VIRTUAL ROUNDTABLE

Equitable COVID-19 Vaccine Access

ELS TORREELE AND JOSEPH J. AMON

Introduction

The rapid development of COVID-19 vaccines is an amazing achievement. It shows how much can be accomplished when human ingenuity, solid medical research capacity, and private-sector product development infrastructure are given extensive public support, from basic research to massive subsidies along the research and development (R&D) and manufacturing pipeline.

However, this historic accomplishment is hardly a success if vaccines are not available widely and equitably. Eighteen months into the pandemic, nearly 1.5 billion vaccine doses have been administered in the world. Yet 75% of vaccine supply has gone to just 10 countries.[1] Fewer than 25 million vaccine doses have been administered in the whole African continent, whose total population is 1.36 billion. While wealthy countries are competing to buy sufficient stocks to vaccinate their entire population multiple times over, many of the poorest countries are unable to procure enough vaccines to protect even their health workers. In high-income countries, children are being vaccinated, despite little likelihood of significant morbidity or mortality, while millions of vulnerable, often older, individuals in low-income countries are getting sick and struggling to find basic elements of care such as oxygen and hospital beds.

This extreme vaccine inequity and injustice is not just a moral failure, as called out by World Health Organization (WHO) Director Tedros Ghebreyesus; it is also an economic and human rights catastrophe, and self-defeating. Scientists have warned that the pandemic is likely to be prolonged and worsened unless this disparity is overcome, and Tedros has recognized that a rights-based approach is essential.[2] New variants of the virus are already emerging that could threaten the feeble progress made so far to contain the disease.

Amidst this global challenge, we are encouraged by a growing mobilization, led by access-to-medicines and health rights activists, to demand solutions to overcome what has been called "vaccine apartheid" and to challenge the artificial vaccine scarcity resulting from pharmaceutical monopolies (namely in the areas of intellectual property and manufacturing capability) and vaccine nationalism. In this roundtable, HHRJ talks with leading health experts and activists about this battle, the challenges, opportunities, lessons learned from previous access battles, and progress being made.

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Roundtable

ET and JA: *Thank you all for participating in this virtual roundtable. Let's get started with two questions: How unprecedented is the current situation? Compared to other challenges (for example, HIV drugs and expensive cancer therapies), what makes COVID-19 vaccine access inequities different?*

Carolyn: Related to both questions, it's clear that the emergence of the COVID-19 pandemic was more sudden and more urgent and more widespread, impacting everyone around the world directly.

Akshaya: Agreed. The scale of the COVID-19 vaccination challenge, especially the global ambition to reach people around the world as quickly as possible, feels unprecedented. The logistical challenge of administering billions of doses to people—many living in rural communities, others in conflict-affected settings, and others in places with weak health care infrastructure—is daunting. And that is compounded by the scarcity of supply, and their highly unequal access. So far, the vast majority of vaccine doses administered have gone to people in a small number of mostly high-income countries.

Reveka: In addition to the suddenness and scale of the pandemic, what has also struck me is the role of social networks and media pressures that defied evidence-based policymaking and undermined the population's trust in both science and politics. And while we must note that new vaccines have been developed in record time, their availability is too low to ensure equitable access for all––even for those considered high-risk groups. So yes, scarcity is a big problem. But also greed: from governments hoarding vaccine doses to pharmaceutical companies refusing to make intellectual property (IP) and critical health technologies available to others.

And there are other factors that makes access to COVID-19 vaccines different. Carolyn mentions everyone being at risk, and that's key, but it was wealthy countries that were first and most severely affected. And they had the power and money to

respond by securing (massive amounts of) vaccines even before safe and effective vaccines were available. While it is understandable that governments, under pressure by their constituents, saw the need to take these steps out of a sense of political survival, the result was to undermine global solidarity.

Michel: Let me add a couple of points on top of what others have contributed. First, the geopolitical context: whereas the North-South divide characterized the 2000s, today's world is more multipolar. China, the Russian Federation, and India, each in their own ways, have become heavy influencers of the geopolitical and economic multilateral agenda. Africa, despite its diversity, is uniting to emerge as a partner—no longer just a recipient—of aid.

Second, we're living in an era of rising nationalism, defiance toward multilateralism, and decreased commitment to global (or even regional) solidarity. The result is vaccine nationalism. The ethical or "moral" debate has disappeared, and even also the pragmatic considerations on global health and economy. The most scandalous and ethically problematic issue at the moment is the inequity of available vaccines to protect health care workers and populations most at risk—and beyond these priorities, to protect the broader population. High-income countries are rushing to vaccinate as many people as possible, while low- and middle-income countries are struggling to access vaccines for health care workers. The issue here is the inability of the global community to act together.

Fatima: Let me make the point more specific: in South Africa, we are now witnessing, firsthand, vaccine apartheid. Colleagues my age in the Global North are getting vaccinated, but in South Africa health care workers, the elderly, vulnerable workers, and others at high risk are still waiting for vaccine supplies. This is apartheid––wealth, geography, and patents matter more than people's lives.

ET: *The nature of the COVID-19 pandemic and the political context in which it is taking place are clearly quite different from earlier access challenges. How can we find solutions to the vast inequalities that exist in terms of access to vaccines and other technologies?*

Yap: What strikes me is that we are not looking at the solutions that have worked in the past. For HIV, countries like India were brought to the table to mass produce antiretrovirals so that the population in need could have access to them. Today, not much is being done in that direction. There is no willingness to truly transfer the vaccine technologies and allow India and African countries to produce vaccines at a lower cost for their communities. No one wants to touch pharmaceutical patents.

