Determining Vaccine Justice in the Time of COVID-19: A Democratic Perspective

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Who exactly is responsible for advancing global justice, and how should they be guided? Here we answer this question in the context of the rights and duties associated with the distribution of COVID-19 vaccines to poor countries and to locally disadvantaged communities, including those in wealthier countries. First, we identify two largely ignored hurdles that the pursuit of global justice must overcome: underspecification and manipulation. Underspecification applies to what justice means on the ground. Although ethical rules may prescribe certain "fair" distributive schemes, the abstract nature of these schemes means that more specific policies are required to implement them. Further, the fluid and contested character of justice makes it vulnerable to manipulation and abuse by self-interested strategic actors. In the next section, we explain how these problems apply to *national* (domestic) and *global* vaccine justice. We argue that democratic participation in the definition of vaccine justice is crucial not just for overcoming these hurdles but also as a practical way to encourage vaccine uptake.

Ensuring vaccine justice requires us to determine who should be prioritized in vaccine allocation—both within each state (domestically) and across states (globally)—as well as on what grounds some individuals have a duty to get vaccinated to protect other individuals, and some countries have a duty to

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redistribute vaccines to other countries. The answers to these moral questions may vary across countries and within each country, as we show in the second section. There, we map out various ways of specifying national and global vaccine justice, pointing out how differences in global and national vaccination strategies represent different answers to the aforementioned moral questions. In the third section, we focus more closely on national vaccine justice by comparing the distribution of vaccines to local Indigenous communities in the United States and Australia. We argue that the direct participation of these communities in vaccine justice is a good way of solving reasonable moral disagreement and improving vaccine coverage. Finally, in the last section, we argue that a similar participatory approach would also benefit the pursuit of global vaccine justice. Building on recent scholarly debates, we argue that the success of any moral framework meant to balance our duties toward compatriots with those toward foreigners depends on it being publicly justified and legitimate. This can happen only to the extent the public engages in robust public deliberation about global vaccine justice.

The Underspecification and Manipulation of Global Justice

Scholars have long focused on the issue of allocating responsibility for global justice. The fulfillment of human rights, they argue, depends on identifying those agents who have duties to implement these rights.[1] Rich, developed states, in particular, have the role of duty bearer.[2] But allocating moral duties is not the final step in the pursuit of global justice. The more practical demands of justice are left unspecified even when we clearly know which agents have a duty of justice and toward which others. General, open-ended principles of global justice are not immediately action guiding. To be effective, and actually implemented, they must be translated into concrete policy. The pursuit of global justice thus calls for the interpretative exercise of what we call "formative agency," which involves shaping what justice should mean and how it should be sought in any particular context.[3]

The exercise of formative agency is required insofar as multiple moral principles, each reasonable in its own right, may bear on the same situation, leading to conflicting prescriptions about what should be done. In the face of reasonable moral disagreement, those responsible for advancing global justice may be uncertain what principle(s) should prevail. Through the exercise of formative agency,

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they will have to trade off and prioritize among the many competing principles and reach some conclusion as to what morality practically calls for in any given socioeconomic, political, or cultural context.

This important moral exercise of formative agency can be undermined by three factors.[4] The first one is the strategic use of justice claims by self-interested agents, especially duty bearers. State governments, NGOs, and lobby groups may each favor a different conception of justice depending on how well it suits their own interests and agendas. The second factor is the democratic deficit that plagues those decision processes that are meant to support global justice at the national or global level. Ideally, all affected parties, including both duty and rights bearers (that is, the "recipients" of global justice), should be included in the deliberation meant to clarify what justice calls for on the ground. Often, however, rights bearers—in particular, the poor and disadvantaged—will have little or no access to these processes, either directly or through representatives. The ensuing decisions can thus advance only a partial understanding of global justice—one that neglects the perspectives and overwrites the moral agency of the most affected parties. And finally, the third factor that impedes the quest for justice is the deliberative deficit of global governance. As we have argued elsewhere, inclusive deliberative processes are best suited to promote the successful translation of general principles of justice into practical policies to be applied on the ground.[5]

Reasonable Disagreement about Vaccine Justice

COVID-19 vaccines are just one among the many *distribuenda* of global justice. Even if political theorists generally agree that richer countries (as well as foundations and corporations) should assist poorer countries by supplying vaccines to them for free or at a very low cost, many other aspects of this redistribution remain unspecified. What does vaccine justice call for on the ground, in the diverse socioeconomic, cultural, and politico-legal contexts that exist across the globe? Due to constraints on vaccine manufacturing and distribution, there are limited vaccine supplies to redistribute at any given time,[6] and thus only limited numbers of people can benefit at any given time. How should moral duties be discharged then under those nonideal conditions?

Due to practical constraints, decisions must be made about how to prioritize the distribution of vaccines both within and across countries. As a matter of justice, national and international decision-makers will also have to explain on what

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grounds some people (especially those with a high chance of surviving COVID-19) are being asked to take the vaccine, and some countries are being asked to donate their doses to other countries.

