Zimbabwe's COVID-19 vaccination roll-out: Urgent need to rethink strategies to improve the supply chain

To the Editor: As of 26 June 2021, Zimbabwe had 46 018 confirmed COVID-19 cases, including 37 761 recoveries and 1 725 deaths, and a total of 747 330 people had been vaccinated against COVID-19.[1] The country is currently facing a third wave of COVID-19, with hospital beds approaching maximum capacity and the oxygen supply running out fast with no clear plans for replenishments. The rollout of a COVID-19 vaccine programme presented a glimmer of hope for the country to control the pandemic and end restrictions. However, at present, inadequate vaccine supply^[2] and vaccine hesitancy^[3] persist as major threats to rapidly achieving herd immunity.

At present, Zimbabwe has authorised the use of Chinese vaccines from Sinopharm and Sinovac, Sputnik V from Russia, and Covaxin from India. No vaccines produced in Western countries have been registered for use in the country. The government recently turned down a donation of three million doses of the Johnson & Johnson COVID-19 vaccine, citing the lack of infrastructure to deal with the refrigeration requirements of the vaccine.[4] Zimbabwe will fail to make much use of the vaccines that need to be refrigerated at very low temperatures owing to lack of equipment. There are unverified reports of imminent registration of a three-jab vaccine from Cuba, results for which have recently been made public. Further, indications are that the more affluent individuals in the country's two largest cities, Harare and Bulawayo, have received a larger percentage of vaccines compared with the rural areas where nearly 70% of the population reside.^[2]

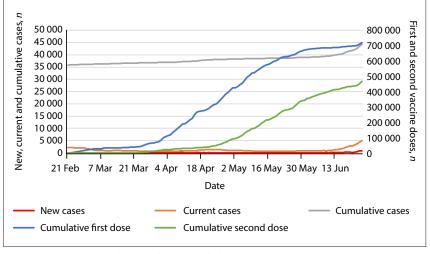


Fig. 1. COVID-19 cases and vaccine doses in Zimbabwe.

We show the trend of COVID-19 cases and vaccination doses given during the period February - June 2021 in Fig. 1.

With an estimated population of ~15 million, Zimbabwe requires a rethink around increasing the current vaccination numbers, which are >1 million despite 4 months having elapsed since the initial rollout of the COVID-19 vaccination programme.

For Zimbabwe to rapidly achieve herd immunity, it must immediately join the COVAX facility to improve its vaccine supply chain and in turn increase the number of doses available to its people, and deal decisively and creatively with vaccine hesitancy. In the interim, Zimbabwe will need to depend more on lockdown restrictions and enforcement of other nonpharmaceutical interventions, including social distancing, to try to contain the aggressive third wave currently sweeping through southern Africa, leaving significant morbidity and mortality in its path. **Godfrey Musuka, Munyaradzi Mapingure** ICAP at Columbia University, Harare, Zimbabwe

Tafadzwa Dzinamarira

ICAP at Columbia University, Harare, Zimbabwe; and School of Health Systems and Public Health, University of Pretoria, South Africa

anthonydzina@gmail.com

- Ministry of Health and Child Care, Zimbabwe. COVID-19: Situation report 2021. http://www.mohcc.govzw/index. php?option=com_phocadownload&view=category&id=15<e mid=741 (accessed 27 lune 2021).
- Mavhunga C. Zimbabwe faces COVID-19 vaccine shortages. VoA News, 28 May 2021. https://www.voanews.com/covid-19-pandemic/ zimbabwe-faces-covid-19-vaccine-shortages (accessed 27 June 2021).
 Dzinamarira T, Nachipo B, Phiri B, Musuka G. COVID-19
- Dzinamarira T, Nachipo B, Phiri B, Musuka G. COVID-19 vaccine roll-out in South Africa and Zimbabwe: Urgent need to address community preparedness, fears and hesitancy. Vaccines 2021;9(3):250. https://doi.org/10.3390/vaccines9030250
 Mavhunga C, Zimbabwe rejects donation of COVID-19 vaccine amid
- Mavhunga C. Zimbabwe rejects donation of COVID-19 vaccine amid shortages. VoA News, 8 June 2021. https://www.voanews.com/covid-19-pandemic/zimbabwe-rejects-donation-covid-19-vaccine-amidshortages (accessed 27 June 2021).

S Afr Med J 2021;111(9):816. https://doi.org/10.7196/ SAMJ.2021.v111i9.15923