Jockey: I agree. The business model that the multinational pharmaceutical industry has been applying remains unchanged, using IP and monopolies to protect and expand their profits. A major civil society win during the HIV/AIDS access campaign was to confirm, and apply, the right of countries to override pharmaceutical patents if they stand in the way of public health—for instance, through compulsory licenses. Today, the dominant discourse is one of voluntary measures, allowing companies to retain full control of the technologies.

Amy: Another unique feature is that for vaccines, the sharing of technology and know-how is critical to manufacturing at scale quickly. That simply wasn't the case for antiretroviral drugs and other medicines that have been the subject of access campaigns. What we need to address COVID-19 vaccine access is not just action on IP (for example, a World Trade Organization TRIPS waiver) but requirements that companies share knowledge and technologies across borders. So we have challenges that are far greater than in these earlier campaigns and efforts.

Michel: The main approach to access to treatment in the case of Ebola, SARS, avian influenza, and HIV epidemics was rooted in a North-South dynamic based on "solidarity," which resulted from geopolitical and economic interests and was realized through a lens of development assistance and aid. COVID-19 has exposed our global interdepen-

dence with regard to health as never before, as well as the limitations of such an approach.

ET: *I gather, Michel, that you are referring to the failure of COVAX, which essentially is built on that same premise, and governed by mainly Western donor countries and institutions. What is especially noteworthy in terms of the breakdown of solidarity is that the same donor countries that set up COVAX competed with it and with one another to secure most of the limited supply of vaccines, leaving supply for the poorest countries at the back of the queue. In early April 2021, COVAX announced the delivery of 38 million doses to over 100 countries, whereas the rest of the world (mostly wealthy countries) had already administered over 550 million doses.*

Carolyn: Many developing countries realized too late that they could not rely on COVAX for timely access to COVID-19 vaccines and that they would have to secure their own doses in order to respond to the epidemic in real time. But their capacity to negotiate bilateral deals is variable, and they are coming late to the game, even if they have the funds to purchase.

Fatima: At the end of March 2021, South Africa––the African country most affected by COVID-19––was still waiting for its first delivery through COVAX. We ended up obtaining a clinical trial supply of the Johnson & Johnson vaccine that allowed the vaccination of 250,000 health care workers. At the end of March, we were waiting for supplies to arrive through bilateral deals and through the African Union, all of which are highly secretive, non-transparent, and not being disclosed to the public. This is shameful.

Reveka: At the beginning of the pandemic, we were all joining forces and proclaiming that one cannot be safe until we are all safe. But those with the capacity to do bilateral deals with manufacturers did so in parallel. It is a clear sign of failing multilateralism, and frankly unacceptable that states openly disregard international mechanisms for sharing doses and undermine global solidarity, with, to a certain degree, the acceptance or even demand of a big portion of the population.

JA: *Institutional failure and breakdown of solidarity are themes that many of you raise.*

Sharifah: Unlike when the struggles for HIV drugs took place, at this moment there is very little trust in global institutions. Many of them are severely weakened and underfinanced, and this reduces the scope for agreements on global solidarity. I'm afraid national lockdowns too have focused priorities inward. It is harder to mobilize citizens toward global priorities because in many countries the crisis has been framed within national contexts.

Akshaya: I think the institutional failure is also a function of how international aid is understood: as charity. South Africa's delegation to the World Trade Organization (WTO) said recently at the WTO General Council, "the problem with philanthropy is that it cannot buy equality … If there are no vaccines to buy, money is irrelevant." If there isn't a shared recognition of human rights as fundamental, then there's no hope for an effective institutional response.

Judith: The global governance architecture that stands in the way of COVID-19 vaccine equalities is similar to other access challenges. Despite a strong normative human rights foundation, the fragmentation of international law and weak accountability for obligations of international cooperation inhibit the enjoyment of the right to vaccines on the basis of global equality. One concrete example is the seemingly entirely separate spheres of international human rights law and international trade law. The result of this fragmentation is the failure to suspend IP protections under TRIPS, and the hoarding of vaccines by wealthy countries. The United Nations (UN) Committee on Economic, Social and Cultural Rights has labeled the current situation as discrimination in the right to access to vaccination at the global level.

JA: *Judith, the Committee on Economic, Social and Cultural Rights' statement is provocative, but the statement doesn't develop this argument at all, and the only other mention of discrimination is about state obligations. Is this simply a rhetorical flourish, or is there an opening here for a more meaningful discussion of the transnational obligations of states?*

Judith: In fact, the Committee on Economic, Social and Cultural Rights has devoted significantly more attention to unpacking transboundary obligations during COVID-19 than it has in previous contexts. Much of this interpretive guidance is found in the committee's three statements on COVID-19, and it remains to be seen how it will be applied in international human rights review processes, including the periodic state party reporting process for the International Covenant on Economic, Social and Cultural Rights (which is resuming in 2021), under individual complaints procedures, and by the Human Rights Council, including during the Universal Periodic Review. Transboundary obligations were also very prominently highlighted in early WHO guidance on human rights in COVID-19; yet since then, WHO leadership and guidance has tended to talk in terms of moral failures and inequitable distribution, rather than maintaining its early embrace of transboundary human rights obligations.

