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## Cameroon's bold response to the COVID-19 pandemic during the first and second waves

In the early phase of the COVID-19 pandemic, Cameroon was among the top five countries in sub-Saharan Africa and the first in central Africa in terms of number of confirmed cases. From the beginning, Cameroon faced the COVID-19 pandemic with the objectives of reducing viral transmission in the community, limiting the number of deaths, and lessening the socioeconomic impact of COVID-19. The Cameroonian government has made calculated decisions, including contextualised mitigation measures, a bold testing strategy incorporating rapid diagnostic tests, treatment of patients with COVID-19 exclusively in specialised treatment centres, re-opening schools during the peak of the pandemic, and integrating mental health care into the national response.1

The first two cases of COVID-19 in Cameroon were confirmed on March 5, 2020. The first case was imported from France and the second was one of their close contacts in Cameroon. The number of cases increased rapidly, after first being imported from western Europe mostly before community transmission of the disease was confirmed in late April 2020.2 In February 2020, the Ministry of Public Health drew up a preparedness and response plan for COVID-19 to quickly detect possible cases of importation of the disease and limit its spread in Cameroon. The incident-management system was therefore activated at the Public Health Emergencies Operations Centre on March 6, 2020, the day after the first cases were confirmed in Yaoundé.2 Based on confirmed case counts and PCR positivity rates, Cameroon had a first COVID-19 peak at the end of June, 2020, and a second peak in April, 2021. In Cameroon, the mean age of people with COVID-19 is 38 years, and 53.1% are men.3 For fatal cases, the average age at death is 58 years, and nearly 20% of these individuals have comorbidities. As of May 12, 2021, 74 946 people have had COVID-19 and 1152 have died, a mortality of 1.5%.2

One clear objective of the response was to detect as many cases as possible given the scarce testing resources. Despite 15 PCR-capable diagnostic laboratories being implemented in nine of ten Cameroonian geographical regions by April, 2020, it was clear that many cases were being missed.4 Therefore, the Cameroon Ministry of Health took the bold decision to incorporate and evaluate rapid diagnostic tests for SARS-CoV-2 antigens and serology.5 The national algorithm was validated by the Scientific Council of Public Health Emergencies in June, 2020. 629 090 people were tested by antiqenic rapid tests between June 6, 2020, and Dec 31, 2020, in selected testing sites located in markets, schools, universities, administrative offices, and businesses. 43 261 (57.9%) of the 74733 COVID-19-positive cases reported by the Ministry of Public Health were diagnosed using rapid tests.2 In addition, the government established specialised COVID-19 care centres in regions with community transmission, thus relieving congestion in public health facilities and reducing the stigma associated with hospitals that were treating patients with COVID-19. To further limit the transmission of SARS-CoV-2 in the community, on March 18, 2020, the government implemented 19 measures, including the closure of all borders, the closure of bars and restaurants after 18:00 h, the limitation of people in public transport, the closure of schools and universities, and the compulsory wearing

of masks in public places. However, recognising the potential negative socioeconomic impacts of COVID-19, the government alleviated some barrier measures over time, altering their pandemic response to address new challenges. Cameroon partially resumed in-person classes on June 1, 2020, and partially opened borders while maintaining the wearing of masks and physical distancing measures.

Despite the second, more detrimental, wave of COVID-19 in Africa, the expected death toll in Africa and Cameroon has not occurred. In part, this is because Cameroon mobilised substantial resources to manage the COVID-19 health crisis. 6 The initial strict government measures were eased rapidly to relieve the burden on the country's economy. The decentralisation of response interventions, integration of operational research, provision of rapid diagnostic tests that are resulting in improved testing capacities, homecare services, and the implementation of a national genomic surveillance platform to follow circulating SARS-CoV-2 variants have made it possible to limit disease transmission, even while hosting the football African Nation Championship in January, 2021, an event that hosted thousands of supporters from across Africa. In addition, the implementation of a vaccination programme since April, 2021, despite population hesitancy, will probably reinforce the control of the epidemic.

The main challenge Cameroon now faces is to strengthen the health system for the next pandemic with greater investment in medical regulation, telehealth, and homecare services that contributed to better management of patients with COVID-19, but

will also be crucially important in future management of acute and chronic diseases. Through the implementation of pragmatic and resilient strategies, Cameroon is learning from the COVID-19 pandemic, allowing the country to prepare for future pandemics while providing better care for their communities.

We declare no competing interests.

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