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Vaccine Nationalism Versus Vaccine Sharing: A Closer Look at the U.S. and India

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Development for the COVID-19 vaccine has been implemented in full force, and one of the greatest challenges is enforcing just and equitable vaccine allocation. This debate paper highlights the arguments for and against sharing a country's COVID-19 vaccine supply with other countries versus employing vaccine nationalism to reach herd immunity. To conclude, the paper offers implementation strategies for government officials to consider when determining an allocation framework. This paper will specifically dissect the case of whether the U.S. should share its vaccine supply with India, a country that originally was worse off compared to the U.S. in terms of number of cases and deaths. Currently, the total vaccination rate in India is 23% less than that of the US (New York Times, 2021). This paper relies on current statistics, ethical framework papers, and other argumentative pieces about vaccine sharing and nationalism.

Introduction

As of 2020, COVID-19 has continued to affect existing health care systems, global economies, education systems, and has exacerbated disparities and inequities across the board. As of December 13, 2021, there have been a total of 270 million cases of the coronavirus and 5.31 million deaths worldwide (Wikipedia & New York Times, 2021). Fortunately, in early 2021, vaccines were developed to combat the virus; vaccines have shown large success with a high efficacy reaching up to 97% (Pfizer, 2021). However, vaccines are limited, leaving a large equitable allocation problem for policymakers, ethicists, and healthcare systems to resolve. Considering COVID-19 is a global problem that doesn't discriminate across borders, vaccine distribution requires *a global* effort. As a result, health, economical, and ethical arguments point to the resolution that the United States should share their vaccine supply with lower- and middle-income countries (LMICs) to fight COVID more broadly and effectively. This paper will specifically outline the arguments for and against vaccine

nationalism and pandemic prioritarianism and describe implementation strategies the United States should consider to share its vaccine supply through the case of the United States and India.

Vaccine Nationalism

Reasons for:

When considering policy options for global vaccine allocation, many governments resort to nationalism. National partiality is defined as "a country's right and duty to prioritize its own citizens" (Emanuel et al., 2020, p.1). Nationalism falls under the general mentality to put one's mask on first before helping others. The strongest argument for this approach is believing that countries should prioritize their own citizens until herd immunity is reached. For reference, several sources have determined that herd immunity for COVID-19 refers to around 70% of the population being vaccinated, and the CDC has recently reported about 61% of Americans have been vaccinated. Additionally, proponents appropriately argue that its government has an inherent responsibility towards protecting its citizens.

As the stages of vaccination progress, the U.S. has shifted its focus to vaccinating teenagers and children. As teenagers and young adults tend to be bigger supporters of vaccines, giving the opportunity for them to be vaccinated would result in a large push towards reaching herd immunity. More specifically, proponents argue that it is unfair for American taxpayer money that funded the development of these vaccines to be shared with other countries, especially considering the large economic downturn experienced by all Americans.

Secondly, the United States and other high-income countries are better equipped for vaccination distribution because of their robust and more reliable resources. Many American government officials and policymakers believe that the U.S. should not donate their vaccines to lower income countries that do not have the resources to vaccinate people successfully even if they had the supply (Liu, Salwi, & Drolet, 2020, p.2). Proponents argue that sharing their supply with low-income countries could be a waste of vaccines since some of these countries are unable to effectively vaccinate thousands to millions of people at once. In this case, the U.S. is more confident in their ability to vaccinate Americans than that of other countries, making officials more hesitant in sharing their supply of vaccines.

In addition to looking at the vaccinated population percent, considering the Infection Fatality Rate (IFR) poses another argument for vaccine nationalism. The IFR is a measurement of the number of deaths as a proportion of the total number of infections. In the U.S., as of May 2021, the IFR was 0.6%, whereas in India, this value was 0.08%. Although these percentages could be skewed because of India's inadequate testing

infrastructure that would have resulted in less cases being reported and a large child population, this means that more Americans die when infected (Gore, 2021). This supports the argument that vaccines should then be prioritized for Americans because of their worsened effect when infected.

Rebuttal:

Although the arguments for vaccine nationalism are plenty, this approach poses ethical concerns. As history shows, absolute nationalism can lead to high income countries purchasing exclusive access to a vaccine; this raises an unfair advantage since LMICs cannot afford this privileged access, and thus, they will have less access to vaccinations (Liu, Salwi, & Drolet, 2020, p.1). However, absolute nationalism is rare and is often paired with donation, which indicates that high-income countries will donate their extra vaccines to other countries. Although a novel system, altruistic donation is normally delayed, which is a major concern because with new waves and variants on the rise, time is crucial with regards to vaccine distribution. This also would likely not be applied since vaccines are scarce and countries would want to prioritize themselves (Liu, Salwi, & Drolet, 2020, p.1).