Carolyn: One could surely hope that this crisis which envelops us all and which has laid bare so many weaknesses of national and international institutions and systems could open the way for the broader discussion on obligations at all levels. Transnational obligations have had very short shrift, but they are clearly critical to the realization of the phrase "no one is safe until we are all safe." So what is the responsibility of wealthy countries—which have bought all the available vaccine production—to ensure safety for all? Who is responsible for ensuring that countries are able to test their citizens and really control pandemics effectively? Where is the space for fleshing out these obligations and ensuring accountability? Can the crisis engender meaningful discussion and action on these issues?

Michel: Interestingly and probably unfortunately in this case, international trade law preceded international human rights law. However, there may appear cracks in the strong legal patent protection. The recent announcement by the Biden administration that it may endorse an IP waiver on pandemic vaccines in "extraordinary times" definitely opens a window of opportunity, even if it has no immediate consequences on access to COVID-19 vaccines. The Independent Panel (www.theindependentpanel.org) calls on the WTO and WHO to urgently convene manufacturing countries and manufacturers to discuss the voluntary licensing of COVID-19 vaccines and technology transfer. It also says that if the call is not followed by action within three months, a waiver on IP should be imposed by the WTO.

JA: *Back to institutional failures—it's not just weak multilateral organizations but also the way that pharmaceutical companies have acted, and maybe a rather timid civil society voice as well?*

Reveka: We cannot forget that the pharmaceutical companies have a lot of power. We need them to research and develop new medical products, and they should not (a priori) be the enemy. Sadly, this pandemic has brought to light brutally the tensions between a private sector (which received significant public investment) that prioritizes profit and the public health imperative of protecting the world. Maybe greed can be considered by some as too strong a word, but it is unconceivable for a medical humanitarian actor that any organization or private actor in the current pandemic will put making a dollar first, before stopping the biggest health crisis of our time. The problems of capacity and IP all stem from the lack of acknowledgment of medical products as collective public health goods. International agreements do not have––even in extreme cases, even temporarily––adequate mechanisms to override existing agreements that constrain access, and there is little interest to push for technology

transfer or to increase the capacity in countries and regions lagging on the development and safe production of medical products.

Michel: While the voice of civil society is heard in Geneva and on social networks, it has not been as strong pressuring leadership at the country level as it was during the HIV/AIDS crisis. There are many reasons for that, but it's quite a paradox, if you think of the obvious dominance of inequities in the vulnerability and socioeconomic impact of COVID-19.

Sharifah: Michel, I think that part of the challenge for civil society is that COVID-19 is not the only unprecedented crisis that the world faces. There are currently numerous global crises––and social movements––related to climate change, Black Lives Matter, MeToo, etc. These movements bump into one another and risk crowding out solidarity movements from the Global South, such as refugee movements and access to essential medicines. On the left, we have failed to galvanize these movements as part of a broader struggle against common enemies, through a collective human rights framework. Issues such as access inequities in the COVID-19 vaccine have to compete with other movements for space and attention from people everywhere, which makes it much harder for them to make an impact.

Akshaya: I am less pessimistic than some of my colleagues. I'm incredibly inspired by the diversity of people who are speaking up in favor of universal vaccine access and pushing for a People's Vaccine. COVID-19 vaccines should be treated as a "global public good" accessible to all. But admittedly it remains an uphill battle.

ET: *Could it be that another contributing factor is that there is not necessarily a common view among health advocates on what is needed? While the call for a People's Vaccine resonates globally as a political call to treat medical technologies as a global common or public good, and make them available where needed, there does not seem to be a shared view on what exactly is needed for that. For instance, Yap—you have argued for a needs-driven approach to vaccination based on local context and epidemiology, instead of the "one size fits all" approach of vaccinating 70% of the population everywhere. Can you say a bit more about that?*

Yap: In many African countries, we are just starting to vaccinate a tiny part of the population, and there is not necessarily a pressing sense of urgency to get vaccinated, as COVID-19 does not necessarily represent the biggest (health) challenge that people are facing. Few countries are still in lockdown, and many have so far managed the pandemic reasonably well through the implementation of other infectious disease control measures.

Michel: I believe there is an even broader point here, related to the weakness of our global institutions to deal with pandemics. There is currently no global strategic guidance on how vaccines should be deployed and on what coverage should we aim for. Ignoring WHO's equitable allocation framework, wealthy countries are moving on the assumption that vaccinating as many people as possible within their countries will allow the national economy and social life to reopen. And for now, they seem relatively blind to how health will remain interdependent on what is happening in other countries and continents.

Another point that seems to stand in the way of a concerted global advocacy effort is that, in my view, we need to separate the debate on immediate allocation of existing stocks from the issue around broader access, including scaling up manufacturing in the mid-term. The two issues do not raise quite the same ethical considerations and should not be confounded in terms of strategy or tactics.

Reveka: I want to come back to the question of what the optimal response strategy would be. Politics and social pressure sometimes lead politicians to make decisions that are not based on solid evidence. This also affects civil society and our ability to articulate demands. We have seen many examples of ques-

tionable scientific practices, like publishing critical data through corporate press releases instead of independently verified scientific publications, or decisions taken based on weak studies, which then later need to be overturned, or without transparency on the underlying data, which results in people losing confidence in science and wondering whether the accelerated development of vaccines was done with the required rigor. It is discouraging to see medical journals publishing articles and studies ahead of peer review that have serious flaws. Similarly, politicians are pushing to include products not demonstrated to be as effective as routine medical practice, and then there is lack of informed consent, and other ethically questionable practices that have occurred in this pandemic, all of which are likely to undermine the population's trust in scientific processes or at least introduce confusion and doubt.

