

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.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

oa

## A locally sustainable approach to COVID-19 testing in Africa

In their Comment, Pascale Ondoa and colleagues<sup>1</sup> elucidate the impressive achievement of African countries on COVID-19 testing. The authors explain that the Africa Centres for Disease Control and Prevention (CDC), through the Partnership to Accelerate COVID-19 Testing in Africa (PACT) programme, did 3.4 million COVID-19 tests in Africa by June, 2020. Although this figure translates to a mere 1700 tests per million people compared with 103000 tests per million people in Italy and 195000 in the UK, this outcome is a great achievement on a continent starved of economic and health resources. There are also reports that, through PACT, 90 million test kits have been secured for Africa for the next six months despite the cut-throat competitive environment of procurement for COVID-19 commodities.<sup>2</sup>

The importance of testing for COVID-19 cannot be denied. Testing is essential for identifying and isolating infected individuals and containing the spread of disease. Countries that have implemented widespread testing followed by strict isolation of infected individuals have had comparatively fewer fatalities than countries that did not. As such, mass testing for COVID-19 has now become best practice internationally. However, African countries with weak economies might have to rethink their approach and develop a more locally appropriate strategy for COVID-19 testing. Although Africa CDC suggests that African countries have the ability to purchase their own test kits, this claim is debatable on the basis of experiences from other epidemics such as Ebola virus disease and AIDS. Most testing kits acquired by African countries for COVID-19 have been donated or are subsidised by grants from international donors. The sustainability of this approach is guestionable. From all current indications, Africa has just entered the early phase of the pandemic; scarcity of reagents and backlogs in testing are not only already happening but are expected to be the norm. Hence, the feasibility of Africa maintaining testing as recommended by the Africa CDC and WHO is problematic.

To make the most of scarce testing resources and to reach those individuals in urgent need, one approach might be to target symptomatic cases only. For individuals testing positive, the test could be extended only to their immediate household contacts. All other contacts should presume they are at a higher risk of having been infected than the average individual and take the necessary steps including self-isolation. The current approach to mass testing or targeting whole clusters of possible contacts might not be sustainable otherwise.

Meanwhile, the Africa CDC should ramp up support for local COVID-19 diagnostic kit development efforts already emerging in the region.<sup>3</sup> The international competition for scarce COVID-19 commodities should be a wake-up call for Africa to cultivate and nurture its own talent for local innovations, not only against COVID-19 but also against other emerging and re-emerging pandemics.

I declare no competing interests.

Copyright © 2020 The Author(s). Published by Elsevier Ltd. This is an Open Access article under the CC BY-NC-ND 4.0 license.

## Elijah Songok esongok@kemri.org

Kenya Medical Research Institute, Nairobi, Kenya

- 1 Ondoa P, Kebede Y, Massinga Loembe M. COVID-19 testing in Africa: lessons learnt. *Lancet Microbe* 2020; **1**: e103–04.
- 2 Mukabana S. African countries secure 90 million coronavirus test kits for next six months. June 4, 2020. https://africa.cgtn. com/2020/06/04/african-countries-secure-90-million-coronavirus-test-kits-for-next-sixmonths/ (accessed July 27, 2020).
- 3 Wetaya R. Ugandan scientists develop quick, low-cost COVID-19 test kits. April 13, 2020. https://allianceforscience.cornell.edu/ blog/2020/04/ugandan-scientists-developquick-low-cost-covid-19-test-kits/ (accessed July 27, 2020).