

# COVID-19 VACCINE HESITANCY PLAYS A ROLE IN THE LOW NUMBERS OF VACCINE ADMINISTERED IN LOW-INCOME COUNTRIES

Vaccination is one of the primary prevention methods and the most cost-effective way of averting infectious diseases. However, despite vaccination being one of the greatest success stories of medicine, the World Health Organization (WHO) identified vaccine hesitancy, the unwillingness to be vaccinated despite the availability of vaccination programs, as one of the top ten threats to global health in 2019. Antivaccination is one of the issues affecting the success of measures to halt the current COVID-19 pandemic, as vaccine hesitancy regarding COVID-19 vaccines has been reported all over the world. Vaccine hesitancy is particularly prevalent among countries that have dispensed low numbers of COVID-19 vaccines.

In this article, we highlight how hesitancy and misinformation have slowed down COVID-19 vaccine uptake. This is a follow up to our article The small numbers of covid-19 vaccines administered in low-income countries indicate inequity in allocation and distribution published in <u>GFO issue 396</u> where we discussed the low numbers of COVID-19 vaccines administered in low-income countries.

## COVID-19 vaccines hesitancy among health care workers

Health care workers (HCWs) play a significant role in creating patient confidence by being a reliable source of vaccine information. Thus, COVID-19 vaccine acceptance among HCWs has a bearing on the uptake of the vaccines by the general population. However, in several countries there have been reports of COVID-19 vaccine hesitancy among HCWs even before the vaccines were made available. In a study conducted between 16 January 2021 and 15 February 2021, 60.7% of the 234 HCWs sampled in Ghana

indicated non-acceptance of COVID-19 vaccines. A similar finding was reported in a study conducted between 15-21 March 2021 among 600 medical students in <u>Uganda</u>. In this study, 62.7% of the medical students were unwilling to receive a COVID-19 vaccine. In both studies, the majority (64%) of those unwilling to accept a COVID-19 vaccine cited safety concerns.

In contrast, more HCWs from non-African countries expressed their willingness to be vaccinated against COVID-19 if the vaccines were made available. In <u>Saudi Arabia</u>, a study involving 1,512 HCWs conducted between 4-14 November 2020 revealed that only 12% were unwilling to have a COVID-19 vaccine. Multiple reasons, such as Inadequate data about the safety of the new vaccine and fear of developing side effects, were among those cited by 71.8% and 49.2% respectively of people unwilling to be vaccinated. In <u>Canada</u>, a study conducted among HCWs between 15-28 December 2020 found that only 19.1% of the 2,761 HCWs that participated in the study declined the COVID-19 vaccine. Most (82%) of those that declined were concerned because it was a new vaccine, 77% preferred other people to receive it first, while 74% felt they had inadequate information.

# COVID-19 vaccines hesitancy among the general population

COVID-19 vaccine hesitancy has been reported among the general population. In Ethiopia, a study conducted from February to March 2021 among 1,184 people revealed that 47.3% were unwilling to receive a COVID-19 vaccine. A study conducted between June and August 2020 among 1,228 Nigerians found that almost a half of them (48.8%) were unwilling to be vaccinated against COVID-19. They provided a number of reasons for refusing to be vaccinated, which included vaccine safety concerns (71%), being afraid that the vaccine would actually give them COVID-19 (62%), and 51% felt the vaccine was not effective. In the Democratic Republic of Congo (DRC), 44% of the 4,160 people sampled in a study conducted between 24 August 2020 and 8 September 2020 were unwilling to be vaccinated against COVID-19. This is because 61% did not trust the vaccine, 14% believed the vaccine was intended to kill Africans, while 6% believed the vaccine made people sterile. A study conducted among 4,136 Kenyans living in Kilifi, Kisumu, Nairobi, and Wajir Counties in February 2021 revealed that 61% expressed hesitancy regarding the COVID-19 vaccine. Those concerned about vaccine safety and its effectiveness were more likely to be unwilling to be vaccinated.

Some African countries fail to use COVID-19 vaccines before their expiration date

COVID-19 vaccine hesitancy is one of the reasons why some African countries have been unable to use their vaccines, resulting to their expiry and subsequent destruction or the vaccines being given to other countries. Malawi was the first African country to burn 19,610 expired AstraZeneca coronavirus vaccines it had received from the African Union. The country received 102,000 doses of the vaccines on 26 March and managed to use 80% of them; however, the remainder expired on 13 April. Similarly, South Sudan received AstraZeneca vaccines from the African Union 14 days prior to their expiration. The country was only able to vaccinate 2,000 HCWs and ended up destroying 60,000 doses which had expired. Apart from the short time required to use the vaccines before their expiration in both countries, conspiracy theories and misinformation played a part in people's vaccine hesitancy.

Early in March 2021, the <u>DRC received 1.7 million doses of AstraZeneca COVID-19 vaccines</u> from the COVID-19 Vaccines Global Access (COVAX) facility. However, the country paused the rollout of its vaccination plan following the suspension of the AstraZeneca vaccine in several European countries following reports of its association with blood clots. The DRC resumed dispensing the AstraZeneca COVID-19 vaccination in April 2021 following the vaccine's clearance by the European Medicines Agency. Since the DRC could not manage to dispense all the vaccines before their expiration in June, it returned1.3 million doses to the COVAX facility for distribution to other countries. As of 27 June 2021, the country had managed to dispense <u>59,443 COVID-19 vaccine doses</u>. Gaps in the DRC's health system, specifically in supply chain management due to poor transport networks, and vaccine hesitancy are to

blame for the country's low vaccination numbers.

Possibility of improved COVID-19 vaccine acceptance in Africa following a fast-growing third wave of the pandemic

Africa is facing the steepest COVID-19 surge in the current third wave that started on or around early May 2021. According to WHO, the first 48 days of the third wave saw a 21% increase in new COVID-19 cases when compared to the first 48 days of the second wave in Africa. There is potential for a greater acceptance of COVID-19 vaccines in Africa following increased reports of serious illness in the current third wave. Zimbabwe, where authorities were initially begging people to get vaccinated, has witnessed long queues in some vaccination centers of people seeking COVID-19 vaccines following a spike of new cases and the fear of the new variant reported first in South Africa.

## Strategies to overcome vaccine hesitancy

The use of a top-down approach to plan and implement a country's COVID-19 response, particularly vaccine roll out, is one of the contributing factors to vaccine rejection. Changing this strategy to adopt a bottom-up approach, where communities are at the center of the response, is a promising approach to counter vaccine hesitancy. This can be operationalized through mobilizing community stakeholders, such as religious, traditional and opinion leaders, community health volunteers, and community members, to educate them on the benefits of vaccination. This can be done at the grassroot levels by community-based organizations as well as community health workers. This strategy not only ensures community buy in but it also creates a sense of ownership of the COVID-19 response.

#### Conclusion

There is need for governments, particularly in low-income countries, to come up with targeted interventions to address vaccine hesitancy and improve vaccine confidence as part of their vaccination roll out plan.

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