JA: *Fatima, can you talk about what's happening in South Africa?*

Fatima: In South Africa, the situation is indeed acute. With over 1.5 million confirmed cases and over 53,000 deaths (which represent nearly half of the 115,000 deaths across the whole continent) by the end of March, the impact of COVID-19 on our society had been dramatic. People are desperate to get access to vaccines, but as I have mentioned, we have hardly had any access to vaccines so far. But I agree with Yap's broader point: the key issue is the prioritization of groups most affected, not based on wealth, medical insurance, nationality, or gender but on vulnerability and risk. Global allocation protocols must include all people in each territory—prioritized on the basis of health occupation (frontline workers), age, and comorbidities.

Looking at South Africa's response to the COVID-19 pandemic, it is different from—and similar to—past challenges, such as that regarding HIV/AIDS:

- Due to the nature of a mutating, highly transmissible virus, the socioeconomic and public health impact has been visible to everyone. Both the impact on communities and the responses of governments and businesses have been in the spotlight.
- Unlike HIV/AIDS, we have not had to deal with government denialism about the science and evidence; however, we have had to deal with a lack of transparency in relation to the timely sharing of scientific decisions on vaccine selection, in addition to multiple lockdowns and regulations that have chilled freedom of expression and assembly rights and, in some cases, made little public health sense. This has all contributed to a lack of social cohesion.
- Civil society and faith organizations have, as for previous diseases, had to work on addressing hesitancy among communities, both in terms of testing for COVID-19 and in terms of accepting the need to vaccinate against infection.
- Unlike with other diseases, many governments rapidly allocated resources when they realized the impact of the pandemic on the global economy, and made funding available for vaccine research. Governments decided to prioritize and fund rapid and necessary research, but they need to replicate that for other diseases too, especially neglected diseases.
- Regulatory authorities have worked at breakneck speed, which shows they could do the same for other diseases.

But the main difference is that we thought we would be able to do better this time around, given the suffering and death that we experienced with HIV, where lifesaving testing and treatment were withheld because of the conduct of our government then, as well as the pharmaceutical companies that held the rights to lifesaving medicines.

ET: *You have all painted a pretty bleak picture of the current state of affairs concerning the world's response to the pandemic, in particular around access to vaccines, and the failure of global institutions to foster equity and fairness in the face of nationalism, greed, the breakdown of solidarity, etc. Are there reasons to be optimistic moving forward?*

Jockey: There are a few things that give me hope. While some of us have challenged patents as a barrier to affordable and equitable access to health products for years, the COVID-19 pandemic may be a turning point that forces local and global policy makers to rethink the broken IP system. Approaches that were long sidelined—such as compulsory licenses and the public production of essential health technologies—are openly discussed, even within countries like Germany and Canada. The proposal by India and South Africa, with the growing support of a majority of countries, for a WTO TRIPS waiver is an example. And while of course this proposal is opposed by wealthier countries and by pharmaceutical companies, the pressure is mounting on the WTO to take action to break the gridlock.

Countries have also started to look at capacity in local production and to support R&D. This will be useful in the long term and for other diseases in the future if they continue and expand support to local capacity. Investment in local R&D and local production, including technology transfer, is important, in addition to getting rid of IP barriers. The initiative of TRIPs waiver measures raised at the WTO is a good attempt. But, in my opinion, it should not be limited to COVID-19. It should not a case-by-case solution. It should be a general measure that is enforced automatically without needing permission from WTO members when we have similar challenges in the future.

Fatima: Despite being extremely disheartened by the conduct and lack of transparency of some governments and vaccine manufacturers, I am encouraged by the accelerated vaccine research being done by public health scientists and researchers, the advocacy for access globally, and the solidarity among older and newer activists with the science and public health community and worker associations. I am also inspired by the battle being waged at the WTO to once and for all show the world why treating medicines as a commodity is not normal and fuels inequality in access to lifesaving interventions.

Sharifah: I didn't expect to get a vaccine so soon, so that is extremely positive. But the most critical fight is that of increasing vaccine supply within the Global South. I think this must be done in a more sustained manner that includes increasing manufacturing capacity so that the Global South can rely on a broader number of countries beyond Brazil, China, and South Africa. We could use this crisis as a catalyst to create a broader manufacturing base for more essential medicines. Most likely, though, the fight that we can win is to increase the capacity of COVAX.

I really welcome the fact that the US administration and New Zealand are now pushing for a TRIPS waiver. However, reflecting on the last TRIPS waiver, which took a significant amount of time to develop, there is a need to ensure that these negotiations break the mold of international lawmaking. Countries need to do three things: First, because the WTO makes law only by consensus, we need more countries on board, especially European countries, which are still officially opposed to the waiver. Second, we need to prioritize the WTO negotiations for a waiver because the world doesn't have time. And third, in the interests of promoting the rights to health and life, we need to ensure that countries don't water down the provisions of the current proposals, thereby making them unusable for countries of the Global South in the future. We have seen this before in previous negotiations, so we need to be alert to this as human rights activists.

Yap: Like Sharifah, I am hopeful that eventually African countries will be able to locally produce vaccines, whether the American, British, Chinese, or Russian vaccine. Where there is the will, there is a way. If Western countries have not yet understood that the strength of a chain is measured from its weakest link, then they will soon learn that until the entire world is free of the virus (and its variants), no country can rest—none. I am also optimistic that African philanthropists will further support their governments in acquiring the technology (not the dose only) to locally produce vaccines to face ongoing and upcoming pandemics.

