**Uneven power dynamics must be levelled in COVID-19 vaccines access and distribution**

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**ABSTRACT**

COVID-19 is one of the major global health threats of the 21st century, causing unprecedented humanitarian crises worldwide. Despite concerted efforts to curb the spread of the disease, the pandemic continues to strain healthcare systems globally and a safe, highly effective, and globally acceptable and equitable vaccination program, together with pre-existing precautionary measures, is essential to effectively contain the outbreak. We commented on the need to level any uneven power dynamics in COVID-19 vaccines access and distribution. The COVID-19 vaccines distribution must not allow for sovereignty which is tightly linked to historical imbalances in power and resources to result into discrimination between rich and poor countries. Poor countries must be supported in ensuring access to COVID-19 vaccines by levelling the power dynamics that perpetuate inequality and fuel inequity. We must ensure equity, fairness and transparency in COVID-19 vaccines distribution and gain public trust in COVID-19 vaccines through participatory community engagement. COVID-19 vaccines distribution and access must be equitable and not politicized.

**1. Commentary**

Since the beginning of the COVID-19 outbreak, it has spread like wildfire over 200 countries in the world, claiming casualties, in morbidities and mortalities, mangling economic growth and stifling productivities at a rate unprecedented in recent histories, with it being subsequently declared a pandemic by the World Health Organization (WHO) on March 11, 2020[1–3]. As at November 30, 2020, over 60 million cases have been reported with about 1 million deaths, with spike in the number of cases and hence a second wave being reported in many countries including the United States of America, Canada and many European countries [4]. Despite concerted efforts to curb the spread of the disease, the pandemic continues to strain healthcare systems globally [5–7]. The unprecedented nature of COVID-19 presents therapeutic challenges implying that no specific treatment has been reinstated for the management of the disease and thus necessitating the use of empirical approaches [1]. It is clear that a safe, highly effective and globally acceptable vaccination program may be a long-term solution against this pandemic. However, a COVID-19 vaccine that is not equitable in terms of distribution and access poses a further challenge in effective curbing of the pandemic. We commented on the need to level any uneven power dynamics in COVID-19 vaccine access and distribution.

The impact and importance of vaccines in modern medicine cannot be overemphasized. Vaccines have played immense roles in the total eradication of grave illnesses and in curtailing and curbing the spread and reducing the morbidity and mortality of many diseases and as such, the prognosis of a safe and effective COVID-19 vaccine can only be positive [8]. There are presently, numerous efforts regarding the development of a safe and effective COVID-19 vaccine. According to WHO, there are currently about 210 COVID-19 vaccine candidates at some stage of development [9]. Out of these, at least 50 candidates are in clinical evaluation. The others are currently in Phase I/II and are set to enter Phase III in the coming months. About 10 of these are in Phase III clinical trials. Worthy of note are the mRNA-1273 (Moderna), BNT162b2 (Pfizer & BioNTech) Gam-COVID-Vac (Sputnik V) (Gamaleya Scientific Research Institute) and the ChAdOx1 nCov-2019 (University of Oxford/AstraZeneca) vaccines who have all shown some level of efficacy against the Phase III clinical trials [9].

As with many other efforts against the pandemic, the research into the development of vaccines is one that has undoubtedly been resource-consuming and quite sadly, not spared from political interference. For example, the United States has been able to fund and fast-track the development of vaccines, securing a large number of doses of the vaccine for its people should it be approved[10]. Similar efforts have emerged in Europe with the European commission having sanctioned contracts with six pharmaceutical firms including a deal with Moderna for 80 million doses and an obligation to supply 80 million more[11]. Seeing as it may be realistically impossible for the production of successful vaccine candidates to meet up with the global demand, efforts to secure the first doses produced have largely been nationalistic with every country looking for means to secure the vaccines for their populations. It therefore raises the concern that even within the countries that manage to secure the first few doses of the vaccine, distribution which should prioritize high-risk groups, may succumb to political forces as it has on the global scale. Having described the exemplary efforts directed towards COVID-19 vaccine development and the concurrent political influences it is subjected to, a robust discourse about equitable distribution, affordability and accessibility of the vaccine to every individual regardless of political, racial or cultural background, becomes paramount. Despite indirect sovereign and imperialist low tones, collaborations between academia and industry in developing COVID-19 vaccine may appear beneficial. These openly political partnerships and efforts play into tensions among poor countries and ultimately prioritize rich countries over poor countries. The COVID-19 vaccine distribution must not allow for sovereignty which is tightly linked to historical imbalances in power and resources resulting into discrimination between rich and poor countries.