Specifying Global Vaccine Justice

Across countries, globally, we might give priority to the most vulnerable states, whose populations have a higher risk of death due to lack of access to health facilities. We might also prioritize countries where other policies to slow down transmission are not feasible or would not be effective (for example, countries where people live in close physical proximity due to population density, or where there is limited housing leading to overcrowding). Or we might adopt a utilitarian framework, trying to maximize vaccine immunity and minimize contagion globally. This might lead us to provide vaccines first to those countries whose resident populations are most globally mobile or that have large emigrant populations who may travel back to their countries of origin. However, a state's capacity to close its borders should also be taken into account. Some countries, like Australia, can more easily close their borders; others (such as EU member states) have more trouble enforcing and justifying such restrictions.

Various global frameworks for vaccine allocation have been proposed, each highlighting different moral values and defending a thinner or thicker conception of global justice. The WHO's Strategic Advisory Group of Experts on Immunization included global equity as one of its six guiding principles. Scholars went further. One of the proposals, the "fair priority model," which uses standard expected life years lost, was advanced on the ground that it would benefit people, minimize harm, prioritize the worse off, as well as show equal moral concern.[7] Another proposal called the "fair priority for residents model" focuses more directly on allowing states to exercise vaccine partiality toward their own citizens, but only insofar as it is needed "to maintain a noncrisis level of mortality, while continuing to maintain reasonable public health restrictions aimed at reducing infection."[8] We discuss this model in more detail below. We argue that the successful adoption of any model imposing limitations on vaccine nationalism depends on it being justified in the eyes of that state's citizens. Inclusive public deliberation on these matters thus becomes crucial in enabling the governments of rich countries to effectively discharge their global duties toward low-income and developing nations.

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While there are many approaches to global vaccine justice, they rarely distinguish between distributing vaccines and getting people vaccinated.[9] Most theories focus on the distribution of vaccines, but as we stress below, this does not automatically promote vaccine justice. It is crucial to not only distribute enough vaccine doses to low-income and developing countries but also to help them effectively vaccinate their populations.

Specifying National Vaccine Justice

Within countries domestically, different principles of justice might lead us to prioritize different categories of people to get vaccines. We saw a combination of these principles in action in the various policies adopted by most states. Utilitarianism led many countries to prioritize certain categories of workers (those which governments dubbed "essential") on the ground that protecting them maximizes the common welfare. In Western countries, these groups were usually a combination of doctors and nurses, teachers, and essential workers. Political incumbents were also given priority in some states (for instance, in the Czech Republic, Bulgaria, and Serbia) on the ground that their lives are crucial to the national interest and the country's security.[10] It is important to recognize, however, that different communities may have different views about whose survival is crucial for the maximization of the whole community's welfare. After all, welfare can be measured along various dimensions (such as money, well-being, need satisfaction, and community flourishing). Communities may prioritize different welfare dimensions depending on the challenges the affected groups face as well as the different means they have available for tackling these challenges.

Deontological concerns about protecting individual rights as opposed to maximizing collective welfare may, on the other hand, lead us to prioritize those particularly vulnerable to the virus. There are, however, different ways to understand vulnerability, so we must first settle on what concept of vulnerability should orient vaccination policy. Some groups may be deemed more vulnerable than others because they have a high chance of contracting the virus (such as frontline workers). Others may be deemed most vulnerable because they have a higher risk of dying if they contract the virus (such as the elderly, immunocompromised, those with comorbidities, and those without good access to health services). This latter understanding was preferred by many governments, meaning that those most likely to contract the disease (such as medical staff and nurses) were vaccinated only after those with a higher chance of dying from the virus had

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gotten a chance to receive the vaccine.[11] In the United States, however, some hospitals tried (mostly unsuccessfully) to use algorithms combining these different types of risks: the risk of death, the risk of exposure, and the risk of transmitting the disease to others.[12] The results were then used to prioritize vaccinations.

The plurality of moral principles that can inflect vaccine justice is visible in the different vaccine allocation frameworks proposed in the United States. The Advisory Committee on Immunization Practices, overseen by the Centers for Disease Control and Prevention (CDC), recommended appropriate ethical principles to determine who should be given priority. The committee interpreted justice as a matter of "equal opportunity for all persons to enjoy the maximal health and well-being possible"—but then set this principle alongside others that we might also interpret as matters of justice, and which indicate different priorities, such as the needs to "maximize benefits and minimize harms" (leading to prioritizing essential and healthcare workers), to "mitigate health inequities" (prioritizing the disadvantaged), and to "promote transparency."[13] Even this list of principles does not exhaust the variety of ethical considerations that could be brought to bear. So, for example, some scholars argued that vaccine justice in the United States should also involve addressing structural racism in public health policies.[14]

An additional example of an allocation framework in the United States came from the National Academies of Sciences, Engineering, and Medicine (NASEM), which recommended first vaccinating high-risk healthcare workers and first responders, and after that people with comorbidities along with those over seventy-five years of age living in crowded settings. It argued that this framework maximizes a series of moral and epistemic values: benefit, equal concern, mitigation of health inequalities, fairness, transparency, and evidence grounding. The NASEM framework, which closely mirrors that of the CDC, does not however include reciprocity, a value present in other frameworks, such as that of the WHO's Strategic Advisory Group of Experts on Immunization.[15]

Most vaccination strategies incorporated the fact that different individuals bear different risks depending on their age, ethnicity, profession, and socioeconomic group. Providing good justifications for vaccination is essential in order to persuade those groups bearing the lowest risks of dying to nonetheless get vaccinated. The justifications should ideally appeal to the moral values and principles of those groups. In most Western states, vaccine messaging emphasized the importance of protecting one's health and the health of one's loved ones. As we will see next, while this type of messaging may have worked particularly well for those

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committed to individualism or conceiving their responsibilities narrowly (that is, as only toward their kin), it may have been less successful for those with a more expansive view of their responsibilities or for those who put group survival (defined in national, cultural, or ethnic terms) ahead of their own survival.[16]

Democratizing National Vaccine Justice: Formative Agency for Local Communities

In most countries, national governments and their medical experts were the ones responsible for deciding policy and messaging relating to vaccine justice—establishing who has a moral right to be vaccinated first, and why there is a moral duty to get vaccinated. There were, however, exceptions that resonate strongly with some of the proposals in our book *Democratizing Global Justice*.