Amy: Right now, we are replicating the worst days of the early campaign for HIV/AIDS drugs access: major international organizations are focusing their energy on efforts that rely on the largesse of rich-country governments and vaccine manufacturers, with no plan adequate to meet global health needs. I don't know how many remember, but before the wave of HIV/AIDS advocacy around the world changed the approach, UNAIDS had something called the "Accelerating Access Initiative," which did nothing of the kind. They would claim success when they got a company to agree to a 60% discount for drugs that we know today can be made for less than 1% of that list price. Those deals could never meet the need and had all kinds of limitations. Activists instead worked to reveal the actual costs of production for these medicines and campaigned to get countries to address patent barriers, to prevent the United States and other rich countries from sanctioning countries that used generics, and then worked to build supply chains for those generic drugs, as well as treatment programs. Today, we've forgotten all about that early model. That's what we need in this setting too—a global campaign for universal access to safe and effective COVID-19 vaccines and therapeutics, designed with public health goals in mind.

Carolyn: That is a very interesting parallel, Amy. When ACT-A and COVAX were established, I had hope that the need for equity in access to diagnostics, therapeutics, and vaccines across the world would inform the response to this global pandemic. I grew less hopeful over time.

The reality of the rampant vaccine nationalism that characterized the approach of the very countries that agreed to the principles outlined for ACT-A was chilling. I became quite cynical that we—the countries of the less wealthy world—had a realistic chance of seeing equity in vaccine access. The lack of resonance of the #PeoplesVaccine campaign, as well as the blocking of the application for a TRIPS waiver at the WTO by those countries that have preordered two, three, or five times the amount of vaccine required by their populations, reinforced my cynicism. Selfishness and political self-interest appeared to be the principles governing vaccine access, which are anathema to public health and human rights. India's move to block the export of AstraZeneca vaccines simply paralleled the approach of the wealthier world.

Yet the recent move by the United States to drop its opposition to the TRIPS waiver suggests that activism might still work. Perhaps humanity can act with reason rather than selfishness. We will see.

JA: *In addition to the justice and moral arguments for equitable access, there's also an argument appealing more to people's self-interest: that unless we ensure access to vaccines to all on a timely basis, including people in developing countries, we are at risk that vaccines will rapidly become ineffective because of the emergence of COVID-19 variants. What do you think are the most critical things to do now to avoid such a scenario?*

Amy: In my view, the most critical need now is to scale up vaccine manufacturing in a manner that can reliably meet global public health needs. Ideally, we would do this in a way that is distributed around the world and yields the most benefits in terms of innovation—which means production in different regions and enough public control over the process to ensure fair prices and the sharing of information, as well as that new innovation can be undertaken without a centralized corporate veto. Without public funding, we would not have these vaccines, and some of them, particularly the mRNA ones, could allow both rapid adaptation to variants and dramatic advances in vaccines for other diseases.

If we focus on building a real technology transfer facility that protects the public interest and that operates globally—for example, through WHO—we would have a model that could also be useful for climate technologies and other health technologies in the future. This is the time to figure out what the contracts for public research funding, or for scaling manufacturing plants, should look like to protect the public's interest. COVID-19 will

not be our last pandemic, and climate change represents an even larger challenge that we should be thinking about in everything that we do.

Michel: The first fight to win is that of the coverage of health care workers everywhere, which requires redistributing the vaccines that are currently available. This is what we need to do today.

The second, which we can start tomorrow, is indeed as Amy says: to significantly increase manufacturing capacity for the short term. This will require discussions on voluntary and compulsory licensing and technology transfer, in addition to the urgent need to fund such regional manufacturing platforms and define their public/private and national/regional status.

At the same time, and as a third point, we must design and agree on a global vaccination strategy: What is it that countries should aim to achieve in terms of coverage? Who are the most vulnerable to protect? Who are the key people to protect to reopen the economy? And as Yap already noted, this may vary from region to region.

My next two points are for the medium to longer term: How can we make sure that the inequities that we are seeing now do not resurface when the world has to re-vaccinate people because of expired immunity or because of the emergence of variants escaping neutralization by antibodies elicited by current vaccines?

And finally, critical for the future and linked to the previous point: Which R&D and manufacturing system should the world build or redesign for pandemics after the crisis, based on lessons learned? And how can the world agree on revisiting the system(s)? One thing is clear: if the system remains the same, the risks of tragic inefficiency will remain for the future.

I am hopeful that the unprecedented health and socioeconomic impact of the pandemic will be a sufficient trigger for a renewed multilateral debate. The increasing interest that countries express toward the idea of a pandemic treaty or framework convention may be an early positive signal, despite the major geopolitical tensions that prevail.

Times of crisis are also times of opportunity. The window of opportunity is narrow, but the next six months will be months of intense discussions on preparedness and response at national and international levels. The World Health Assembly, the G7, the G20, the UN General Assembly, and many other fora will be drawing lessons from the last year and engaging in negotiations to develop a new international system for preparedness and response. The Independent Panel for Pandemic Preparedness and Response is clearly recommending shifting from the current market-driven system for R&D on vaccines, diagnostics, and therapeutics for pandemics to one based on the fundamental consideration that these are global common goods.

