

The Dangers of a Unilateral Race to a Vaccine
Vaccine Nationalism Threatens the World's Most Vulnerable

By: Alice Hickson, Lilly Blumenthal, Emilia Charno, Gabe Reyes, Marley Hillman

Introduction to our Issue Guide

Since the first outbreak, governments across the globe have failed to unite in the fight against Coronavirus. Nowhere is this more apparent than in the race to develop a vaccine. Rather than consolidate efforts, many countries have disengaged from multilateral efforts and strike out on their own. The United States and Europe are placing advance orders for hundreds of millions of doses of successful vaccines, leaving little for poorer parts of the world. For example, the United Kingdom has pre-ordered enough vaccines for each of its citizens to get vaccinated five times over (Airfinity). This disparity extends to vaccine manufacturing as well, mostly occurring in and funded by the United States and the United Kingdom. Little is known about these funding deals and if terms have been added to them. Once a vaccine is approved for distribution, a massive global demand will overwhelm a limited supply. Scientists long warned that a devastating pandemic was likely to hit in the near future, yet the international community has not put in place a mechanism to ensure equitable access to a pandemic vaccine. What has emerged is the failure of the international community to rally support for a campaign to secure vaccines for low- and middle-income countries (LMICs). This begs the question of whether we, as a global community, can overcome the COVID-19 pandemic if not acting as a coordinated unit. To address these questions we have organized concerns into the following categories: Addressing the Issue of Effectively Distributing the Vaccine (1), Addressing Current and Historic Inequity in the International Healthcare System (2), Addressing Concerns About Future Health, Security, & Stability (3), and Addressing Concerns About the Safety of “Myself” and/or “Loved Ones” (4).

Status of Stakeholders Involved

The forces of vaccine nationalism are winning out. Trump announced the United States would not participate in the Covid-19 Vaccines Global Access (COVAX) Facility, a global effort to help develop and distribute a coronavirus vaccine backed by Gavi, CEPI, and the World Health Organization, an effort that over 170 countries are in talks to sign onto and is backed by Germany, Japan and the European Commission. Under COVAX, wealthy nations would need to contribute around \$18 billion in purchases for about a dozen experimental vaccines, with the aim to ensure first access for the world’s most vulnerable. One billion vaccines would be allocated to LMICs and cost these regions little or nothing. Instead, the U.S. government has signed deals worth more than \$6 billion with several vaccine companies as part of Operation Warp Speed, which aims to provide the U.S. population with vaccines by January 2021. Following the U.S. example, many other countries are pursuing unilateral plans, focused on producing a vaccine for priority use or buying up potential vaccines from other nations. Europe’s Inclusive Vaccines Alliance, formed by France, Germany, Italy, and the Netherlands, has signed a deal to buy 400 million doses of AstraZeneca’s vaccine for use in EU member states.

