

Global challenges for equitable access to COVID-19 vaccination

Desafios globais para o acesso equitativo à vacinação contra a COVID-19

Desafíos globales para el acceso equitativo a la vacunación contra la COVID-19

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The rapid development of COVID-19 vaccines represents an important stride in science and public health and feeds the world's hope for overcoming the pandemic. However, the approval of safe and effective vaccines by regulatory agencies is just one step in a long journey to reach herd immunity and provide control of the disease.

The next step is to produce sufficient doses of vaccines to achieve coverage that ensures interruption of community transmission. This is a major challenge. A survey conducted in June 2020 by Coalition for Epidemic Preparedness Innovations (CEPI)¹ estimated at 2 to 4 billion doses the global capacity for production of COVID-19 vaccines by the end of 2021. Four billion doses would be sufficient to vaccinate about 25% of the world population, considering two doses per person, as most of the approved vaccines require. Yet this coverage would be insufficient to interrupt transmission.

High priority should thus be assigned to expansion of vaccine production capacity. A better strategy would be to generalize the technology transfer processes, allowing other manufacturers besides patent-holders to have a command of the technology and to invest in expansion of production. Still, there is an even a bigger barrier to this technology transfer, namely the intellectual property rights system.

India and South Africa took the main initiative to expand global production capacity by proposing to the TRIPS Council of the World Trade Organization (WTO) the temporary suspension of intellectual property rights. This proposal has been discussed since October 2020², but a favorable decision seems unlikely, given the opposition from the United States, Canada, United Kingdom, and European Union. The Brazilian government also opposed this suspension.

With a limited supply of vaccine doses and limited prospects for increasing production in the short term, the challenges are thus distribution and equitable access between countries and between population groups.

High-income countries took a step ahead and signed purchase agreements even before proof of the vaccines' safety and efficacy. As of February 24, 2021, 191 million doses had been administered in the world, 75% of which in ten countries alone. In 130 countries, with 2.5 billion inhabitants, no doses had been administered. The wealthy countries, with just 16% of the world population, purchased more than half of the available doses of COVID-19 vaccines³.

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World Health Organization (WHO) Director-General Dr. Tedros Adhanom has criticized “vaccine nationalism” – in which countries compete for the available doses –, referring to a “catastrophic moral failure”⁴. However, the unfair distribution of vaccines between nations is not merely an ethical issue. Since COVID-19 is a transmissible disease that knows no borders, it will continue to be a global threat while there are still cases anywhere in the world, especially with the emergence of new SARS-CoV-2 variants.

To confront the inequality in distribution of vaccines between countries, overcoming the system of allocation based on individual countries’ purchasing power, the COVID-19 Vaccine Global Access Facility (Covax) was established as a collaboration between WHO, GAVI – The Vaccine Alliance, and CEPI. According to this initiative, high and middle-income countries and private organizations finance vaccine purchases. The doses are then distributed among all countries, even low-income nations that cannot contribute, in quantities proportional to their populations. The initial target is to vaccinate, with 1.8 billion doses, 20% of the population in each participating country, including the 92 low-income countries, by the end of 2021⁵.

Although Covax is a relevant initiative, the target falls short of the actual needs. Vaccinating with one dose 20% of the population in the 165 countries that joined Covax will not be sufficient to control the pandemic. Besides, it will not be easy to reach this target.

The first difficulty with Covax is the shortage of financial resources. As of February 26, 2021, the funders (governments and donor organizations) had committed to donate USD 11 billion, leaving a deficit of USD 22.2 billion for reaching the target of 1.8 billion doses. There are also uncertainties on issues related to production capacity, regulation, formal contracts, and preparation of national vaccination programs in the various countries⁵.

Besides equitable distribution on the global scale, there is the challenge of unequal access to vaccines among each country’s inhabitants. Just as high-income countries multiply the vaccine doses for their citizens, wealthy individuals in any country can use their purchasing power to obtain priority access to vaccination.

To avoid this problem, most countries have organized vaccination programs in phases, according to WHO guidelines⁶, prioritizing healthcare workers and persons at increased risk of severe evolution or death from COVID-19, like the elderly.

Even with the definition of priorities, structural inequalities pose challenges for vulnerable populations. In poor areas or those far removed from cities, with logistic and other difficulties, vaccination is slower and reaches lower coverage.

Latin America has 26% of the world’s COVID-19 deaths and 18% of cases but has applied only 6% of the vaccine doses⁷. Although some Latin American countries have started immunizing their citizens, vaccination is proceeding slowly, failing to keep pace with transmission. Of the 33 nations, 18 have not started immunizing their populations as of this writing. This translates as profound inequality in the eye of the hurricane.

Brazil, particularly through the National Immunization Program (PNI), has historically achieved high vaccination coverage rates, but since 2016 these targets have not been reached⁸. In an interview to CNN, former Health Minister José Gomes Temporão recalled that in 2010, in just three months, 80 million Brazilians were vaccinated for H1N1. And on a single day, the PNI succeeded in vaccinating 10 million children for polio⁹. In principle, the country is thus fully capable, technically speaking, of implementing an efficient and equitable COVID-19 vaccination program. The difficulty in Brazil is thus limited to obtaining sufficient doses of vaccines.

