

## IS IT POSSIBLE TO CONTAIN AND TREAT WIDESPREAD COVID-19 INFECTION IN AFRICA?

On March 16, at the World Health Organization's most recent COVID-19 press conference in Geneva, WHO Director-General Dr. Tedros Adhanom Ghebreyesus said: "As the virus moves to low-income countries, we're deeply concerned about the impact it could have among populations with high HIV prevalence, or among malnourished children."

For countries with high burdens of HIV and/or tuberculosis, COVID-19 is an enormous public health concern. Yet as of this writing, there is very little global guidance available on how countries should – from a clinical point of view – manage this multiple burden, beyond sticking with current treatment regimes.

Some information available on HIV- and COVID-19 co-infection comes from South Africa's <a href="National">National</a> <a href="Institute for Communicable Diseases">Institute for Communicable Diseases</a> (NICD), which has just released guidelines "about the importance of continuing to take ARV treatments and stay healthy," Dr Lynn Morris, Director of the NICD, said. "For most people, the [COVID-19] infection is mild and does not involve hospitalization," Morris told the GFO in an email. "They will completely clear the virus after a few weeks." But, she said, "we don't know how COVID-19 will impact South Africans who are living with HIV and TB."

"For those who do not know their HIV status," Morris also said, "we recommend getting tested and tak[ing] ARVs if needed, as they restore immune function, which will help to fight COVID-19."

The clinical interactions between COVID-19 and HIV in a co-infected individual have not been fully explored (noted also by Professor Alan Whiteside in a separate article in this GFO), and not much discussed in the public domain – understandable given the short history of COVID-19, with scientists and medical professionals around the world working around the clock to care for patients and research

treatments and vaccines.

What has been specified in many global forums is that some 'co-morbidities' – certain pre-existing underlying conditions such as respiratory illnesses or cardiovascular disease – are likely to make people more susceptible to or worsen the effects of COVID-19 infection. It has also been clearly stated by public health authorities around the globe (in addition to the NICD) that people whose immune systems are compromised may be more susceptible to infection with COVID-19 – clearly the case for people living with HIV and for many people living with TB, or both, as well.

Logically, therefore, countries with high burdens of HIV and TB in their populations (frequently the case in sub-Saharan Africa, and most countries in the region implementing Global Fund-financed programs against these diseases) are likely to face even greater challenges if their health systems need to cope with widespread COVID-19 outbreaks. And yet this issue has not been explicitly addressed in the affected countries' mass communications around COVID-19 so far.

Health systems' ability to contain COVID-19

In addition, the same high-HIV- and TB-burden countries are the ones most likely to have public health systems that are less able to cope with extraordinary public health crises compared to the health systems of 'rich', developed nations, such as those in Europe currently grappling with an upsurge in COVID-19 cases – because in general developing countries lack the systems, and the levels of finance, medicines, equipment and the sheer numbers of medical professionals required to deal with infectious disease outbreaks on a vast scale.

A hopeful counter-argument to this is that some of these countries with comparatively weak health systems are the same countries that have, mostly, successfully fought (if not yet vanquished) the virulent Ebola outbreaks that have affected mainly West Africa in recent years – Democratic Republic of Congo, Gabon, Guinea, Ivory Coast, Sierra Leone, Liberia, Mali, and Nigeria. The World Health Organization called the 2014-2016 Ebola epidemic the "the largest and most complex Ebola outbreak since the virus was first discovered in 1976", and the countries that were hardest hit have as a result developed expertise and systems to screen for infections and manage virulently transmissible diseases.

Dr Aaron Aruna, the Ministry of Public Health Director of the Fight Against Diseases in the DRC told WHO in February that having their Ebola screening in place "made it easy for us to start screening for coronavirus disease." Dr Gervais Folefack Tengomo, WHO's Incident Manager for COVID-19 in the DRC said, "It is helpful that a lot of the infrastructure needed to diagnose, isolate and treat severe cases is already in place due to Ebola." A U.S citizen who has recently travelled in more than five African countries told the GFO that she was impressed with the systems the African countries she had visited had in place for systematic temperature screening and interviews about passengers' prior travels at borders and at airports – something that at that time, at least, was not routine in the United States (this has since changed).