Secondly, many opponents of national partiality indicate that "people's entitlement to lifesaving resources should not depend on nationality" (Emanuel et al., 2020, p.1). Because COVID vaccinations are crucial to achieving herd immunity, boosting economies, saving lives, and returning back to unrestricted activities, it is unfair for only certain countries to reach this universal goal solely based on nationality. This also overflows into the argument that some lives are more important than others, entirely based on national borders. This anti-utilitarian approach would promote a country regardless of how severely affected it is by COVID rather than prioritizing total—in this case, global—benefit when making decisions. Therefore, drawing the line between partial and absolute nationalism is challenging.

It should be noted that people who lean towards nationalism in other policy spheres such as military and foreign policy also tend to share more anti-vaccine beliefs. Because of this, following vaccine nationalism could result in working backwards when measuring support for the virus vaccine. Although saving vaccines for themselves will allow for a quicker return to "normal" in that particular country, this has the potential to tarnish the country's reputation as a global team-player and discourages international cooperation, which is important for countries in the long-run. This can also disrupt the U.S.'s status of being a powerhouse and leading country by acting selfish in a time of need. Officials should seriously consider these drawbacks of resorting to national partiality when building vaccine allocation frameworks.

And lastly, a strong argument against vaccine nationalism is the statistics on how many vaccines have already been wasted in the U.S.

According to NBC News in early September, states governments and pharmacies have wasted 15.1 million doses of the COVID-19 vaccine since March 2021. In fact, Walgreens on its own has wasted 2.6 million doses and CVS reported 2.3 million waste doses (Eaton & Murphy, 2021). Sharifah Sekalala, an associate professor of global health law at England's University of Warwick, explains that global inequalities are intensified because "'vaccines are being wasted while lots of African countries have not had even 5 percent of their populations vaccinated'" (Eaton & Murphy, 2021).

Vaccine Sharing

Reasons for:

The flip side to vaccine nationalism is vaccine sharing, referring to high-income countries sharing their vaccine supply with low- and middle-income countries. In support of this notion, when the vaccines were first developed, the World Health Organization announced their commitment to fair access and "equitable deployment" of vaccines (Liu, Salwi, & Drolet, 2020, p.1).

The strongest argument for vaccine sharing is prioritarianism, which is a political philosophy that prioritizes benefit to the worse-off. In this case, the "worse off" would be the group or country with the highest rates of cases of and deaths from COVID-19. Similarly, prioritarianism places a higher moral weight to helping the worse-off than the better off (Nielsen 1). This philosophy is valid because there is a higher burden from the pandemic, more dense living conditions, and limited access to healthcare in worse off and lower income countries. Additionally, lower income countries have lower per capita income levels, which have been heightened due to COVID and therefore, is more reason to support the prioritarian viewpoint (Hodgkinson et al., 2021, p.25).

To go further, prioritarian beliefs can be divided into three categories: social justice, severity, and age weighted. Social justice prioritarianism refers to the fact that there is a moral duty to aid the socially disadvantaged. This reinforces the argument that high-income countries should share vaccines with LMICs that are "socially disadvantaged." Severity prioritarianism refers to the notion that allocation should depend on prioritizing countries that are the most severely ill. Again, this supports vaccine sharing since India and other low-income countries are more affected by COVID than the U.S. and high-income countries. And lastly, age-weighted prioritarianism points to the fact that young people should be prioritized over older people because they have had "less life years" as measured by quality adjusted life years (QALYs) (Nielsen, 2021, p.1). So in the case that the U.S. would be trading its vaccines for teenagers and children for adults in India, this category supports vaccine nationalism. However, in the context of COVID-19, ageweighted prioritarianism is not

a valid consideration because the virus affects older people more often and severely than younger people. Therefore, the emphasis should be on allocating vaccines to older adults. In addition, age-weighted prioritarianism doesn't match the prioritarian overarching belief to prioritize the worse-off. The WHO also supports this by warning against prioritizing the young because they do not benefit the most from vaccines (Hodgkinson et al., 2021, p.23).

Secondly, lower income countries helped and contributed to the development of vaccines by participating in clinical trials. Therefore, proponents argue that these countries should be rightly compensated and receive priority for vaccinations and vaccine supplies (Liu, Salwi, & Drolet, 2020, p.1). This is particularly important because vaccines are often the only source of treatment in LMICs. In other words, "without access to acute care in developing countries, prevention with a vaccine may be the only available intervention" (Liu, Salwi, & Drolet, 2020, p.2). Whereas on the other hand, the U.S. and high-income countries are able to still provide successful robust—temporary—treatment even without the vaccine.

Additionally, it is important to consider that time is essential when determining allocation frameworks. At the onset of vaccine distribution, India was doing exponentially worse with its COVID response. The nationalist belief that the U.S. should save their vaccines for themselves until it achieves herd immunity and then share its vaccine surpluses with other countries later cannot be justified; by then, the impact of the surge in India has already been made. In other words, the effect of COVID-19 is irreversible, and therefore, the U.S. cannot wait to share the vaccine with India until it is ready to do so. As of March 2021, there was a huge rise in additional deaths in LMICs because there was no sufficient process of mass vaccination; the decision to not ship vaccines to low- and middleincome countries will cost millions of preventable deaths (Hodgkinson et al., 2021, p.67).