Option 1	Actions	Drawbacks
<p data-bbox="201 281 506 386"><i>Addressing the Issue of Effectively Distributing the Vaccine</i></p> <p data-bbox="201 428 529 1121">When the first vaccine is approved a staggering global need will confront limited supplies. People around the world - from disease control experts to healthcare workers, to ordinary citizens - have expressed concerns regarding how to fairly distribute such an in-demand vaccine to the world population. We view this issue as a vital step in order to avoid international chaos. In order to avoid such a scenario, we propose the following action steps.</p>	<p data-bbox="573 281 943 680">Create a uniform strategy to save the most lives and slow transmission the fastest. Health experts suggest the first shots should be given to health care workers around the world, then people at a higher risk of severe disease, then those in areas where the disease is spreading rapidly, and finally, the rest of us.</p>	<p data-bbox="987 281 1419 751">It will be difficult to create a uniform strategy that accounts for all of the biases in the healthcare system. Also, we will have to reconcile with the paradox of giving countries with rising cases and deaths a vaccine when they may also be the ones that had the most relaxed restrictions; in other words, these countries would essentially be being rewarded for taking the virus less seriously than others.</p>
	<p data-bbox="573 785 963 1696">The World Health Organization, in addition to other international governing bodies and organizations should set up a system to accelerate and equitably distribute vaccines. This system would invest in many different vaccines, instead of just a few, and involve an alliance of all countries signed onto it to ensure early access when a successful vaccine becomes available. The early access would distribute the same percentage of vaccines to each country, and the individual country would then decide how to allocate them fairly. Hopefully, this would encourage rich countries to sign on by reducing their own risk that they're investing in the wrong vaccine candidates.</p>	<p data-bbox="987 785 1419 1583">It will be difficult to avoid a scenario where money, power and national interests to protect one's own citizens win out. The United States and Europe are already placing advance orders for hundreds of millions of doses of successful vaccines, which will leave little for poorer parts of the world. In addition, how can international bodies truly incentivize rich countries to sign on to these agreements. Also, if countries did sign on, only a percentage of their population would receive a vaccine in the early stages, and a similar problem could compound on a micro-sale; the wealthy would win out and poorer and/or more at-risk individuals would still be left behind.</p>
	<p data-bbox="573 1734 927 1877">International governing bodies such as the United Nations and G-20 should create an agreement among</p>	<p data-bbox="987 1734 1406 1877">It will be difficult to ensure a political commitment from the highest levels of government, as well as vaccine producers. Also,</p>

	countries and vaccine producers to source their vaccines in different locations, so that no single country can stop them from being exported.	how can international governing bodies incentivize the vaccine producers to do this monetarily wise.
Option 2	Actions	Drawbacks
<p><i>Addressing Current and Historic Inequity in the International Healthcare System</i></p> <p>Centuries of colonialism, globalization, and capitalism have created massive inequity between countries, including within the realm of healthcare. COVID has put these issues on full display. For example, French doctors had suggested testing potential COVID treatments in Africa, which the WHO Director-General criticized as a “colonial mentality.”</p> <p>Countries in Africa, a continent historically exploited by colonialist and imperialist forces, have actually responded quite effectively to COVID.</p> <p>A global pandemic requires a global response. If one country responds effectively to COVID, but others do not, international exchanges of disease will still occur and that one country will need to</p>	<p>Vaccines should be made available at fair and affordable prices to all countries in order to ensure full participation in an international response to COVID.</p>	<p>Corporations producing the vaccine may be disincentivized by the possibility of earning less profits.</p>
	<p>In terms of quantity, vaccines could initially be distributed between nations according to the severity of the nation’s COVID outbreak relative to their population. Assuming that there is scarcity with regards to the vaccine, later distributions could focus on redirecting resources to countries that display greater need later on.</p>	<p>A country’s need for vaccines may not match its willingness to utilize vaccines. For example, the vast majority of the United States are currently experiencing uncontrolled outbreak levels of COVID, but anti-vaccine sentiment is not uncommon within the US population, so the US may not be willing to fully utilize the vaccines that they would be given.</p>
	<p>The above action might require approaching vaccine distribution via a command economy, where international governing bodies determine production and distribution rather than leaving it up to the free market to decide (which historically and currently creates inequity between groups).</p>	<p>The most common examples of command economies are communist states, which leads many people to fear any economic system that is not a totally free market. It is difficult to convince populations steeped in anti-communist sentiment that some governmental control of what could also be distributed via a free market might actually be a good thing.</p>