Clinical care

What remains challenging for many African countries is how to adequately care for people who are ill with COVID-19, if they test positive for it. In Nigeria, after the first case of COVID-19 was reported there last week, the country's leading public health official, Chikwe Ihekweazu, the Director-General of the Nigeria Centre for Disease Control, said the biggest risk for his country was its ability to provide adequate clinical care, in the event that the virus spreads widely through the population. Acknowledging that even though the proportion of infections that lead to "severe" illness is relatively small (taking China, with more than 80,000 confirmed infections, as the base case), Ihekweazu said that "the absolute numbers will be fairly significant if transmission really gets a foothold in a context like Nigeria".

Many other African countries have similar contexts. Though the numbers of reported infections of COVID-19 in Africa remain relatively low on a per-country basis (most African countries have under 100 tested-and-confirmed infections each, with the exception of Egypt at 196 reported cases, as of March 18), many experts suspect that this may just be the spark before the wildfire. And they emphasize that it is containment at this point in an epidemic that makes all the difference.

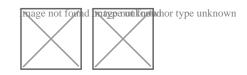
Dr Anthony Fauci, the Director of the United States' National Institute for Allergies and Infectious Diseases (NIAID), emphasized in his words to the U.S. public on March 16 (accompanying President Donald Trump's televised address in which he declared a 'national emergency' regarding COVID-19), that it is at this point in an epidemic when one often thinks that measures being taken are too extreme. And retrospectively, he said, that they always seem to fall short. "I think we should really be overly aggressive and get criticized for overreacting," he told NBC News.

Like Ihekweazu, Fauci's main concern is grounded in an anticipated shortage of medical equipment – insufficient ventilators and access to oxygen therapy for those who need it – should COVID-19 really take hold. "So our best bet," he said, "is really to focus as hard as we can on early detection."

Dr Tedros's oft-repeated injunction to "test, test, test" is at once reassuring and aspirational, given many countries' limited diagnostic capacities and decisions to test people for COVID-19 only in the presence of symptoms. For African leaders, medical professionals and anxious members of the public, how to tread the line between effective prevention and control of COVID-19, and the limitations of their socioeconomic realities, is a pressing question that requires an urgent – and global – response.

## Some COVID-19 tools and resources:

- WHO's daily COVID-19 Situation Reports
- <u>Johns Hopkins University's Coronavirus resource centre</u> (with frequently updated interactive maps and visuals)
- WHO's online 'Responding to COVID-19' courses in WHO's official languages (Arabic, Chinese, English, French, Russian, Spanish)
- WHO's online 'Responding to COVID-19' courses in additional national languages (Japanese, Bahasa Indonesian, Portuguese, Italian, Turkish, Vietnamese)
- <u>'Critical preparedness, readiness and response actions for COVID-19,'</u> WHO Interim Guidance (16 March 2020)
- South Africa's Department of Health coronavirus website: https://sacoronavirus.co.za/
- South Africa's National Institute for Communicable Diseases
- WHO's 'Mental Health and Psychosocial Considerations during COVID-19 outbreak'
- Child-friendly explanation of coronavirus; see image below (left)
- COVID-19 basic prevention poster for the broader public (South African Department of Health); see image below (right)



Left: Child-friendly COVID-19 explanation; right: South African COVID-19 public information poster

Editor's note: The GFO will continue to report on COVID-19 in future editions, especially with regard to the interactions between COVID-19 and HIV/TB, as well as implementing countries' efforts to deal with the concurrent pandemics.

## Further reading:

- Dr Tedros's opening remarks at WHO's March 16 press conference on COVID-19
- <u>'Anticipating Coronavirus in West Africa,'</u> interview with Chikwe Ihekweazu, Director-General of Nigeria's Centre for Disease Control, from 'Think Global Health' (3 March 2020)
- Global Fund Executive Director poor more than anyone'. Peter Sands' blog, 'COVID-19 threatens the marginalized and the

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