Fatima: The recognition of the crisis by the UN Human Rights Council, UN experts, the UN secretary-general, WHO, the WHO director-general, UNAIDS, World Bank leaders, Anthony Fauci, the Vatican, the African Union, the International Court of Justice, the Africa Centres for Disease Control and Prevention, and the Anglican Church of Southern Africa is promising—it marks a reckoning with power rooted in IP. While the supply crisis in the European Union, Canada, and the United Kingdom has shown that there has to be a shift in the way that global leaders and CEOs respond to the lack of adequate supplies of safe and effective vaccines, these countries are literally—even with such a massive supply crisis—allowing companies to continue to sit with the knowledge that could save lives, restricting its widespread scale-up and use, and telling black and brown people to wait until 2023 and 2024 in some cases. This is absurd—a ridiculously unfair world order—yet we have been here before.

COVAX and C-TAP may be critical—but at the current rate at which they are able to source supplies and foster cooperation, they will not be the solution for the access crisis, especially in the Global South. They are also too deferential to pharma power and influence and rely on volunteerism, which is not sustainable in my view. Our challenge is to get as many supplies to the Global South as soon as possible—and this is why the TRIPS waiver, other compulsory licensing measures, and the vol-

untary transfer of technology need to be vigorously pursued. It is critical to have manufacturing capacity, to dispel the myths of the implications of the TRIPS waiver, and to use other means of sharing technology fairly (especially for research funded by public sources). Most importantly, we have to remind everyone of the impact that interrupted and insufficient access in poorer and middle-income countries will have—especially as more variants are discovered.

Reveka: I believe that we are in an impasse; we need doses to come quickly to be useful. Until production matches need, we will continue to struggle to find a way for the equitable allocation of available doses. It is difficult to say to someone in the United States or United Kingdom that they have to wait for their shot because, for example, health workers in Cameroon need to be vaccinated, when maybe that person in the United States or United Kingdom has lost someone and is afraid of the pandemic or they just need the economy to open and go back to work. Increasing the availability of doses is key, and we can do that if decision makers work together to push for faster technology transfer, lift IP barriers, and keep an eye on pricing and transparency.

Yap: I am optimistic that, eventually, communities will push hard enough to get what they need considering that they don't all need the same things.

ET: *In addition to the global access challenges, do you see other inequities, challenges, or discriminations playing out at the country level?*

Carolyn: The exact inequality challenges we see at the global level are playing out at the local level—and also in terms of the overall pandemic response. Work-from-home orders apply only to the wealthier citizens who have access to computers and the internet. In my country, Jamaica, testing for COVID-19 is very limited within the government system, and private testing is expensive, so it is available only to those who earn high wages. Testing in workplaces such as factories and courts is nonexistent or minimal. Education from home is hardest on those children whose parents are barely literate or have no internet access or devices on which their children can log in to attend classes.

And evidently, we are seeing this also play out for vaccine access. While the Jamaican government has presented its vaccine rollout plan, it works best on the internet appointment link, as the phone number for appointments is not usually answered. Those with transportation can afford to go from vaccine center to vaccine center in hopes of getting the last couple doses in a vaccine vial that would otherwise go to waste—and they often get them.

Those with private doctors get their names on official lists for vaccination, while those without private family doctors don't even know this is possible. My heart hurts for the lessons that the world and my country have not learned from this pandemic.

Judith: I agree—we can see it also in the United Kingdom. Even if vaccination take-up has exceeded expectations, with over half the adult population, and 87% of those over 50, having received a first vaccine by March 2021, the rollout did face challenges in terms of inequalities in both the vaccine prioritization process and take-up.

There has been some effort to reach and support these and other communities with low vaccine take-up or particular support needs (for example, persons from minority groups, persons living in economically deprived areas, persons with learning disabilities, homeless persons, asylum seekers, and refugees and migrants). This includes financial support for local health authorities to tackle vaccine inequality; vaccination clinics for learning disabled persons in the city of Liverpool; pop-up vaccination clinics in places of worship and community centers; and campaigns and messaging involving ethnic minority stars to encourage vaccine take-up.

Amy: There are absolutely shameful disparities in access to vaccines in the United States, everywhere. In my home state of Connecticut, which is celebrated as a success story, my neighbor's 16-year-old

daughter just got vaccinated, but half of all people who are over 75 or Black have not been vaccinated. We just have not built the systems to reach people, even though we know how to do it. Community groups, especially the smallest and the most local, have been hugely successful in reaching communities that are not well connected to the health care system, for example through door-to-door campaigns. We have also seen some good initiatives like mobile vans and pop-up clinics in churches. But they have not been brought to scale, and states are also opening up again, putting these same communities at grave risk. Because we have a history of vaccine hesitancy in the United States, we know how to address it. You need trusted intermediaries to help people learn about and get comfortable with the vaccine, and you need to make access easy. Most state and local governments aren't taking this approach.

Fatima: The risk of exacerbating inequalities as a result of differential access through the public and private health care systems also exists in South Africa—for instance, if we allow vaccine producers to sell directly to middle men and private providers. Thus far, however, there is no user fee, so vaccines will be free; and thus far, there is a single access and allocation plan through the government. This is a victory for civil society—we have argued and pushed for this for a year. Also, the government is now including undocumented persons too—another victory. Of course, we still have to see the first shipments of vaccines arrive and then be distributed widely.

A key challenge I foresee is when we will be barred from traveling from Southern Africa to other parts of the world because we have no vaccine passports or proof of vaccination for some time to come—even while we wait and wait for supplies. Additionally, with new variants, the risk we face is when others who are vaccinated in the Global North start traveling here—we do not know enough from an epidemiological point of view what this might mean for our country and its people.