<p>continue to combat the pandemic. Not only is vaccine nationalism the morally incorrect thing to do on the global stage, but it is also counterproductive to the effort to end COVID.</p>		
<p>Option 3</p>	<p>Actions</p>	<p>Drawbacks</p>
<p><i>Addressing Concerns About Future Health, Security, & Stability</i></p> <p>COVID-19 vaccines would help many to have a future at all, in the sense of being able to literally stay alive. However, nationalism not only hinders the ability of many to access vaccines, but to other methods of enabling long-term security and stability for those most impacted by the epidemic both domestically and abroad. The following actions are potential ways to complement equitable COVID vaccine distribution alongside other ways of securing health, security, and stability amidst the compounded social, economic, and health crises exacerbated by the global pandemic.</p>	<p>In addition to moving toward transnational, collaborative efforts to create and distribute COVID vaccines under global organizations like the UN, utilize these global orgs to push nations away from nationalistic politics and profit-motivated or corporate-controlled distribution toward state-controlled creation and distribution. This will disallow the profiting off of a vaccine that could save many lives and focus efforts on securing public health and building herd immunization globally.</p> <p>An alternative to the above action is to set price caps on vaccines, and/or imposing heavy taxation on the profits (not creation) garnered from vaccine distribution/sales by corporations who do not abide by price caps. Price caps would help ensure that vaccines are accessible to more people and imposing taxation would pressure corporations to either follow price caps or would create money that could be</p>	<p>We operate under global capitalism and so many governments might be hesitant to assume creation and distribution of vaccines. In addition, many nations are becoming increasingly nationalistic, and so creating networks away from the purview fascist governments, i.e. building solidarity and connections between grassroots activists and organizers, will play a major part in making this action a possibility.</p> <p>Various nations may have political conditions that will disallow such price caps or taxation. However, redirecting potential profits from vaccine distribution could help alleviate some of the conditions (poverty, homelessness, food insecurity) exacerbated by the pandemic.</p>

<p>Ensuring a more equitable distribution of COVID-19 vaccines throughout wealthy and poor countries means lower-risk populations will not receive the vaccine in the first wave. These actions explain ways to keep yourself as well as the ones you love safe when you or they do not receive a vaccine during the initial wave.</p>	<p>suggest that they concentrate on educating adults by creating approachable and digestible curriculum that explains the ways in which <i>we all</i> can remain safe from the help of PPE and social distancing. Additionally, I suggest that local government officials hold regular town halls with health care providers. This way, people have access to health care works, are able to ask questions, and understand the criticality in vaccinating front line workers and at-risk individuals first.</p>	<p>have busy schedules. Therefore, the healthcare providers may feel overworked.</p>
	<p>For smaller children, it is important that teachers lead by example (wearing masks, social distancing) and teach COVID-19 safety precautions through stories, class discussion, and even a project. By doing this, children will grow practice COVID-19 safety procedures out of habit.</p>	<p>Concentrating on educating children on COVID-19 will reduce school time for other educational and extra curricular topics.</p>
	<p>To distribute PPE equitably and ensure people have the materials they need, I suggest that counties create a hub and spoke model. The hub will be the county health care officials, and the spokes will be COVID-19 safety ambassadors at every neighborhood school. There will be an adult ambassador coupled with a student team. Through conversations, the adults will understand what may be missing in the</p>	<p>This requires that the county spend a large sum of its budget towards PPE. Therefore, it will have less money and resources to go towards other things, like parks and recreational centers.</p>

	<p>children’s day to day COVID-19 precautions, and how the county can improve its distribution of materials to the neighborhoods.</p>	
	<p>People often think about the safety of their loved ones and themselves before the safety of others abroad. To reinforce the message that safety abroad is also safety at home, I suggest that the U.S. government depict the extent at which people travel in and out of the U.S. To do this, I suggest that the government issue helpful graphics, statistics, and advertisements. This will help the greater populations (who are lower-risk) understand that their own safety partially relies on the safety of others- at home and abroad.</p>	<p>This requires that the U.S. government commits to distributing the COVID-19 vaccine abroad. Therefore, there will be fewer vaccinated individuals in the U.S. The government must financially commit to sustaining social distancing, working from home, and distribution of PPE is required. This investment may reduce spending in other federal areas (hopefully the military.)</p>

