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.

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Letter to the Editor

High SARS-CoV-2 IgG seroprevalence among pregnant Cameroun women 14 months after the beginning of the pandemic

The period following the COVID-19 pandemic triggered by the appearance of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in Wuhan (China) has seen the virus evolve, producing variants that have driven successive waves of infection. The total number of COVID-19 cases worldwide is now close to 593,000,000, with more than 6,400,000 deaths.

There were few reported cases of COVID-19 on the African continent during the early stages of the pandemic, especially in sub-Saharan Africa. But modelling studies indicated that some African countries were highly vulnerable and not well equipped to respond to an outbreak.[1] The World Health Organisation (WHO) and its partners launched the COVID-19 Access Tool Accelerator in April 2020 to address this inequality by developing effective tools to manage COVID-19 in the middle- and low-income countries.

However, Africa seemed to remain more resistant to the coronavirus than other continents, perhaps because of the warm climate, young population, or the immune history of its people. The dynamics of the disease in Africa surprised the world, thwarting many predictions, despite the lack of medical facilities, the poor adherence to or impossibility of social distancing and overcrowded cities. It soon became clear that this underreporting was probably due to a lack of screening and that SARS-CoV-2 was emerging in many African countries just as it was in the rest of the world.

Two years into the pandemic, the global epidemiological map of Africa does not seem to have changed, except for northern African countries (https://coronavirus.jhu.edu/map.html). The current published number of COVID-19 cases/10^6 inhabitants varies from 4.5 10^{-3} in Cameroon to 4.5.10^{-4} in Chad. The comparable indicators in developed countries are 0.5 in France, 0.28 in the United States, 0.36 in Italy and 0.16 in Brazil.

We estimated the prevalence of SARS-CoV-2 in Cameroon by testing for specific antibodies against the virus (SARS-CoV-2 IgG II Quant Alinity i Abbott). We collected serum samples from 292 pregnant women being cared for in a maternity ward (Health Care Center, Centre d'Animation Sociale et Sanitaire) in Yaoundé. This maternity hospital performs about 4500 deliveries per year. The women were 16–47 years old (mean: 26.8, median: 26). Three-quarters of them (225, 77%) tested positive. Although none had been vaccinated against COVID-19, their antibody titers were not correlated with their age.

The high seroprevalence in unvaccinated women mirrors the upsurge in COVID-19 cases, most of which are asymptomatic or paucisymptomatic. This suggests that the virus was already actively circulating in this area by the first half of 2021. The first cases of COVID-19 in Cameroon were reported in early March 2020 (Ministry of Public Health Cameroon: COVID, 2021. Available at: http://COVID-19.minsante.cm/), and the virus had spread so well that prevalence studies showed that the anti-SARS-CoV-2 IgG seroprevalence was 24% in June- to August 2020, just 8 months after the emergence of the virus. The figures are the same as those reported in the general populations of other African countries,[2] after tests on healthy blood donors[3] and health workers exposed to COVID-19 patients.[4] Thus, Africa was not spared by the pandemic, and the current underreporting of cases is due to a lack of screening, little or no increase in clinical cases suggesting COVID-19 and little or no increase in reports of unexplained deaths.

The two-dose vaccination rate does not exceed 11% in many African countries, but the question of whether to immunise African people against COVID-19 remains unanswered as long as a universal vaccine against SARS-CoV-2 is unavailable. Should what has not been done since the beginning of the pandemic still be attempted in view of the active circulation of the virus, as indicated by the low overall COVID-19 morbidity and mortality, and the high seroprevalence?

We believe that vaccination policies should be redefined, given the delay and the evidence of active virus propagation in Africa. The target populations for vaccination could be more precisely defined based on regular seroprevalence surveys of the general population. It is no longer a question of mass vaccination of a population that is already naturally immune to SARS-CoV-2 but rather of targeting at-risk groups such as the elderly, people suffering from co-morbidities, and healthcare workers. Finally, the really urgent need is to resume the Expanded Programme on Immunization as soon as possible because the COVID-19 pandemic has dramatically worsened the implementation of "classical" immunisation campaigns in many countries.[5] This is where human and financial resources should now be directed.

Author statements

Conflict of interest

None of the authors declare any conflict of interest.

Author contributions

J.-M.M. designed the study and wrote the article. M.T.K. collected samples and associated data. S.B. and C.P. performed the ELISA and collected the results. M.B.L. and C.O.E. collected samples

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and data. A.B. organised the study in Cameroon. J.I. did editing and revisions.

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