For instance, in November 2020, the U.S. government offered federally recognized Native American tribes and Alaska Natives two options: they could either (1) receive vaccines through the states, thereby accepting the CDC's vaccination rollout strategy with all its moral prioritizations; or they could (2) receive them separately through the Indian Health Service, in which case the communities would control vaccine distribution. Indigenous communities generally chose the latter option.[17] This allowed them to devise rollout strategies that would match the communities' moral values.

Ultimately, the strategies they adopted prioritized the preservation of the communities' cultures and languages above anything else. Thus, tribal leaders, council members, knowledge keepers, and Native speakers, some of a younger age, were vaccinated first.[18] Some tribes also decided to distribute the vaccine to nontribal citizens sharing a household with a tribal citizen or working for a Native American organization. Surplus doses were often allocated outside of the community to other community-based groups (for example, to the National Association for the Advancement of Colored People or to the Asian American community).[19]

The messaging that was used to target Native members emphasized the survival of the entire group rather than of the individual. Considering that Native people were particularly vulnerable to the virus, and that death rates were much higher than for other groups, the preservation of culture and language was of special interest in Native people's vaccination rollout.[20] Moral duties to get vaccinated were thus justified by appealing to Native individuals' existing duties toward their culture and broader community overall, not just toward their families.

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While some in those communities were initially reluctant to get vaccinated,[21] that reluctance was effectively addressed through vaccine campaign messaging, as well as proactive actions taken by tribal leaders. A survey issued by the Urban Indian Health Institute involving representatives from 318 tribes across forty-six states revealed that many decided to get vaccinated out of a "strong sense of responsibility to protect the Native community and preserve cultural ways."[22] Seventy-four percent of the respondents said they would decide whether to get vaccinated based "not on an individual level but based on the needs of their community,"[23] suggesting a communitarian conception of justice.

Culturally attuned messaging coupled with innovative strategies encouraging vaccination paid off.[24] Protective measures were also customized by each community, including stay-at-home orders, sealing the borders of tribal lands, mask mandates and physical distancing, and modified tribal ceremonies.[25] Because Native American and Alaska Native communities were able to exercise formative agency in the area of vaccine justice, vaccine uptake was especially high in these populations. Vaccination rates were consistently higher for non-Hispanic American Indian and Alaska Native communities than for other U.S. racial and ethnic groups.

According to vaccine-administration data, in March 2021, 26 percent of these groups had been vaccinated with one dose and 14 percent were fully vaccinated, in comparison to 14 percent of whites vaccinated with one dose, and 8 percent fully vaccinated. In January 2022, 67 percent of American Indians had been vaccinated with one dose and 56 percent were fully vaccinated, in comparison to 51 percent and 46 percent, respectively, of whites.[26] Some tribes exceeded all expectations: the Blackfeet tribe in Montana, for example, had a 95 percent vaccination rate by March 2021.[27]

We can contrast what happened in the United States with Indigenous vaccination policy and outcomes in Australia. The context is a bit different because for the first year and a half of the pandemic Australia isolated itself from the world, and the incidence of COVID-19 in the population as a whole was very low. However, once mass vaccination did commence (much more successfully overall than in the United States), the vaccination rate for Indigenous Australians was much lower than for the Australian population at large (the reverse of the situation in the United States). As of January 2022, 73.2 percent of the Indigenous Australian population over the age of sixteen was fully vaccinated, compared to 92.3 percent of the country as a whole.[28] While this percentage is higher than for the Native

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American population in the United States, it is considerably lower in comparison to the rest of the Australian population. (Unlike the United States, Australia does not compile national vaccination rates based on race, so we do not know exactly what the rate was for white Australians, though given the reportedly low vaccination rates in some ethnic minority communities in the country, the rate for whites was probably higher than for the general population.) In the United States, on the other hand, Native Americans were not under-vaccinated when compared to other groups, including white Americans.

In Australia, Aboriginal and Torres Strait Islander peoples remained under-vaccinated despite being identified by governments from the outset as high-priority groups for vaccination (due to poor background health outcomes) and Indigenous leaders taking the issue very seriously. This prioritization, and the relatively small size of the Indigenous population, meant that (again, unlike the U.S. effort) there was no need to decide who within the Indigenous population should be vaccinated first. However, we can compare the United States and Australia to the degree to which there was local formative agency involved in messaging.