ET: *Carolyn, how will this play out in the Caribbean—tourists can come in, but residents can't leave?*

Carolyn: I am not aware of any initiatives for vaccine passports in any region of the Caribbean, but given the region's economic dependence on tourism, I would not be surprised if the idea gains currency here. Already, there is talk that vaccination will be mandatory for some workers. A COVID-19 vaccine passport seems like a simple step away. I do not agree with either mandatory vaccination or vaccine passports. They are a breach of one's right to control one's own body and health. If my access to vaccines is limited because of my economic circumstances in my country, or the economic circumstances of the country I live in, then to require me to have one to travel is a complete breach of my right to equality. I think particularly of seasonal workers (such as hotel staff, farmworkers, seamen, and cruise ship workers) who depend on travel to provide for their families but who, by virtue of their youth and health, are unlikely to get vaccinated in countries with limited vaccine supplies. What a gross discrimination that would be for their right to equality of access, right to work, etc.

Michel: COVID-19 has clearly been a revealer of the many profound inequities that exist between and within countries. A revealer of the deep reality of the social, economic, political, cultural, and commercial determinants of health. There have been inequities in who is more vulnerable to infection and to progressing to severe forms of the disease, in who is more affected by public health countermeasures, and—now—by who has access to vaccination.

Any global initiative to prepare and respond better to future health pandemics requires not only that health be understood as a technical and medical issue but that it be repositioned at a political level in its economic, security, developmental, and social justice dimensions.

On the passport question, I am rather pragmatic, and—unsurprisingly for those who know

me—I believe in harm reduction. I live in the European region, and the question is no longer about whether, but how. The pressure is too high to be countered. It will happen. If the UN does not do it, airlines will do it first. So let us focus our attention on how to minimize the unequitable impacts it may have, rather than say no. Let's imagine how we can make the tool into a real "pass" that can help travel and reopening the economy, but not be a constraining requirement.

Reveka: I disagree, I think we should stop talking about vaccine passports until we have enough data on (1) protection from transmission; (2) duration of that protection; and (3) vaccine availability in enough doses to cover the whole population. Engaging in a debate on trade-offs without first meeting those conditions is giving credit to the idea of vaccine passports, which I believe we should not do.

Requiring proof of vaccination to move around can be endorsed only if everyone has the same access to the vaccine and the document proving vaccination.

Sharifah: I have four key concerns about vaccine passports. First, as others have said, they are likely to lead to discrimination against groups who, for whatever reason, cannot take up the vaccine. This will moreover disproportionally impact marginalized groups (such as refugees; Black, Indigenous, and other people of color; and people who are living in poverty). Second, because there are several vaccines on the market, there is a risk that passports will create hierarchies, which damage national vaccination drives because people will rationally demand vaccines that have the most benefit to them. This is really bad for health systems. Third, vaccine passports will invariably involve private companies that are already coming forward to issue these certificates. This is part of a longer tradition of the commodification of health (as opposed to thinking about health as a human right) and may include handing over data from populations into private hands. Ultimately, with commodification, we will lose the public health argument, which will invariably lead to fraud. Lastly, this will be seen as compulsory vaccination by stealth, and this will play into the hands of anti-vaxxers. This may seem okay in the short run, but as this crisis has illustrated, trust is essential to collectively respond to crises—and so this may harm health systems in the long run.

Amy: My fear is that we are talking about passports before even making access universal. How can you penalize people for not being vaccinated if we have not made it possible for them to get a vaccine, whether in the United States or around the world? In addition, the potential for a real, brutal kind of global apartheid is obvious, and truly immoral, particularly when we have all of the tools we need to do this differently and make vaccines available to everyone around the world.

The United States is also distinctive for how much power we give private market actors. If we see requirements for vaccination, they are more likely to come from the private sector, places like universities and employers, and of course that raises major accountability questions. I'm also worried that in the United States we're skating over the very real histories of abuse and neglect that have given many people reason to want more information and time, and we're trying to push everyone into a vaccine, creating a backlash.

It's hard to see how mandates could be legitimate if we have not built the programs needed to give everyone access. That said, I think these issues are complex.

JA: *The discussions I've seen comparing possible COVID-19 vaccine passports and international vaccination cards (for example, for yellow fever) all seem a bit superficial. There are other, perhaps more important, historical examples—and concerns—that should be considered.*

Amy: This pandemic has highlighted something fundamentally tragic about the US civil liberties tradition. Here, it's easier to argue that you have a right to *not* wear a mask or take a vaccine than it is to argue that you have a right to access to testing, vaccines, and health care. So we should be careful

about playing into that history, about suggesting that measures to protect all of us are somehow unjustified, or that the government is always a threat. Of course, health and rights advocates have worked hard against punitive public health approaches like mandatory testing—think of the HIV era—and in general, history suggests that punitive approaches are deployed mostly against the poor and marginalized, and that they just don't work very well. They also clearly will amplify real inequities here in the United States, given who has access to the vaccines and who is hesitant. We do have some new dynamics with white evangelicals and Republicans expressing hesitancy, part of the legacy of Trump and the nihilistic politics of the Republican Party—but here, too, I think mandates are likely to build resentment and that other approaches should be tried first.

Fatima: For me, inclusion, nondiscrimination, and dignity are the key rights issues in this passport debate. However, I think we should differentiate between someone refusing to take a vaccine (an antivaxxer) and someone who is unable to access one. The UN Human Rights Council, WHO, and scientists should lead these discussions. But I'm not optimistic. These passports are pernicious vaccine nationalism version 3 (version 1 was the bilateral buy-up by richer nations, and version 2 was the limited manufacturing deals for some markets only). It will block off large parts of the world from others.