Conclusion

Our inquiry and concern gathering lie at the intersection of objective scientific truth and questions of morality. From this project and our learning in CVS 150, it is clear that as soon as a COVID-19 vaccine is approved for mass use, global need will collide with limited global supply. As highlighted by the concerns we have gathered above, it is crucial to advocate for the fair distribution of vaccines across the world. The first option (*Addressing the Issue of Effectively Distributing the Vaccine*) addresses institutional approaches to handling the pandemic, through such channels as the World Health Organization and United Nations. The second option (*Addressing Current and Historic Inequity in the International Healthcare System*) asks citizens and scientists alike to recognize colonial legacies of oppression and respond with equity-centering approaches in real time. The third option (*Addressing Concerns About Future Health, Security, & Stability*) promotes long-term security, employing mutual aid networks and setting price caps for vaccines. Finally, the fourth option (*Addressing Concerns About the Safety of “Myself” and/or “Loved Ones”*) prioritizes health and essential workers, regardless of country or wealth status, above low-risk populations for vaccination and suggests approaches like community education, ambassadorship, and PPE dissemination. Ultimately, we will only stem the spread of COVID-19 as an international community when we act with objectivity and empathy to prioritize at-risk populations in all countries. This is the simple and ultimate takeaway of our concern gathering.

Vaccine Nationalism Concern Gathering

Our concern gathering involved speaking with a diverse group of stakeholders and asking them the following questions:

- 1. What concerns you when you think about vaccine nationalism? What bothers you most, personally?*
- 2. What concerns do you hear friends and family members--or people you don't know well--talking about when it comes to vaccine nationalism?*

Over Zoom, we spoke with two physicians and one medical student. They provided the following concerns.

Children's physician in Atlanta, GA: *Care for the Vulnerable, Minimizing harm to others*

- “My concern is that people who have the most money, even though they are at lower risk, will be vaccinated before higher risk people- perhaps even in our own country. I am scared that doctors in lower income countries will die/be at risk, while people in Europe and the U.S. use the vaccine. Even if we delegate x amount of dollars to these countries for vaccines, will they be distributed fairly, due to corruption? How do we decide which countries get them?”

Physician in Washington, D.C.: *Having a secure future, Security of the group against outsiders, Safety of my person, Self-reliance*

- “I just don't think we're in a position to give significant resources to other countries yet. We have no control over the virus here. We need to take care of ourselves first. If I have three family/friends sick in the hospital with covid, and I pay a certain amount of resources to help them recover, I don't want those resources going anywhere else besides those three people. You have to control it here before you take away resources from Americans and give it to third world countries. We have the most cases in the world and it's not close. And as someone who routinely puts himself at risk by taking care of covid patients it would really piss me off to see us give away resources we so desperately need. If you do not vaccinate low-risk individuals, you are putting people at risk.”

Medical student Boston, MA: *Care for the Vulnerable, Minimizing harm to others, Having a Secure Future*

- “I hear you Daniel (Physician in D.C.) but if the question is health workers in Kenya and High risk individuals in Kenya over low risk Americans (who have been so incredibly irresponsible- not really sure that it matters but it makes me angry) I give to those in the other countries simply bc we're talking about low risk Americans vs high risk in other countries. I agree with Daniel if we're talking about high or medium risk Americans. But

I don't think a healthy 18 yo American should get a vaccine before a 70 yo doctor in Peru or Kenya. Also long term thinking about nations' economic standing, these poorer countries will have much longer recovery and may never recover if not given the vaccine. Should those low risk Americans who could just wear a mask get a vaccine over people in other countries?"

Johns Hopkins University Biomedical Engineer Graduate, Lives in Washington, D.C.: *Care for the Vulnerable, Minimizing harm to others, Being treated fairly by others, Order in the group, Having a secure future*