The Australian government identified messaging as important, given vaccine hesitancy within Aboriginal communities and the spread of misinformation from outside groups of anti-vaxxers. But unlike in the United States, this messaging was never systematically controlled by Indigenous communities themselves: as one Indigenous leader put it, "I never really heard anything significant about 'this is what we need to do' from the government in terms of working with our communities."[29] At one level, the need to involve communities was recognized, with extra funding going to the National Aboriginal Community Controlled Health Organisation. But, for the most part, messaging to these communities amplified government campaigns (though a logo appears on the organization's website saying "I got fully vaccinated because I love my family, community and culture").[30]

So far, we have looked at how prosperous countries involved or failed to involve local disadvantaged communities in the formulation of vaccine justice. Yet, the challenges these countries had to face pale in comparison to those faced by poor and developing countries. After all, one primary manifestation of international vaccine injustice is the inequality of access to vaccines across rich and poor nations. When it comes to accessing vaccines, agency is often concentrated in the hands of donor countries, pharmaceutical corporations, large foundations such as the Gates Foundation, and national governments. This also means that

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within poorer nations, harder decisions have had to be made concerning who has first access to a scarce resource.

In India, for example, it ultimately fell to the Supreme Court to resolve controversies over the prioritization of government officials and people of a specific age, among other issues. The fact that cases reached the courts suggests substantial disagreement about the principles of justice to be applied—and that the contest between advocates of different principles is taking place in adversarial terms, rather than democratic-deliberative ones (let alone *inclusive*-deliberative terms, involving the vulnerable groups themselves, or *local* inclusive-deliberative terms, regarding who should be prioritized and why).

Politics and policy in India are not always like this. For example, Jennifer Spicer analyzed the deliberative qualities of the process leading up to the passage of the National Food Security Act in 2013. Her analysis points to the importance of poverty advocacy organizations instigating and joining deliberation in the public sphere, which had some influence on the eventual policy outcome (alongside expert bodies, courts, and more formal legislative politics).[31] The Right to Food Campaign was particularly active in the process, functioning as an umbrella for many advocacy groups, including those representing marginalized people, notably Dalits. Formally, at least, the campaign was committed to direction from the grassroots, rather than top-down management.[32] Other researchers, such as Paromita Sanyal and Vijayendra Rao, have also demonstrated the consequential nature of direct participation by poor and lower-caste individuals in village deliberation in *gram sabhas* (open village meetings mandated by the Indian constitution), with positive consequences for the distribution of local welfare expenditures.[33]

The broader lesson we can draw from this discussion of vaccine justice (and its comparators) is that inclusive deliberation involving the most affected and most vulnerable can be highly productive when it comes to determining what justice means on the ground. Such deliberation can also be instrumentally effective in increasing vaccination uptake. Seeking such positive exercise of inclusive deliberative agency when it comes to global justice involves, on the face of it, an additional order of challenge, given the distance between local communities and global governance. But it is not *that* different, considering the size and federal nature of the U.S. and Indian political systems that we have emphasized in our examples.

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From National to Global Vaccine Justice: The Role of Public Deliberation

Competing moral claims to vaccine priority among citizens (and residents) need to be resolved, but so do those between citizens (and residents) and nonresident foreigners. Drawing lessons from the previous section, here we argue that participatory deliberative engagement may also help governments determine and publicly justify any limitations to vaccine nationalism that are required by global vaccine justice. Knowing that we have a duty is not enough to guarantee the pursuit of global vaccine justice. Even if we accept that there are cosmopolitan, universal duties to help foreigners, we still have to clarify what these duties demand of us in practice, when other types of duties, such as special duties, must also be discharged. Recent debates on global vaccine justice have acknowledged this issue. But, as we show below, the proposed moral accounts are incomplete without the recognition that to be action guiding, any such account must also be further specified. In a democracy, this specification is best sought through public deliberation, allowing citizens and residents to exercise formative agency in matters of vaccine justice.

Global vaccine justice calls on states to balance two sets of duties: special duties toward compatriots and universal duties toward the rest of the world. But while universal duties should constrain special duties generally, governments still have a lot of discretion in determining how those moral trade-offs should be handled in practice.[34] As much has already been recognized. Notice also that any vaccination strategy that a government endorses will effectively act as a resolution to such trade-offs. To be effective on the ground, in democratic states at least, any vaccination policy restraining vaccine nationalism has to be publicly justified and at least not opposed by a majority of the population who will bear the consequences of that policy. The specification of global vaccine justice will thus have to rely on some mechanism for dampening moral disagreement about where we should draw the line on national partiality.

Scholars have different ways of tackling these moral conflicts. Delivering global vaccine justice on the ground is however less an issue of persuading scholars and more an issue of persuading the vast majority of the population of developed states that vaccine nationalism and partiality must indeed be curbed. We thus need a conflict resolution mechanism that can deal with moral disagreement at

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the level of *public opinion*. One such mechanism is, we argue, inclusive democratic deliberation.

Inclusive democratic deliberation can be a good way of making citizens (1) *aware* of the moral trade-offs entailed by any national vaccination strategy; (2) *knowledgeable* about the moral disagreement existing among scholars and other practitioners regarding how those trade-offs might be resolved; and (3) *involved* in determining where to draw the line on vaccine nationalism.

The moral frameworks that have been proposed by scholars in response to these moral conflicts suffer from two flaws: underspecification and weak public legitimacy. Both flaws can be addressed through inclusive democratic deliberation. Their weak legitimacy is not an intrinsic problem of these frameworks. After all, to be publicly justifiable and legitimate such frameworks must first have some public visibility. At the moment, however, these frameworks do not permeate civil society and the collective conscience in any meaningful way.

