

The SARS-CoV-2 serological results in African countries should be interpreted with caution

ITM and INRB researchers analysed blood samples using five different SARS-CoV-2 serology tests

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Dit is de omschrijving

A recent study by the Institute of Tropical Medicine (ITM) in Antwerp and the Institut Nationale de Recherche Biomédicale (INRB) in Kinshasa shows that the results of different SARS-CoV-2 serological tests, which are those that identify antibodies against the virus, give inconsistent results among each other. The study was done on health care workers in different healthcare facilities in Kinshasa, DRC in July-August 2020. In a [communication published in the Lancet Global Health](#), researchers warn the research community and policy makers to interpret with caution the results of seroprevalence studies done in African countries with commercial tests validated in Europe, the USA, or Asia.

In order to gain better insight into SARS-CoV-2 circulation in Kinshasa, ITM and INRB analysed the blood samples from 562 participants, using five different SARS-CoV-2 serology tests. Their findings suggest that there is a higher circulation of COVID-19 in Kinshasa than expected, based on the official reported cases, but due to potential specificity problems of serological tests, it is difficult to put a precise figure on real spread of the virus.

According to the test used, the seropositivity in healthcare staff in our study varied between 13-36%, which is relatively high considering the low number of symptomatic and severe cases reported in Kinshasa during the first wave. This result could be due to a cross-reaction of the tests with other circulating viruses or parasites in the African subcontinent, and could lead to false positivity. Such a potential lower specificity - in this case of SARS-CoV-2 commercial tests - in African countries was also observed in the early 1990s with HIV serology tests, showing a lower specificity in African samples when compared to European samples.

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