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## Letter to the Editor

## Obstacles and Policy Measures Toward COVID-19 Vaccination: Creating a Sustainable Road Map for Malawi



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## ABSTRACT

The Coronavirus Disease 2019 (COVID-19) pandemic is a public health threat for Malawi which is facing several challenges concurrently including disease burden; inadequate finances; illiteracy; and public mistrust in government. In this pandemic, vaccines are the most reliable and cost-effective public health intervention, and the Malawian government has instituted an action plan which includes prioritizing the vaccination of traditional and religious leaders, increased vaccination sites to include workplaces and shopping malls, and health promotion. However, there is still considerable hesitancy around the use of the available vaccines in Malawi. In this paper, we explore the multiple interrelated factors driving COVID-19 vaccine hesitancy in Malawi. It is therefore recommended that the Malawian government embrace multicomponent and wide-ranging strategies to address COVID-19 vaccine hesitancy in the country. This includes reviving trust in national health authorities by offering population-specific, target-driven, and effective, transparent, and timely communication to its citizens and relevant stakeholders about the safety and efficacy of the COVID-19 vaccine.

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## 1. Commentary

The COVID-19 pandemic is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Since December 2019, when the virus was first discovered in Wuhan, China, it has claimed over 3.3 million lives worldwide (World Health Organization, 2021). On 14 February 2020, Egypt's Health Ministry confirmed African's first case. According to the Novel coronavirus information center, It reached Malawi on 2 April 2020 and has since spread to all districts of Malawi. As of 10 May 2021, Malawi had 34,180 confirmed cases with 1,153 deaths and a Case Fatality Rate of 3.37% (Ministry of Health Malawi, 2021). The increasing disease burden in Sub-Saharan Africa is causing further challenges to the health care systems, however, COVID-19, poses major threats (Lucero-Prisno et al., 2020).

Malawi is a landlocked country on the Great African Rift Valley and lies on the western shores of Lake Malawi. It is bordered by Tanzania to the north, Zambia to the west, and Mozambique to the east, south, and west. The 2018 Malawian population and housing census estimated a population of 18.147 million. The country's healthcare system is organized into four levels – community, primary, secondary and tertiary. According to the World Health Organization (WHO), Malawi has high levels of child and adulthood mortality rates, and a high prevalence of diseases such as tuberculosis, malaria, HIV/AIDS, and other tropical diseases.

With a total fertility rate of 4.4, Malawi has the highest population densities in sub-Saharan Africa. Other challenges include inadequate finances to support poverty reduction programs; high levels of illiteracy; and reduced capacity in institutions. The United Nations Children's Emergency Fund (UNICEF, 2021) report shows the highest toll of COVID-19 pandemic affects rural masses because of shunning of health services by communities amidst rumors of the pandemic's prevalence and associated dangers in health centers. This could be projected to impact the relevant efforts to curb the pandemic in the country.

Trust amongst stakeholders, the service providers and service users, and other institutional partners across the board, is vital for the proper functioning and utilization of a health system (Rowe and Calnan, 2006). Historical mistrust of government and public health bodies is a contributory factor to vaccine hesitancy (Razai et al., 2021). The Malawi health sector is challenged by public mistrust in government. Various public health measures were put in place to forestall the spread-frequent hand washing, social distancing, compulsory use of face masks in public as well as the closure of schools (Gadabu, 2020). However, the population's mistrust of the government hampered its mitigation efforts which posed a huge concern for Malawi in navigating the pandemic (Schrad, 2021). In Malawi, the political wrangles secondary to a February 2020 ruling by Malawian courts that ruled for a rerun of presidential elections in July 2020 due to irregularities observed in the May 2019 elections further compounded this public mistrust in the Malawian government (Masina, 2020).