To illustrate our point, take the fair priority for residents (FPR) framework, put forward by a group of scholars led by Ezekiel Emanuel.[35] According to it, states are entitled to just enough vaccine doses to "maintain noncrisis levels of mortality" while "maintaining reasonable public health restrictions aimed at reducing infection."[36] As even the scholars supporting this framework acknowledge, it is not immediately action guiding, as we must first decide how we should understand "noncrisis" mortality levels and "reasonable" public health restrictions. Multiple reasonable understandings of these terms may exist. It is thus not clear why we should accept an understanding of noncrisis mortality levels as those that occur during a "worse-than-average, but not terrible, year of influenza,"[37] as these scholars propose, and not simply as levels of mortality pre-COVID. Assuming that the period before the pandemic was considered one of noncrisis, it seems entirely reasonable that a community might equate noncrisis mortality levels with those experienced before COVID-19 struck, not with those experienced during a bad year of influenza. Returning to the pre–COVID-19 mortality levels may seem reasonable, especially for risk-averse communities who do not normally experience bad years of influenza. In light of such reasonable disagreement, any vaccination framework is in need of public justification. Democratic deliberation provides such public justification, by involving individuals and groups in the specification of what noncrisis mortality levels should mean in the context of a community.

Disagreement might also surround what counts as a "reasonable" restriction. While Emanuel and his coauthors rightly point out that the "wearing of masks"

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and the "installation of HEPA air filtration systems in public buildings, schools, and housing for the elderly"[38] are in theory reasonable measures, we also saw in many developed countries a growing discontent with mask mandates—a measure that does not impose significant limitations on individual freedom. The spending of budget funds to install HEPA air filtration systems might also arouse discontent in countries where such systems are not currently prevalent, especially as they are not alone capable of stopping virus transmission.[39] We may also wonder to what extent social distancing mandated by state institutions and other organizations, which is an effective way of limiting transmission, may be considered a reasonable restriction. Again, we can probably expect wide social disagreement on this question. While some will argue that social distancing is a low cost to pay to lower transmission and deaths, others (introverts) may claim it is a godsend, and yet others will inevitably see it as an unreasonable restriction. Virtual technologies allowing us to see and communicate with our friends and family can never provide the same support to our personal relationships as close physical contact can, opponents of social distancing would argue. Such disagreement could effectively be resolved or at least reduced through inclusive democratic deliberation allowing citizens and residents to reflect upon and exchange views on what the community as a whole should deem a reasonable or unreasonable restriction in the times of COVID-19.

Our aim here is not to show that the FPR is a bad framework. Our point is simply that to be effectively implemented, any theoretical framework meant to balance duties toward compatriots with duties toward the rest of the world, and thus impose some cost on compatriots, however theoretically sound that framework may be, will have to pass some public justification test before or after being endorsed by governments. Furthermore, as we argued, community engagement in these debates is also needed in order to further spell out some aspects of the framework that leave room for different reasonable interpretations. The FPR supporters themselves concede that any principle must be "understandable by average citizens," "justifiable to those very citizens who are expected to honor it," and "actionable . . . with limited and imperfect data."[40] Yet this can only be achieved insofar as citizens and residents can engage in inclusive public deliberation on the merits and demerits of such frameworks, and their interpretations. Inclusive democratic deliberation is also an opportunity to challenge any existing misinformation and anti-science sentiment that is harbored within the population, perhaps magnified and amplified through social media or a biased press.[41] By

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promoting discursive accountability, holding speakers to account for their statements, and allowing the critical scrutiny and debunking of false claims, democratic deliberation can fight back against post-truth—at least to the degree that deliberation crosses political, social, and ethnic divides, and the confines of echo chambers.

We are not the only ones to argue in favor of a participatory deliberative solution. Others have argued that public deliberative events could be used to develop principles for vaccine allocation both within and across states. Stuart Peacock, for example, claims that deliberators could discuss ethical principles guiding vaccine allocation and identify policy recommendations, as well as the potential trade-offs.[42] They could deliberate over the two ethical principles proposed by the WTO: whether countries should initially receive vaccine doses proportional to the size of the population or whether they should be distributed to countries according to other indicators of need (the number of frontline health workers, the percentage of the population over sixty-five, and the percentage of people with comorbidities). Alternatively, they could deliberate over what the priorities of a global vaccination strategy should be: reducing premature deaths, reducing serious economic or social deprivations, or returning to life as it was pre–COVID-19.[43]

A More Ambitious Solution: Global Deliberative Forums

While Peacock, as we do, advocates for a series of national-level deliberative processes, we go one step further in suggesting that global forums are also possible. In 2021, an online Global Citizens' Assembly on climate and ecological emergency took place, with one hundred lay citizens from around the world selected by "algorithmic sortition."[44] An in-person global citizens' assembly on genome editing is also planned.[45]

The resolutions made in such meetings could inform policymakers and governments, and could become part of broader public debate via the media. Obviously, the media as we know it has all kinds of commercial and political imperatives that get in the way of contributing to reflection about social justice. However, it is possible to imagine the cultivation of spaces for reflection in connection with investigative journalism in the legacy media, or platforms for civil exchange on social media. Journalists might also publicize such moral conundrums of national and global vaccine allocation as we discussed here through increased coverage of the challenges faced by poor and developing nations. To the extent they do attend

