Q&A with Professor Salim Abdool Karim

Africa has not been as hard hit by the COVID-19 pandemic as predicted. Here, we talk to Professor Salim Abdool Karim, the head of South Africa's Ministerial Advisory Committee on COVID-19 to find out why and what the future might hold.

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When the COVID-19 pandemic hit, many people expected Africa to be hit hard, given that many of its cities are overcrowded, have large slums and limited access to healthcare. Yet the death toll for the entire continent is around 34,000 people - less than that of Italy - despite having a population of 1.3 billion people. Over the past month, Africa Centres for Disease Control (CDC) has been reporting an average 10% fall in the number of weekly new cases. So why has Africa not seen the devastation it feared?

Q. WHY HAVE THERE NOT BEEN AS MANY INFECTIONS AND DEATHS FROM COVID-19 ACROSS AFRICA AS ANTICIPATED?

A. There are many possible explanations. The first possible reason is that we have a problem of under-reporting. But this does not seem to be the main reason because we are not seeing many cases of acute respiratory distress in hospitals, which would be expected if there were lots of cases. The second is under-testing; I think it’s likely that we are missing cases because testing rates are quite low in several African countries. But again, if many missed cases were true, we should expect hospitals to be full of undiagnosed acute respiratory distress. The third theory is younger populations. When you have a younger population, you will expect to see less clinical illness and fewer deaths, but we are not sure whether you would expect to see fewer infections. A fourth possible reason is that most of the countries in Africa had early lockdowns. In South Africa we had an early lockdown, but we still had a major epidemic – though with a delayed peak.

A fifth possible explanation is that the epidemics in Africa are still going to occur and that it has just been delayed in this continent. Another hypothesis is that people who live in crowded conditions may develop cross-reactive immunity through repeatedly being infected with the common coronaviruses. But if this is true, we would not expect India or Brazil, with their overcrowded shanty towns, to have such severe epidemics.

Incidently, temperature and humidity were previously thought to play a role but that has been debunked too. The virus dies within minutes of exposure to sunlight but spread readily during the European summer as well as in hot weather in countries like India.

I must stress that these are all hypotheses and speculation that need to be thoroughly researched in order establish the actual reasons why Africa has not had a more severe epidemic. Based on the current circumstantial evidence available, I think it may be a combination of many of these reasons.

Q. SO WHICH IS THE MOST LIKELY EXPLANATION?

A: I think the most likely explanations are yet to be determined. We really don't know for
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Sure. I think younger age, under-reporting and under-testing in combination is the most likely explanation, but even this combination cannot fully explain why infections and deaths are so much lower than expected in African countries like Kenya, Nigeria and Congo.

Have you read?

- What do vaccines do?
- Which COVID-19 test is most relevant to me?
- You’ve got your antibody test result – but what does it mean?

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Q. HOW ARE AFRICAN COUNTRIES PLANNING FOR THE FUTURE - ARE THEY PLANNING FOR THE WORST SO THAT THEY'RE READY FOR WHATEVER HAPPENS?

A. I think most countries in Africa are taking a four-step approach. The first response is to implement government measures to control the virus from spreading. The second is to try to achieve containment or low transmission by using non-pharmaceutical interventions, such as getting people to wear masks, maintain physical distancing and practice hygiene – like regular handwashing. And the third is what is referred to as “living with the virus”. Each country is trying to get to a point where they have got low transmission, and then create a set of rules so that people can live in a ‘new normal’ with the virus, which means working at home when possible, adhering to non-pharmaceutical interventions and reducing the risk of super-spreading events. And then the final stage that everyone is hoping for is having a vaccine or a cure.

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Q. IN THE UK AND COUNTRIES WHERE THE EPIDEMIC HAS TAKEN A HUGE TOLL, PEOPLE ARE REALLY WAITING FOR A VACCINE AS A WAY OF GOING BACK TO SOME KIND OF NORMALITY. WHAT WILL A VACCINE MEAN FOR AFRICAN COUNTRIES?

A: A vaccine is critical to Africa as it is to the rest of the world as well. The current approach to coronavirus mitigation and control is predicated on a future with herd immunity through a vaccine. A coronavirus vaccine could be the difference between Africa’s economic recovery or continued hardship. Africa has been making progress towards achieving the sustainable development goals but SARS-CoV-2 has set it back and pushed the continent off-track in achieving its social and economic goals. However, a vaccine is not guaranteed, as we have never created and licensed a vaccine against a coronavirus before, but also what if we get a vaccine that is only 40% effective? We have
already seen cases of re-infection, so the idea of getting a lifelong vaccine… I am not optimistic about it. We may still need to continue our measures to prevent transmission, even when we have a vaccine.

Q. THE SOUTH AFRICAN HEALTH MINISTER HAS SAID HE THOUGHT THAT THE PANDEMIC HAD BROUGHT MORE COHESION TO THE HEALTH SYSTEM - DO YOU THINK THAT THAT'S TRUE?

A: Yes, it’s true that the coronavirus epidemic has enhanced cooperation between the public and private sectors, and has shown that many different aspects of the complex health system we have in South Africa can work well towards a common goal. If you asked me in February this year “can you take the Cape Town International Convention Center and make it into an 800-bed hospital with oxygen supply at every bed and a special ICU facility, and can you do all of that in six weeks?”, I would have said “Are you crazy?! A hospital is a very complex organisation.” I am so impressed that South Africa rose to the challenge through sheer dedication, passion and resilience and made it happen – several field hospitals were built in record time. Fortunately, there wasn’t the need to utilise the full capacity of all the field hospitals. Some may view that as wasted resources, but it was more important that we were well-prepared to save lives when the surge hit – so, we had to take every measure to ensure that South Africa was prepared for the worst-case scenario. Our initial goal was to save lives, having witnessed the health care situation in the Italian epidemic. South Africa was able to work better together, not without challenges though, to mitigate the impact of this epidemic and avoid an Italy-like situation here.

Q. HOW MUCH CONCERN IS THERE ABOUT A SECOND WAVE?

A: In South Africa we are deeply concerned about a second wave. It seems that the second wave occurs a few months after the first wave. And when it occurs, it might be related to people becoming complacent in their adherence to prevention interventions. It might also be that people who were infected the first time have waning immunity and then a few months later, they are susceptible again, that might be contributing. While I don’t know the reasons, I think second waves are probably largely due to complacency and the releasing of restrictions that create conditions for the second wave. Looking at second waves in Spain, Israel and South Korea, amongst others, we see that each country had different reasons for a second wave but they are mostly related to easing restrictions or allowing mass gatherings. These potential ways that a second wave can start, will need to be kept in check. That's part of the new normal.
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