mean producing more vaccines, but also ensuring that different countries or regions have the capability to make their own.

#### Increasing manufacturing capacity

There have been many calls to force large pharmaceutical companies to give up their valuable patents, but patents are often not the bottleneck in expanding manufacturing capacity. Instead, it is a shortage of highly qualified biologics manufacturing specialists, equipment and labs. The fastest pathway to increased production capacity is for high income countries to facilitate the transfer of technology and help overcome staff and equipment deficits. This will enable more manufacturers to produce vaccines under licence from pharmaceutical companies.

Meanwhile news that big pharmaceutical firms are looking at <u>developing</u> such manufacturing partnerships in African countries such as South Africa, Senegal and Rwanda are to be applauded. But we shouldn't underestimate the challenges involved and the time needed to get such new plants up and running.

Aside from the practical aspects of sourcing the equipment and workforces required to build and operate these facilities, it is vital that the right scientific and regulatory frameworks are in place to guarantee the development of safe and effective vaccines. There is also the secondary question of what happens to these facilities once the demand for Covid-19 vaccines eventually recedes. Flexibility in production capacity can make the plants **more robust to uncertainty in demand and more successful** in delivering different types of vaccine platforms.

Making this happen is clearly a major undertaking, one that will take time and require funding and coordination at an international level. There has to be a global commitment from all stakeholders involved, a commitment that goes beyond geographical boundaries and individual interests.

## Tackling vaccination hesitancy

While addressing manufacturing and order queue swapping challenges is by no means easy, there are at least clear paths forward that the global community is beginning to take. This is also the case for the challenges around cold chain logistics, with many steps being taken to install new fridges and freezers in countries that lack adequate infrastructure. There is, however, one additional obstacle to tackle: ensuring significant vaccine uptake within each LMIC when doses do become available.

The reality is we have all been living in the shadow of the disease for nearly two years, so the sense of immediate threat has begun to wane. In some countries, a common narrative that there is now less risk from Covid-19, borne out by the low or zero prevalence of infections in an individual's immediate social circle, means a less obvious need to get vaccinated—regardless of people's views on vaccinations in general.

While vaccination misinformation and concerns about side effects are present in LMICs, the percentage of sceptics and anti-vaxxers **is lower than many high income countries**. The bigger challenge is to convince **more than half of the population in some countries** who have no issues with vaccines per se, but who feel the threat from the virus is exaggerated and so question the urgent need to get vaccinated against Covid-19.

Because it can be impacted by local cultural and social beliefs, vaccine hesitancy is a problem that has to be addressed on a country or even local district level. It is often a function of a complex web of relationships among the public and government, civil society and religious authorities. LMIC governments need to figure out how to tackle it within their own population and understand what kinds of local interventions and incentives are necessary to persuade the majority to get vaccinated. International collaboration can definitely help, not least through identifying and sharing success stories. Organisations like **Exemplars in Global Health**, run by Gates Ventures, are already conducting research and **collating global examples of best practices** where countries or districts have managed to reach high vaccination levels.

At a recent event Exemplars hosted to discuss best practices in Indian districts that have achieved over 90 percent vaccination rates, local officials highlighted the importance of empathy. In other words, meeting the communities on their terms, using their languages, following their customs, and addressing their fears. They also cited sheer persistence and ingenuity as essential to their success.

Understanding how a district in India <u>achieved 100 per cent vaccination</u> <u>rates</u> can be incredibly useful, but how to share this solution with a health adviser in a district of Ghana? And how to do it in a way that makes sense for the local situation? When to use mass vaccination sites at <u>festivals and</u> <u>celebration venues</u> and when to <u>conduct targeted at-</u> <u>home/community outreach</u>?

Answering these questions calls for global collaboration to ensure that different ideas are shared and discussed across different regions. Translating these exemplars into actionable plans requires funding and a global consensus on how to develop vaccine delivery strategies and infrastructure that include the right behavioural and motivational nudges.

The statistics are stark evidence that we have failed to find fair and equitable solutions to tackle the challenges presented by Covid-19 to date. Yet the inequity is not something that we can choose to ignore. If we cannot urgently address vaccine inequity, we will all continue to face the gloomy risk of a prolonged pandemic, with recurring scares around new variants, and constant fluctuations between the opening and closing of our schools, offices, restaurants, borders and economies.

#### Find article at

https://knowledge.insead.edu/responsibility/new-variants-show-why-world-urgentlyneeds-vaccine-equity

#### About the author(s)

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#### About the research

"Achieving global equity for COVID-19 vaccines: Stronger international partnerships and greater advocacy and solidarity are needed" is published in PLOS.