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to such questions at all, journalists have focused more on the moral conflicts that may arise domestically and less on those that arise globally. There is limited coverage of the global lack of access to COVID-19 vaccines, let alone the corollary that under conditions of scarcity, any dose allocated to one's state may be a death sentence for someone elsewhere. Yet, many developed nations have already rolled out booster doses, with some states even administering a fourth booster shot, despite evidence showing little extra protection being afforded by such a booster.[46]

The prospects for such citizen deliberation influencing global governance merit examination. The fact that global vaccine governance is not well developed is an obvious problem. Rich countries currently do not feel bound by the good intentions about fair distribution and availability of vaccines embodied in, for example, the Pandemic Influenza Preparedness Framework passed by the World Health Assembly in 2007.[47] In 2020, the COVAX international agreement, whose negotiation involved the WHO, the World Bank, the G-20, the EU, and the Gates Foundation, could be seen as advancing a "nascent global governance regime for vaccine research, development, and distribution."[48] However, this regime has yet to see a formal treaty, which would need to be negotiated by national governments, including those of poorer countries (in 2021, the World Health Assembly began discussing an international pandemic treaty).

These shortcomings of global governance can sometimes be compounded by deficiencies in the national governments of poorer countries when it comes to defending the interests and the formative agency of their citizens and residents in the area of global vaccine justice. Certainly, some governments in poorer countries have been vocal critics of the refusal of big pharmaceutical companies to relax their intellectual property rights in a way that would enable faster production and distribution of vaccines in poor countries. However, some of these governments have themselves come under fire for unjust practices. In India, for example, the government proclaimed after the pandemic began in 2020 that the country would be the "pharmacy of the world," an export-oriented approach that impeded access to vaccines for India's own vulnerable populations once the pandemic hit the country in a big way.[49]

Sovereign states do not always serve their citizens well, which means there is a role for nonstate actors in transnational governance to exercise formative agency in regard to principles and practice for vaccine availability and distribution. Civil society organizations are active in, for example, criticizing the vast profits that a company such as Pfizer earns from vaccines, and the market power that it

exercises. In Africa, advocacy groups such as the Africa Forum and Network on Debt and Development have joined the call for the suspension of intellectual property rights in vaccines.[50] Generally missing is the voice of ordinary citizens, especially the poor and marginalized. This matters to the degree "the COVID-19 vaccine rollout highlights how inequities continue to leave the most marginalized populations of the world underprotected, including groups that face discrimination due to race and class, persons in detention, and those who have been forcibly displaced."[51] As we have argued, it is important to organize this voice into global vaccine governance, whether or not it is via the kind of global citizens' assembly we have described. The (limited) good news here is that the underdeveloped state of the global vaccine governance regime provides an opportunity to build in opportunities for broader citizen participation as the regime develops.

Conclusion

In the allocation and distribution of vaccines no less than in other spheres of allocation and distribution, formative agency is integral to the quest for justice. It is necessary to determine what justice means on the ground, and what is required to balance the claims of national and global justice. Formative agency, in turn, needs to be exercised in an inclusive deliberative and democratic fashion, if justice is to be pursued in ways that are responsive to the interests and understandings of those most affected by policy decisions, especially the poor and marginalized.

NOTES

[1] Onora O'Neill, "Agents of Justice," *Metaphilosophy* 32, nos. 1–2 (January 2001), pp. 180–95.
[2] Thomas Pogge, *World Poverty and Human Rights* (Cambridge, U.K.: Polity, 2002).
[3] See John S. Dryzek and Ana Tanasoca, *Democratizing Global Justice: Deliberating Global Goals* (Cambridge, U.K.: Cambridge University Press, 2021), see esp. ch. 2 for the concept of formative agency.
[4] For a more in-depth discussion of these factors, see ibid.
[5] Ibid.
[6] This seems to be one of the reasons for a very slow distribution of Moderna vaccines to poorer countries. Although both the United States and the United Nations, through the COVAX program, committed to assisting poor states by sending them free vaccine doses (with the United States hoping to buy vaccines from Moderna at a reduced price and donate them to these states), very few poor and developing countries eventually got access to Moderna shots; and when they did, they got access to only very small amounts. Moderna blamed its limited manufacturing facilities for this situation, even singling out the national governments of these countries for refusing to invest in expanding their factories. See Rebecca Robbins, "Moderna, Racing for Profits, Keeps Covid Vaccine Out of Reach of Poor," *New York Times*, October 9, 2021, www.nytimes.com/2021/10/09/business/moderna-covid-vaccine.html.
[7] Ezekiel J. Emanuel, Govind Persad, Adam Kern, Allen Buchanan, Cécile Fabre, Daniel Halliday, Joseph Heath, et al., "An Ethical Framework for Global Vaccine Allocation," *Science* 369, no. 6509 (September 2020), pp. 1309–12, cited as note 7 in Ariadne A. Nichol and Kellen M. Mermin-Bunnell, "The Ethics of COVID-19 Vaccine Distribution," *Journal of Public Health Policy* 42, no. 3 (September 2021), pp. 514–17.