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The COVID-19 pandemic in Malawi suggests that non-uptake and compliance to precautionary measures, political instability as well as public mistrust can disrupt the public health systems; even more advanced economies like the USA suffer the same (Govender and Poku, 2020). In a country with an HIV prevalence of 9.2% and many others battling with infectious diseases, this might render noncompliant patients susceptible to comorbid infections, most commonly TB, pneumonia, meningitis. However, studies have shown that the global efforts to ameliorate the effects of the pandemic and to reduce its health and socio-economic impact rely on preventive efforts (Nicola et al., 2020).

Vaccination is a crucial public health intervention to reduce the effects of a pandemic (Conte et al., 2020). Many vaccines have been approved for emergency use in addition to more than 66 vaccine candidates currently in clinical trials (World Health Organization, 2021). According to the World Health Organization, as the rollout of Covid-19 vaccines Global Access (COVAX) vaccines accelerated, the first campaigns in Africa using COVAX doses began in Ghana and Côte d'Ivoire. On 5 March 2021, Malawi received her first shipment of 360,000 doses of the Oxford-AstraZeneca Covid-19 vaccine from COVAX. For the Malawian government, no one is safe until everyone is safe and everyone, therefore, the government prioritizes the vaccination of traditional and religious leaders, as a way of encouraging their communities to get vaccinated (The Global Alliance for Vaccines and Immunizations, 2021).

Although Malawi aims to vaccinate nearly 11 million of its population of 18.147 million, as of April 14th, only 300,000 people have so far been vaccinated (World Health Organization, 2021). The Ministry of Health in their efforts increased vaccination sites to include workplaces and shopping malls to reach as many people as possible. Conversely, In April 2021, about 16,400 of the 102,000 doses of covid-19 vaccines donated by the African Union (AU) to the Malawian government were not used and expired (African News, 2021). This prompted the government to destroy the expired vaccines which resulted in apathy among the rural dwellers in taking the vaccine. Besides, in the earlier vaccination process, turnout was high, however as misinformation regarding the administration of out-of-date doses started to circulate, hesitancy increased. Moreover, others hesitated because they needed more time to understand how the vaccine works.

However, the Government of Malawi has set out a Health Sector Strategic Plan II (2017–2022), one of the goals is to ensure the highest quality of health for the Malawian citizens through nationwide vaccination programs. Again, the success of a vaccination program lies in the level of acceptance, which may serve as a hurdle for the people of Malawi (Coustasse et al., 2021; Schoch-Spana et al., 2020).

Vaccine hesitancy, according to the Strategic Advisory Group of Experts on Immunization (SAGE, 2014), was defined as: “delay in acceptance or refusal of vaccination despite the availability of vaccination services”. WHO has listed vaccine hesitancy as one of the top ten threats to health and well-being in 2019 (World Health Organization, 2019). Several factors affect the attitude towards acceptance of vaccination, including confidence, convenience, and complacency (MacDonald, 2015). Confidence is defined as the trust in the safety and effectiveness of the vaccine, trust in the delivery system as the healthcare system, and trust in the policymakers (French et al., 2020). Convenience entails the availability, affordability, and delivery of vaccines in a comfortable context (MacDonald, 2015). While Complacency denotes the low perception of the disease risk; hence, vaccination is deemed unnecessary (French et al., 2020).

Vaccine hesitancy is driven by a multitude of cultural, social, historical, political, and individual factors such as emotions, values, risk perceptions, knowledge, or belief (Larson et al., 2014). Also, new studies show that the introduction of new vaccines generates

more hesitancy (Dubé et al., 2018). The recent Ebola vaccination experience in some African countries pointed out that the introduction of new vaccines as a crucial public health intervention strategy can be met with sociocultural, religious, and political resistance. Thus, resulting in the crippling of well-planned vaccination programs when uncertainties about vaccine safety and efficacy arise (Masumbuko Claude et al., 2019). Additionally, in Northern Nigeria, challenges of vaccine hesitancy are due to unmet needs, oral polio vaccine (OPV) safety, and political differences (Warigon et al., 2016). Conversely, in the United States, 50% of Americans said they are willing to take the vaccine, 30% are unsure, while 20% are refusing the vaccine (Neergaard and Fingerhut, 2021). Interestingly, Malawi is a country with multicultural patterns, an unstable political atmosphere, and mistrust which can undermine the efforts of rolling out the COVID-19 vaccine. It is, therefore, crucial to explore the factors militating against the acceptance of COVID-19 vaccines in Malawi.

