



# COVID-19 vaccines development in Africa: a review of current situation and existing challenges of vaccine production

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With the growing concern on the evolution of vaccine development in Africa, I congratulate Lamptey et al. [1] on their coronavirus disease 2019 (COVID-19) special article titled “COVID-19 vaccines development in Africa: a review of current situation and existing challenges of vaccine production.” Indeed, a critical gap in vaccine production on the continent is largely responsible for the vaccine inequity. In their piece, the impressive summarization of challenges faced in vaccine development in Africa is indeed a call to action for policymakers and leaders in the health systems on the continent. As the presence of available vaccines has been proven to reduce infections [2]. While structural aspects such as limitations in the cold-supply chains, lack of access to vaccination clinics in underserved areas, digital constraints and a competition for sparsely available appointments could be other constraints faced even after the mitigation of the production challenges are tackled [3]. The authors pointed out that there is a lag in Africa in reduction of COVID-19 burden cases by vaccination [1].

If the challenges of vaccine production in Africa are surmounted, and African nations come up with their own candidates, a major hurdle could be vaccine wastage of available doses. Today, African nations account for some of the lowest COVID-19 vaccination rates worldwide; Nigeria with 6.5% fully vaccinated, Tanzania 5.1%, Cameroon 4.5%, Ethiopia 18.5%, and Kenya 15.6% [4]. The readiness to get vaccinated is greatly influenced by a mistrust of the authorities [5]. With the development of a suitable candidate, vaccine hesitancy on the continent could largely account for wastage of vaccine doses.

In addition to strategies to develop COVID-19 vaccine candidates in Africa, it is also imperative that issues that create a mistrust between the population and the health authorities/governments are addressed, to witness a full acceptance of the developed vaccine and compliance. This can avert any possibilities of vaccine wastage if a suitable candidate is developed on the continent. While the push for the development of a pan-African vaccine project is ongoing, community engagement should be used as a measure to restore the confidence of the public. By the use of trusted community figures, confidence in potential developed vaccines in Africa can be increased.

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