Jockey: I agree it is a complex issue, but I can't quite see any circumstances today where vaccine passports can be useful and deployed in ways that do not exacerbate discrimination and inequalities. It is a trade-off between individual and collective rights in fighting against COVID-19. Balancing between the two is challenging. Models in the countries with tight restrictions and the ones with compromise measures have pros and cons.

Yap: In West and Central Africa, we are just starting to vaccinate a tiny part of the population, and the idea of a vaccine passport is quite far away—and also useless because few countries are still in lockdown, so there's no need to get any certificate to be allowed to live a normal life. The question will be different, of course, with regard to traveling. WHO should lead the discussion and ensure that no one is left behind. Until everyone has access to the vaccine, no one should have a passport. Otherwise, it is a culture of privilege.

ET: *I would like to come back to other inequities or forms of discrimination you see that are exacerbated in this COVID-19 vaccine access crisis.*

Judith: COVID-19 vaccine access inequalities also risk exacerbating health inequalities more broadly through the severe impact of COVID-19 and COVID-19 responses on health systems and social determinants of health in countries or among communities with low access. Vaccine inequalities risk further exacerbating other forms of inequality, including economic inequalities that have been driven by COVID-19, with profound human rights implications.

Sharifah: I would point to three specific areas of inequity, and where barriers to universal health coverage are overlapping with those to ensuring access to COVID-19 vaccines:

1. *User fees*

   Many countries are attempting to recoup some of the costs of purchasing vaccines by imposing user fees. For example, Egypt has announced that it will charge US$12 for the vaccine, which is likely to deter the poorest people, who have been severely affected by the crisis. India has introduced a dual-track system in which patients in private hospitals pay, while those in state hospitals do not. While this may seem equitable, in practice it means that richer people are getting to the front of the queue. *Free at the point of access* means that the vaccine is provided solely according to need, regardless of ability to pay. It has even been suggested that giving small incentives (such as *negative* user fees) for the poorest people would incentivize people to vaccinate their children. I am also sympathetic to broader

support for people to receive their vaccinations at work if possible and for paid sick leave to recover, especially for those in precarious jobs.

2. *Technological barriers to access*

   Even where the vaccine is offered free of charge, other obstacles are excluding vulnerable people. For example, many countries are relying on technologies in order to vaccinate their populations. In India, people need to use apps, such as the Co-WIN 2.0 portal and the Aarogya Setu app to access the vaccine, and Uganda and South Africa are using digital ID systems for vaccination. Despite rapid digitization across the developing world, many older people, as well as poor people and migrants, lack access to technology and national ID systems and may therefore be excluded by these policies. Nondiscriminatory distribution entails priority based solely on clinical need, not knowledge of or familiarity with technology.

3. *Discrimination*

   Some countries, such as Kenya, have proposed that private companies be able to buy vaccine supplies to vaccinate their employees and relatives. Kenya has also prioritized diplomats over health workers, and Indonesia has suggested that the more "productive" members of society be vaccinated first. Such policies reproduce the logic of commodification, as vaccines are given to more affluent or "productive" members of society at the expense of those who may need them the most. It is essential to ensure that vulnerable and hard-to-reach populations are prioritized and that intersectional characteristics are given consideration over and above this. Transparency is essential here. Phrases such as "officials with strategic importance" in national policies risk being abused into allowing wide groups of people—who are not particularly vulnerable—to benefit. Clear guidance helps avoid such loopholes.

Akshaya: At Human Rights Watch, one area we are monitoring is the systematic exclusion of certain populations—for example, the exclusion of Palestinians under occupation from Israel's vaccination program. Sometimes there is progress: countries like Lebanon and South Africa have backtracked after officials initially claimed that refugees and undocumented migrants would be excluded from their vaccination programs.

We're also focused on the importance of inclusive and accessible outreach to marginalized populations and the extra hurdles that some may face in accessing vaccine registration systems. In some states in the United States and in some countries in Europe where vaccine rollout is further along, we've seen residents denied vaccine access because they lack valid identity documents. In the United States, our researchers have also documented the impact that the digital divide has had for older people's access to the vaccine.

Reveka: Like Akshaya, I would highlight discrimination around refugees and migrants, where, for example, people are packed in different camps all across Europe (more specifically, in Greece) and in the Palestinian territories. Of course, there is already a big discussion related to the situation of prisoners in the United States and in many other countries.

But on the Palestinian territories and Israel: as COVID-19 spreads through the West Bank and Gaza, Palestinians remain unprotected while Israel, with a large availability of vaccine doses, carries out its fast-paced vaccination campaign and is now pursuing herd immunity, without any visible intention to significantly contribute to the improvement of vaccination rates in the Palestinian territories. As of mid-March, less than 2% of Palestinians had been vaccinated in the West Bank and Gaza—an alarmingly small number in light of the third wave of the deadly pandemic.

And if I may say one final thing about vaccine passports: we need to push back!

We cannot just accept the introduction as a fait accompli. And if journals like *HHRJ* don't push back and offer clarity on the conditions for introduction, then who will? I am aware that it may be a lost battle if some countries decide to introduce them. At the national level, the introduction of pass-

ports cannot be done unless the whole population has access, and only then should be led by human rights associations in collaboration with health experts. Internationally, clearly WHO would lead this discussion, but again: we need to push back!

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