- “The idea of vaccines and medicines operating under free market regulations has never sat well with me. While I realize that a large portion of the United States may disagree with that, it's important to acknowledge that my thoughts regarding vaccine nationalism are molded by that guiding principle. Countries like the United States have an enormous amount of leverage over other countries with smaller economies. Even though the United States is an important player in international trade, that should not guarantee them, or other countries with large economies, first dibs on any successful vaccine. Given that COVID has affected nearly every country in the world and that vaccines will be in limited supply for the short term future, I personally believe that an independent organization comprised of several governments and international organizations (UN, WHO, etc.) should discuss how to successfully distribute a vaccine; one important topic this organization would discuss would be how to mitigate the effects of “vaccine nationalism.” Countries with severe case counts should be prioritized as that would most likely save the most lives. However, it is important to consider that countries with rising cases and deaths may also be the ones that had the most relaxed restrictions; in other words, these countries would essentially be being rewarded for taking the virus less seriously than others. Given the length of time I've spent thinking about this topic, I'm not sure how to work around this paradox, but it is something that my proposed organization would take into account. Obviously, these are some very preliminary thoughts of mine but hopefully this helps in some way.”

Certified Pediatric Nurse Practitioner in New York, NY: *Care for the vulnerable, having a secure future, self-reliance*

- My concern as a healthcare provider is that the same rigorous standard applied to previous vaccines both nationally and internationally will somehow be rationalized to be compromised due to a political rush by multiple governments to want to be the first. For example, currently China is reporting a vaccine that they have been using with a high measure of success despite the fact that the same rigorous vaccine data (randomized, double blind control studies) have not been reported. The gold standard to bring any

vaccine to market is to have safe phase one, two, and three clinical trials that can produce a safe and acceptable odds ratio, similar to the profile of a similar vaccine. I'm also concerned that governments across our country and the world still are the main securers to access to universal vaccines. Until governments are not partially biased by vaccine makers in terms of bringing the vaccine to market we will not have equal access to quality vaccines. Multinational pharmaceutical companies make more money in richer countries, as they can promote and upcharge for the vaccine. A great example of this for future research is the oral polio vaccine vs. inactive, injectable polio vaccine. Of course, there are also inequities based upon the access to biomedical supplies necessary for vaccine execution across countries (cotton swabs, needles, even healthcare workers). As far as what concerns those around me, I've heard similar concerns about vaccine safety and unequal access from family and friends.

College Student in Los Angeles, CA: *Care for the vulnerable, Minimizing harm to others, Being treated fairly by others, Having a Secure Future*

- I'm concerned about how a vaccine will be delivered safely to a large group of people. As a college student and low-risk individual this is a hard thing to think about as well. I know that I should not be high priority since there are other people--the elderly, frontline and essential workers, immune-compromised people--who should be vaccinated before me. That doesn't stop me from worrying about my and my friends' health. Across countries, I would guess the United States and other wealthy nations will have access to vaccines in large quantities. It may not be that poorer countries can't access the vaccines but that they can't access enough of them. This idea really bothers me. We are living through a pandemic, which literally refers to the whole world. Travel across borders is so common these days that our world will not be safe and COVID-free until all countries have the resources to implement a vaccine. To be honest, I hear friends and family talking more about personal safety within the US than fairness about distribution across countries. I think the current situation of COVID in our country sometimes makes it hard to think beyond the stressful day-to-day. I definitely think that it's important to do so.

College Graduate in London, England: *Care for the vulnerable, Minimizing harm to others, Self-reliance, Being treated fairly by others*

- I was actually thinking about this a lot the other day. Like it really encapsulates an aspect of capitalism that is somewhat troubling. My perspective is obviously based in England which is a little different but I was thinking about how when a successful vaccine is created, it will obviously go to the highest bidder so that the labs / scientists / researchers / pharma companies get more money because otherwise why would they be motivated to work on a vaccine if it's just going to be disseminated freely when they COULD get more money for it to be stockpiled by a certain country. But then pharma companies have

sooooo much money should there be a cap on how much they can spend/obtain/if they spend over a certain amount some of it has to be distributed fairly to a global audience? How do they decide who gets it? My conservative (in England) friends/colleagues would probably say that Europe/America have some of the main labs working on the vaccine, so why shouldn't they get it first – but then I feel that is a somewhat unethical view because the reason other countries don't have the resources to have labs making the vaccine is because of big countries monopolizing those fields/areas of trade.