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It is worthy of note that deciding the appropriate approach to vaccine distribution requires a critical appraisal of the nature of the disease itself. It has been proven that the disease is most pathogenic in individuals with compromised immune systems and individuals living with other diseases, groups which have thus been classified as the high-risk groups. Individuals in this category include those with immunosuppressive illnesses like diabetes, cancers, HIV/AIDS, malnutrition, and the aged people. Health workers and primary caregivers are also a category of people with a higher index of susceptibility to the disease. In the same vein, individuals in lower income countries that are ravaged by war and conflicts, shrivelled by poverty and co-morbid epidemics, and could not conform with physical distancing and lockdown protocols constitute a significant number of vulnerable people. In an ominous twist, it could be the case that in the absence of conscious efforts towards equitable distribution of vaccines, the groups of people who may have the most access to the vaccines and the demography classified as high-risk groups may not overlap enough for a significant impact on the progression of the disease on the global scale. Ergo, equity, and accessibility begin with coverage of individuals at higher risks of the infection. This further highlights that access to COVID-19 vaccine should be determined by need over national wealth, power, and international influence.

For a disease that has claimed millions of lives and rendered millions incapacitated, it is expedient that vaccination, the utmost way-out from the debilitating effects of the virus, becomes accessible to and is equitably distributed among willing countries and individuals. Additionally, we must note that herd immunity—a concept used to describe protection of unvaccinated individuals by reduction of the number of people who can transmit the diseases and thus curtail the rate of spread of infection can only be achieved through equitable vaccine distribution. Failure to drive intentional efforts towards this, will create a world of bipartite healthcare coverage: one part favoured and the other part marginalized, constituting a vacant act of injustice and inequity of health coverage. This can only mean that we can never truly eradicate the virus and deaths will continue to soar in the marginalized parts of the world.

Low- and middle-income countries (LMICs) have always been at the bottom list of technological and medical advancements including vaccination and drugs. Unfortunate examples include the massive deaths from HIV/AIDS between 1997 and 2007 in Africa, a jarring record of 12 million mortalities which ravaged the continent [12]. Whereas developed countries had made abundantly available the drugs for the disease, African countries continued to succumb to the virus. Similar incidence has been observed during the 2009 swine-flu epidemic [12]. Rich countries procured the vaccine for the illness at surplus rates while the poorer countries were wanting. Unlike the higher income countries who have been able to enforce lockdowns and initiate physical distancing protocols, LMICs have barely been able to do this, and therefore breeding a swathing population of more vulnerable individuals. Moreover, LMIC countries have deplorable infrastructures including bad roads and housing, leading to an enormous number of difficult-to-reach population. In spite of these and even though their financial contributions to vaccine development have been limited, the world must carry them along in vaccination protocols towards a common enemy, a no-respecter of colony or social backgrounds. Poor countries must be supported in ensuring access to COVID-19 vaccine by levelling the power dynamics that perpetuate inequality and fuel injustice [13].

Vaccine hesitancy is another factor that could militate against equitable vaccine distribution. Vaccine hesitancy is “the reluctance or refusal to use vaccines despite the availability of vaccines”, it was classified as one of the top ten threats to global health by the world health organization in 2019 [14]. A growing number of people have a preconceived idea of outright refusal of the vaccine, borne out of misinformation or dogma, when it becomes available. The belief that the vaccine introduces a chip that commandeers people’s autonomy by the government continues to be foreboding. In conjunction with dogmatic anti-vaxers and potential uneven power dynamics, vaccine hesitancy becomes a considerable challenge to vaccine distribution. To combat this, it is paramount to spread information and educate people in as many ways as possible about the importance of vaccines and fight misinformation and conspiracy theories with evidence-based information.

2. Conclusion

As unprecedented as the COVID-19 pandemic is and despite the daunting challenges it has posed, numerous remarkable feats have been achieved in curbing the spread and eradicating the disease, including but not limited to the current efforts for an effective COVID-19 vaccine, a feat achieved in just about 10 months, compared to the average time span for the development of vaccines even in the recent past which takes nothing short of a decade, indeed remarkable it is. This remarkable achievement, however, must not end there, COVID-19 vaccination programmes need to be global and multinational and prioritize the vulnerable and marginalized populations to fully curb this pandemic. We must ensure equity, fairness and transparency in COVID-19 vaccines distribution and gain public trust in COVID-19 vaccines through participatory community engagement. A reliable supply chain must be established to ensure timely and adequate tracking of vaccine deliveries to even the most remote part of the world. The healthcare workforce must be reinforced and adequately prepared to overcome challenges faced in vaccine distribution. COVID-19 vaccine distribution and access must be equitable and not politicized.

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Competing interests

The authors declared no competing interests.

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