This point highlights the work by the Oswaldo Cruz Foundation (Fiocruz) and the Butantan Institute, which established COVID-19 vaccine partnerships with AstraZeneca/Oxford University and Sinovac, respectively, ensuring access to vaccines for Brazilians. These vaccines enabled Brazil to start vaccination, prioritizing healthcare workers, elderly, the institutionalized persons with disability, and indigenous people. As of February 28, 6.9 million doses had been administered, or 5.5 million persons with the first dose and 1.4 million with the second dose (Ministério da Saúde. COVID-19, vacinação: doses aplicadas. https://qsprod.saude.gov.br/extensions/DEMAS_C19Vacina/DEMAS_C19Vacina.html, accessed on 28/Feb/2020).

However, the vaccination campaign has not achieved the same degree of organization that the PNI has used historically in its campaigns. Unfortunately, by acts and omissions since the beginning

of the pandemic, the Brazilian government has either failed to take measures to control the disease or has even contributed to aggravating it ¹⁰. Neither has it facilitated vaccination rollout, delaying the purchase and distribution of vaccines and refusing to conduct communications campaigns.

As if this were not enough, the president of Brazil himself encouraged the creation of a consortium of large Brazilian private corporations authorized by the Ministry of Health to import 33 million doses of vaccine, having sent a letter to AstraZeneca in the last week of January, informing the company of the decision ¹¹. In early January, the Brazilian Association of Vaccination Clinics had already announced the purchase of five million doses of the Covaxin vaccine from the Indian laboratory Bharat Biotech, with the objective of vaccinating part of the population that is not in the priority groups ¹². Obviously, the supply of vaccines by the private health sector further exacerbates the inequalities between Brazilians with higher and lower purchasing power.

In short, the challenges are huge for equitable access to COVID-19 vaccination, ranging from the production of sufficient amounts of doses to the organization of efficient vaccination programs and the guarantee of distribution according to ethical and epidemiological criteria.

At the global level, unless the governments of high-income countries and the pharmaceutical industry change their behaviors and take urgent measures to guarantee the production and equitable distribution of sufficient doses of COVID-19 vaccine, there will be no ethics or justice in relations between peoples or effective control of the pandemic.

In addition, without equitable distribution of vaccines, the global economy will not recover, causing greater human suffering and even more avoidable deaths. An analysis by the National Bureau of Economic Research estimates that if persons in wealthy nations are vaccinated immediately but those in poor countries are only vaccinated in subsequent years, the global economy will shrink by USD 9 trillion ¹².

To protect people's lives, effective and safe COVID-19 immunization should be considered a global public good, and vaccines must be produced in larger volumes, distributed according to ethical and epidemiological criteria and supplied at no cost to users. This can be achieved by waiving intellectual property rights for COVID-19 vaccines, sharing vaccine technology openly, fully funding Covax, interrupting bilateral agreements, and investing in strengthening national health systems. Ultimately, the challenge is to meet global and national obligations to human rights, promoting rather than preventing global access to vaccines.

At the national level, Brazilian society needs to decide to take the pandemic seriously. The Federal Government has been blatantly inept, and the Brazilian Association of Collective Health (ABRASCO) has proposed the organization of a "National Salvation Committee", with participation by the three levels of government (Federal, State, and Municipal) and civil society representatives in the Brazilian Unified National Health System (SUS) and the scientific community ¹³.

According to a structural analysis, the current global health crisis has maximized the tendency towards economic concentration and thus profit-seeking, alongside the affirmation of each State's unequal power logic, clearly evidencing the iniquities that capitalism has accelerated in its current stage of development. The large economic conglomerates in the pharmaceutical industry have further concentrated and profited from the disease, protected and sustained by the economic and political weight of the nation-States where their headquarters are located. These States reaffirm the unequal power of international domination. The laboratories produce within the framework of globalization and are backed by facilities and subsidies granted by the power of the principal countries in developed capitalism and even international agencies, which encourage unbridled liberalization, without regulation and without ethics in the world economy in general and specifically in health.

In conclusion, civil society in Brazil and in the world is actively pressuring governments and multilateral agencies to adopt the necessary measures to control the pandemic and make all societies less unequal. A striking example was provided by the Sustainable Health Equity Movement (SHEM). <https://www.sustainablehealthequity.org/>, accessed on 28/Feb/2021), which convenes scientific and professionals societies from all over the world, taking initiatives in the various international bodies such as the United Nations General Assembly, Human Rights Council, and Economic and Social Council, in addition to political arrangements such as the G20, demanding post-rhetorical coherence from their members in defense of equity in access to vaccines and other inputs to fight the pandemic.

Without effective health diplomacy to ensure equitable access to vaccines there will be no control of the pandemic or economic recovery. For the wealthy countries and the dominant classes to change their stance, it is indispensable for them not to forget that no one is safe until everyone is safe.

Contributors

L. E. P. F. Souza conceived and wrote the article, approved the final version, and is responsible for all aspects of the work. P. M. Buss conceived and critically revised the text, approved the final version, and is responsible for all aspects of the work.

Additional informations

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