The various recommendations of this current study could assist the government, stakeholders, and policymakers to undertake proactive and well-designed multifaceted strategies that build trust in the healthcare system while highlighting the importance of vaccination to the community and encouraging vaccine uptake and acceptance. Besides, it will ensure that the battle against the COVID-19 disease is won, thereby strengthening the country's health systems, which will thus be better positioned to further prepare and respond to future pandemics thereby boosting other health indicators in the country.

## 2. Recommendations

### 2.1. Building trust in the system

There is a need for the Malawian government to build trust in the community. Trust in government has been associated with adherence to recommended protective behaviors and the intention to accept vaccination regardless of what authorities did to manage the risk of infection (Van der Weerd et al., 2011). If the Malawian government is to be transparent in dealing with the present COVID-19 vaccine hesitancy, efforts should be directed at providing timely information about the vaccine, communicating openly, timely, and honestly with the public, substantiating claims, openness about what can be investigated, and accountability when things go wrong regarding the vaccine usage. Trust in healthcare professionals can also be utilized. Recognizing the roles of healthcare workers as trusted sources of information could reduce the perceptions of risk of covid-19 vaccines among people. Such communications can be made more effective by providing educational resources in multiple languages to enhance the relay of the necessary vaccine-related information to the less educated population in the country (Bish and Michie, 2010). Written messages directed at communities with low literacy levels should be designed using pictures or symbols that are easy to comprehend.

### 2.2. Utilizing a Dialogue-based approach

Government should also prioritize a dialogue-based approach as recommended by the World Health organizations (WHO). Community group engagement which includes the involvement of religious or traditional leaders, social mobilization, social media, and mass media will ensure culturally competent interventions that can also help reduce vaccine hesitancy (Hoppe and Eckert, 2011). Concerns arising from the suspicion of expired vaccines should be adequately addressed by disposing of any expired batch of vaccines to gain the trust of the people.

### 2.3. Improving health promotion

Moreover, a proactive and coordinated approach to health promotion will be vital in ensuring high levels of compliance to COVID-19 precautionary measures. Even though vaccines substantially reduce the chance of infection, fully vaccinated people are still in danger of contracting and spreading the covid-19. It is therefore recommended that the public health promotion department of the ministry of health continues to advocate through various channels of communication to the citizenry that both vaccinated and those that are yet to be vaccinated continue to adhere to preventive measures (use of face masks, social distance, wash hands) to avoid infecting people, especially vulnerable population, particularly in high spread communities.

### 3. Conclusion

The effectiveness of public health interventions is dependent on the behaviors of members of the general populace. This study shows that a network of factors determines COVID-19 vaccine hesitancy in Malawi, many of which coincide with one another. It is therefore pertinent that multicomponent and wide-ranging strategies be developed to address COVID-19 vaccine hesitancy in the country. Around the world, trust in a time of uncertainty and upheaval is essential for cooperation and ensuring the best possible health outcomes. To gain public trust in health programs, the Malawian government should ensure population-specific and target-driven effective and timely communication to its citizens and relevant stakeholders. This should pass through the trusted healthcare providers and the gatekeepers to the community-traditional rulers, religious leaders, and youth-led groups, whereby relevant, usable information regarding the importance, safety, and effectiveness of the COVID-19 vaccine is provided. Also, the interaction is fostered as a means to improve people's engagement in public health programs and to address the low-risk perception population. The above strategies, however, have implications both for current levels of vaccine acceptance and for future vaccines.

### Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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