Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

COVID-19 vaccine hesitancy in Africa: a call to action

Published Online
December 20, 2021
https://doi.org/10.1016/
S2214-109X(21)00563-5

In addition to low COVID-19 vaccine coverage in Africa due to vaccine nationalism and vaccine diplomacy, the gradual effort to distribute COVID-19 vaccines to low-income and middle-income countries (LMICs) is threatened by vaccine hesitancy. In Africa in particular, the low vaccine coverage[1] and the ubiquitous vaccine hesitancy in a concerning proportion of the population undermine efforts to fight the COVID-19 pandemic. We advocate for humane, culturally relevant, and rapid public health action to address these issues.

Vaccine hesitancy in LMICs is due to a dearth of knowledge about the fact that vaccines are the most effective public health interventions, and have reduced significantly the burden, morbidity, and mortality of communicable diseases. There are also historical, structural, and other systemic dynamics that underpin vaccine hesitancy among people who recognise the public health importance of immunisation.[2] A history of colonial medical and vaccine research abuse in Africa diminishes trust in current vaccines. Additionally, an absence of nuanced and culturally informed understandings of vaccine hesitancy and misinformation are major contributing factors. Vaccine hesitancy in Africa is also linked to the duplicity of the global community. Although the global community recognises the need for global vaccine coverage to end the COVID-19 pandemic, it exhibits no firm commitment to expedite vaccine deployment to the African continent, which further reinforces and perpetuates vaccine hesitancy.[3,4]

This duplicity is compounded by vaccine diplomacy and donor dependency leading to multiple vaccines, without regulatory approval, making their way into many African countries. The unintended consequences of approaches that bypass continental collective efforts through Africa Centres for Disease Control and Prevention (CDC) include allegations that Africa is a testing ground for vaccines, which further reinforces vaccine hesitancy. Some of these concerns have been exacerbated by sentiments expressed by some people in high-income countries—eg, by two French doctors in early April, 2020—with regard to conducting COVID-19 vaccine trials in Africa.[5]

Bilateral arrangements that bypass continental collective efforts through Africa CDC consolidate the geopolitical influence and economic interests of vaccine providers. The result is that vaccine geopolitics and economics compromise vaccine acceptance, widely amplifying misinformation from social media, religious groups, and other outlets, and filtering confusing messages into communities.

Positioning vaccines in a way that demonstrates equitable access and benefits to the population is a powerful tool to address resistance. Evidence from the roll-out of the Ebola vaccines in west Africa suggests that the physical presence of the vaccine drives the involvement of national leadership, which trickles down to local communities. The field deployment of the experimental Ebola vaccines combined with an innovative social mobilisation and community engagement strategy overcame vaccine hesitancy in this instance.

A just vaccine landscape will accelerate the promotion of vaccines through a bottom-up health approach. When vaccines are made available, community engagement will become the single most powerful mechanism to successfully combat any vaccine hesitancy and resistance. A commitment to innovative health promotion that is anchored in locally responsive and culturally relevant knowledge, transparency, equity, and access to COVID-19 vaccines will be a strong antidote to vaccine hesitancy in the continent.[6]

We issue a call to action in support of global vaccine access and acceptance, and have four recommendations to curtail vaccine hesitancy in Africa: (1) Africa CDC and the WHO Regional Office for Africa should effectively coordinate the continental advocacy drive for COVID-19 vaccines and to minimise vaccine hesitancy through effective community engagement, and contribute to a robust COVID-19 vaccine roll-out strategy; (2) WHO should share experiences and lessons learnt from social mobilisation and communication campaigns for the clinical trials of the Ebola vaccines to effectively overcome hesitancy towards the COVID-19 vaccines; (3) an observatory should be established, under the umbrella of WHO and Africa CDC, in each African country to monitor and combat fake news, rumour mongering, and misinformation about COVID-19; (4) dedicated resources should be mobilised from national and international funders to support the

logistics and human resources needed to implement robust health promotion for COVID-19 vaccination that would complement the vigorous advocacy for vaccine procurement and manufacturing on the continent to increase access and equity.

Only by owning the response through committed leadership will it be possible to take these actions forward and to achieve the universal immunisation that we need to protect the people of Africa and that of our world, ensuring that no-one is left behind.

We declare no competing interests. We received no grants or other financial support.

*Polydor Ngoy Mutombo†, *Mosoka P Fallah†, Davison Munodawafa, Ahmed Kabel, David Houeto, Tinashe Goronga, Oliver Mweemba, Gladys Balance, Hans Onya, Roger S Kamba, Miriam Chipimo, Jean-Marie Ntumba Kayembe, Bartholomew Akanmori*
fallahm@africa-union.org

†Joint first authors

National Centre for Naturopathic Medicine, Faculty of Health Sciences, Southern Cross University, Lismore, NSW, Australia (PNM); Refuge Place International, Monrovia, Liberia (PNM, MPF); Center for Emerging Infectious Diseases Policy and Research, Boston University, Boston, MA, USA (MPF); Faculty of Medicine, Midlands State University, Gweru, Zimbabwe (DM); Faculty of Public Health, Thammasat University, Pathum Thani, Thailand (DM); School of Humanities and Social Sciences, Al Akhawayn University, Ifrane, Morocco (AK); School of Public Health, University of Parakou, Sainte-Rita, Cotonou, Benin (DH); Centre for Health Equity Zimbabwe, Equal Health Global Campaign Against Racism, Harare, Zimbabwe (TG); Department of Health Promotion and Education, School of Public Health, Ridgeway Campus University of Zambia, Lusaka, Zambia (OM); Gender Institute, Midlands State University, Gweru, Zimbabwe (GB); Department of Public Health, University of Limpopo, Polokwane, South Africa (HO); COVID-19 Task Force, Democratic Republic of Congo President's Office, Kinshasa, Democratic Republic of Congo (RSK); UNAIDS, Durban, South Africa (MC); Faculty of Medicine, Department of Lung Diseases, University of Kinshasa, Kinshasa, Democratic Republic of Congo (J-MNK); Regional Vaccine Research and Regulation, WHO Regional Office for Africa, Brazzaville, Congo (AK); College of Health Sciences, University of Ghana, Accra, Ghana (AK); Africa Center for Disease Control, Addis Ababa, Ethiopia (MPF)

1 Makoni M. COVID-19 vaccine trials in Africa. *Lancet Respir Med* 2020; **8:** e79–80.
2 Callaghan T, Moghtaderi A, Lueck JA, et al. Correlates and disparities of intention to vaccinate against COVID-19. *Soc Sci Med* 2021; **272:** 113638.
3 Sallam M. COVID-19 vaccine hesitancy worldwide: a concise systematic review of vaccine acceptance rates. *Vaccines (Basel)* 2021; **9:** 160.
4 Karafillakis E, Larson HJ. The benefit of the doubt or doubts over benefits? A systematic literature review of perceived risks of vaccines in European populations. *Vaccine* 2017; **35:** 4840–50.
5 Karakaya F. COVID-19: French doctors recommend trials in Africa to test vaccines. https://www.aa.com.tr/fr/afrique/covid-19-des-m%C3%A9decins-francais-pr%C3%A9conisent-des-essais-en-afrique-pour-tester-des-vaccins/1789838 (accessed Dec 9, 2021).
6 Jaklevic MC. Researchers strive to recruit hard-hit minorities into COVID-19 vaccine trials. *JAMA* 2020; **324:** 826–28.