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[8] Ezekiel J. Emanuel, Allen Buchanan, Shuk Ying Chan, Cécile Fabre, Daniel Halliday, R. J. Leland, Florencia Luna, Matthew S. McCoy, Ole F. Norheim, G. Owen Schaefer, Kok-Chor Tan, and Christopher Heath Wellman, "On the Ethics of Vaccine Nationalism: The Case for the Fair Priority for Residents Framework," *Ethics & International Affairs* 35, no. 4 (Winter 2021), pp. 543–62, at p. 547.

[9] Nichol and Mermin-Bunnell, "The Ethics of COVID-19 Vaccine Distribution," p. 516.

[10] Chris Harris, "COVID Vaccine: Who in Europe Is Leading the Race to Herd Immunity?," Euronews, November 17, 2021, www.euronews.com/2021/11/17/covid-19-vaccinations-in-europe-which-countries-are-leading-the-way.

[11] Ibid. Prioritizing those with a higher chance of dying from the virus was done in Austria, Belgium, Croatia, Cyprus, Denmark, France, Germany, Ireland, Norway, Slovenia, Spain, Sweden, Switzerland, and the U.K. Medical staff were, on the other hand, vaccinated first in Estonia, Finland, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, and Ukraine.

[12] Nichol and Mermin-Bunnell, "The Ethics of COVID-19 Vaccine Distribution," p. 515.

[13] Nancy McClung, Mary Chamberland, Kathy Kinlaw, Dayna Bowen Matthew, Megan Wallace, Beth P. Bell, Grace M. Lee, H. Keipp Talbot, José R. Romero, Sara E. Oliver, and Kathleen Dooling, "The Advisory Committee on Immunization Practices' Ethical Principles for Allocating Initial Supplies of COVID-19 Vaccine—United States, 2020," *Morbidity and Mortality Weekly Report* 69, no. 47, pp. 1782–86, at p. 1782.

[14] Vickie M. Mays, Susan D. Cochran, Aleta Sprague, and Jody Heymann, "Social Justice Is Not the COVID-19 Vaccine Alone: It Is Addressing Structural Racism through Social Policies That Shape Health," supplemental issue, *American Journal of Public Health* 111, no. S2 (July 2021), S75–S79.

[15] Nichol and Mermin-Bunnell, "The Ethics of COVID-19 Vaccine Distribution," pp. 514–15. "Reciprocity" in this context means taking a special concern for health workers and others who bear high risks in order to control the pandemic. Some U.S. states have chosen to further tweak these frameworks: for instance, Tennessee has included the CDC's Social Vulnerability Index in their vaccine allocation framework to promote equity.

[16] Although the rationale for getting vaccinated in order to avoid putting intolerable strain on the healthcare system could certainly be reframed as being other-regarding, not self-interested, in nature.

[17] Sukee Bennett, "American Indians Have the Highest Covid Vaccination Rate in the US," *Nova*, PBS, July 6, 2021, www.pbs.org/wgbh/nova/article/native-americans-highest-covid-vaccination-rate-us.

[18] Ibid. See also Raymond Foxworth, Nicole Redvers, Marcos A. Moreno, Victor Lopez-Carmen, Gabriel R. Sanchez, and James M. Shultz, "Covid-19 Vaccination in American Indians and Alaska Natives—Lessons from Effective Community Responses," *New England Journal of Medicine* 385, no. 26 (December 2021), pp. 2403–6, at p. 2405.

[19] Bennett, "American Indians Have the Highest Covid Vaccination Rate in the US."

[20] Ibid.

[21] Beyond their initial reluctance, the ultimately high vaccination rates of Native populations are even more surprising considering the long history of how vaccinations and diseases like smallpox have been used as a tool by governments to oppress and eradicate these communities. See Dana Hedgpeth, "How Native Americans Were Vaccinated against Smallpox, Then Pushed off Their Land," *Washington Post*, March 28, 2021.

[22] Urban Indian Health Institute, *Results from a National COVID-19 Vaccination Survey: Strengthening Vaccine Efforts in Indian Country* (Seattle: Urban Indian Health Institute, 2021), p. 34. See also Foxworth et al., "Covid-19 Vaccination in American Indians and Alaska Natives," p. 2405.

[23] Abigail Echo-Hawk, cited in Joanne Silberner, "Covid-19: How Native Americans Led the Way in the US Vaccination Effort," *British Medical Journal*, 374, no. 2168 (2021).

[24] Foxworth et al., "Covid-19 Vaccination in American Indians and Alaska Natives," p. 2405.

[25] Ibid. Some tribes also used monetary incentives, whereas others made access to tribal ceremonies conditional on proof of vaccination.

[26] This trend has largely continued: in May 2022, 60 percent of American Indians were fully vaccinated and 72 percent had been vaccinated with one dose, in comparison, respectively, to 48 and 53 percent of white people, 61 and 67 percent of Asians, and 42 and 48 percent of Blacks. See "Trends in Demographic Characteristics of People Receiving COVID-19 Vaccinations in the United States," Covid Data Tracker, Centers for Disease Control and Prevention, 2022, covid.cdc.gov/covid-data-tracker/#vaccination-demographics-trends. Accessed 15 May 2022.

[27] Silberner, "Covid-19."

[28] Matt Woodley, "Vaccination Gap: Vulnerable Communities Left Exposed as Omicron Threatens," NewsGP, January 14, 2022, www1.racgp.org.au/newsgp/clinical/vaccination-gap-vulnerable-communities-left-expose.