Although, it can be argued that because of India's significantly larger population, there will be a smaller proportion of the total population being benefited compared to the U.S. with the same number of vaccines. However, this counterargument only considers the number of people helped, not the total benefit per person or in the country. In these cases, the total benefit would still be higher in India; therefore, it is more costeffective to send the vaccines to India even if a smaller percentage of its total population is being helped.

And lastly, if vaccines are not shared, it is likely that more variant strains will be developed in these countries, devaluing the efficacy of the originally developed vaccines. Therefore, if the U.S. decides to keep vaccines for itself and reaches herd immunity and variant strains in LMICs develop from the absence of vaccines, due to international travel and commerce, these strains will inevitably reach the U.S.; all of the efforts to

vaccinate Americans will be wasted. Thus, even if the United States hasn't reached full herd immunity, it should share its vaccines with other countries to protect itself in the long run.

Rebuttal:

Although the arguments for sharing vaccines to low- and middle-income countries are strong, there are gaps in reasoning that must also be addressed. Firstly, opponents argue that LMICs may not have the strong ability to implement vaccine distribution. Simply, "vaccines should not be allocated if they cannot be used" (Liu, Salwi, & Drolet, 2020, p.2). This would result in LMICs "unjustifiably wast[ing] a lifesaving resource" (Emanuel et al., 2020, p.4). This refers to the many operational challenges of vaccine distribution in LMICs, including but not limited to: unstable storage required for vaccines, weak security and control, inadequate vaccination infrastructure as it relates to physical locations to vaccinate people, less specialized healthcare workers, and unreliable identification and tracking systems (Hodgkinson et al., 2020, pp. 25-26). Thus, when sharing vaccines and supplies, countries should also ensure that the country has adequate resources, and if not, share those as well.

Next, on a more global status viewpoint, prioritizing the worse off—in this comparison, India—may translate to rewarding countries who have responded to COVID-19 ineffectively and discouraging countries "that have effectively suppressed viral transmission" (Emanuel et al., 2020 p.4). It could lead to demotivating countries to develop a robust response if they can ride off of other countries' successes. However, this also unfairly puts all the blame for the country's response on India without considering their response in context of their available resources and weaker healthcare systems. Additionally, helping low-income countries in need will only benefit high-income countries in the future by securing stronger alliances.

And lastly, there is concern about how well the U.S. vaccines will work in India considering the limited amount of research on how well these vaccines work on variant strains. Although this is true, this opens the opportunity for researchers to experimentally measure how well these vaccines fight against variant strains before these strains are found in the U.S. Additionally, the concern over the vaccines possibly not working as effectively does not outweigh the potential millions of lives saved by the vaccine.

Discussion and Conclusions

Low- and middle-income countries should be prioritized for vaccinations because they are worse off—as defined by prioritarian beliefs—and will gain more benefit from vaccines than high income countries.

Economically speaking, the opportunity cost of both decisions should be analyzed. If the U.S. ships some of their vaccine supply, it can't use it to vaccinate American children and teenagers. On the other hand, if the U.S.

doesn't ship some of their vaccine supply, many adults will face the severe and irreversible impacts of COVID including organ damage, strains on its healthcare systems, negative impacts on the economy, unemployment, and heightened poverty; these impacts of COVID are not as prevalent and exaggerated in the U.S. because the U.S. has a stronger economy, healthcare, and education system. For the simple comparison of education, schools in the U.S. were much more easily able to transition to online learning because of the greater access to technology. However, LMICs are more impacted by these indirect consequences of COVID-19 (Emanuel et al., 2020 p.2).

Given the arguments presented, the US and other high-income countries should share and ship a portion of their vaccine supply to LMICs, employing some vaccine nationalism. This would be implemented based on the country's rate of transmission (Rt). To clarify, the higher the Rt value, the faster the virus progresses. If the rate of transmission is below 1—meaning the rate of transmission is increasing at a decreasing rate—in the home-country (United States), then the vaccines should be shared with countries that have a Rt larger or equal to 1 (low- and middle-income countries) because the amount of potential harm by COVID in the home country isn't justified to keep vaccines. Moreover, "the marginal benefit of additional doses of vaccine in a country able to keep Rt below 1 generally will pale in comparison to the potential benefits to countries whose Rt remains above 1" (Emanuel et al., 2020, p.1). To provide numbers, the May 2021 Rt values in a few US states are provided: 0.89 in California, 0.65 in New York, and 0.85 in Illinois, Indiana, and Wisconsin (COVID Act Now, 2021). Although the data on Rt values in India are limited, generally for LMICs, it tends to range from 1.25-2.0 based on how strict the preventative measures are (Hodgkinson et al., 2021, p.33). Overall, vaccines should be prioritized based on COVID-burden; there should be a balance between vaccinating a country's own citizens and helping protect other nations who are suffering more because of the virus. Equally important, as a larger percentage of a country becomes vaccinated, more efforts should be focused on outreach and education as opposed to securing more doses. When making global vaccine allocation frameworks, policymakers should consider the ethical viewpoints presented in this paper and the tradeoffs for both decisions.

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