[29] Peter O'Mara, Aboriginal and Torres Strait Islander faculty chair professor, Royal Australian College of General Practitioners, cited in ibid.
[30] National Aboriginal Community Controlled Health Organization, "COVID-19 Vaccine Updates and Information," website accessed August 3, 2022, www.naccho.org.au/covid-19-vaccine-updates-and-information/.
[31] Jennifer Margaret Spicer, "Feeding the People: Deliberative Democracy and the Politics of India's National Food Security Policy" (PhD doctoral thesis, University of Sussex, 2021).
[32] Ibid., p. 76.
[33] Paromita Sanyal and Vijayendra Rao, *Oral Democracy: Deliberation in Indian Village Assemblies* (Cambridge, U.K.: Cambridge University Press, 2019).
[34] Eilidh Beaton, Mike Gadomski, Dylan Manson, and Kok-Chor Tan, "Crisis Nationalism: To What Degree Is National Partiality Justifiable during a Global Pandemic?," *Ethical Theory and Moral Practice* 24 (March 2021), pp. 285–300, at pp. 296–97.
[35] Emanuel et al., "On the Ethics of Vaccine Nationalism."
[36] Ibid., p. 547.
[37] Ibid., pp. 548, 550.
[38] Emanuel et al., "On the Ethics of Vaccine Nationalism," p. 549.
[39] These air filtration systems work best when accompanied by social distancing and mask wearing. See "Air Cleaners, HVAC Filters, and Coronavirus (COVID-19)," United States Environmental Protection Agency, www.epa.gov/coronavirus/air-cleaners-hvac-filters-and-coronavirus-covid-19.
[40] Emmanuel et al., "On the Ethics of Vaccine Nationalism," p. 550.
[41] On how social media can undermine collective judgments, see Ana Tanasoca, "Against Bot Democracy: The Dangers of Epistemic Double-Counting," in "Perspectival Political Theory," special section, *Perspectives on Politics* 17, no. 4 (December 2019), pp. 988–1002. On how the media can distort perceptions of public opinion, see Ana Tanasoca, *Deliberation Naturalized: Improving Real Existing Deliberative Democracy* (Oxford: Oxford University Press, 2020), ch. 6.
[42] Stuart J. Peacock, "Vaccine Nationalism Will Persist: Global Public Goods Need Effective Engagement of Global Citizens," *Globalization and Health* 18, no. 1 (February 2022), pp. 1–11, at pp. 7–8.
[43] Ibid, p. 8. Peacock draws on Emanuel et al., "An Ethical Framework for Vaccine Allocation."
[44] Global Assembly, globalassembly.org.
[45] John S. Dryzek, Dianne Nicol, Simon Niemeyer, Sonya Pemberton, Nicole Curato, André Bächtiger, Philip Batterham, et al., "Global Citizen Deliberation on Genome Editing," *Science* 369, no. 6510 (September 18, 2020), pp. 1435–37.
[46] Smriti Mallapaty, "Fourth Dose of COVID Vaccine Offers Only Slight Boost against Omicron Infection," News, *Nature*, February 23, 2022, www.nature.com/articles/d41586-022-00486-9.
[47] Mark Eccleston-Turner, "The Pandemic Influenza Preparedness Framework: A Viable Procurement Option for Developing States?," *Medical Law International* 17, no. 4 (December 2017), pp. 227–48.
[48] Sam F. Halabi and Ana Santos Rutschman, "Viral Sovereignty, Vaccine Diplomacy, and Vaccine Nationalism: The Institutions of Global Vaccine Access," *Emory International Law Review* 36, no. 1 (2022), pp. 1–32, at p. 5.
[49] Carnegie Civic Research Network, "Civil Society and the Global Pandemic: Building Back Different?," Carnegie Endowment for International Peace, September 30, 2021, carnegieendowment.org/2021/09/30/civil-society-and-global-pandemic-building-back-different-pub-85446.
[50] Halligan Agade, "Civil Society Organizations in Africa Call for a People's Vaccine," Africa, China Global Television Network, March 13, 2021, africa.cgtn.com/2021/03/13/civil-society-organizations-in-africa-call-for-a-peoples-vaccine.
[51] "Why Responding to COVID-19 Requires Justice, Not Charity," Open Society Foundations, last updated March 2022, www.opensocietyfoundations.org/explainers/why-responding-to-covid-19-requires-justice-not-charity.

Abstract: What does vaccine justice require at the domestic and global levels? In this essay, using the COVID-19 pandemic as a backdrop, we argue that deliberative-democratic participation is needed to answer this question. To be effective on the ground, abstract principles of vaccine justice need to be further specified through policy. Any vaccination strategy needs to find ways to prioritize conflicting moral claims to vaccine allocation, clarify the grounds on which low-risk people are being asked to vaccinate, and reach a balance between special duties toward countrymen and universal duties toward foreigners. Reasonable moral disagreement on these questions is bound to exist in any community. But such disagreement threatens to undermine vaccine justice insofar as the

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chosen vaccination strategy (and its proposed specification of vaccine justice) lacks public justification. Inclusive democratic deliberation about vaccine justice is a good mechanism for tackling such moral disagreement. By allowing residents and citizens to participate in the specification of abstract principles of vaccine justice, and their translation into policy, democratic deliberation can enhance the legitimacy of any vaccination strategy and boost compliance with it.

Keywords: deliberative democracy, agency, COVID-19, vaccine justice, global justice