

Four questions to Dr. Mukendi, member of the COVID-19 Response Secretariat in the Democratic Republic of Congo

The first case of SARS-CoV-2 (COVID-19) infection in the Democratic Republic of Congo (DRC) occurred on 10 March 2020, and according to the results of the investigation, it was imported from Europe, resulting in the first death in the country seven days later. On 3 June 2021, the Congolese public health authorities announced the start of the third wave of COVID-19, with the epicentre located in Kinshasa. According to the statistics from the Ministry of Health (MOH), the milestone of 55,145 confirmed cases has now been passed, making the DRC the twentieth most affected country on the African continent (although this figure should be treated with caution as it depends on the volume of screening conducted and the strategy adopted by each country). To understand the measures taken by the country, and the challenges posed by the management of the pandemic, we interviewed Dr. Stéphane Mukendi, member of the coordination for the management of patients with COVID-19 within the Technical Secretariat that manages the DRC's response to COVID-19 in the DRC, under Professor Muyembe's Direction.

Could you give us your background Dr. Mukendi?

I am a specialist in internal medicine and nephrology, I am also trained as a field epidemiologist. In addition to my clinical activities in the management of internal medicine pathologies, I am also very involved in the medical management of epidemics, in particular, Ebola and currently COVID-19. I have participated in the response against Ebola epidemics here in DRC but also in West and Central Africa (WCA) countries in 2014; this was at their request, given that our country has experienced several Ebola outbreaks and it was important that we share our knowledge and experiences with the affected WCA countries.

How is the DRC particularly affected by epidemics?

The DRC is one of the most affected countries in the region regarding infectious disease epidemics, including cholera and measles, but also Ebola and now the COVID-19 pandemic. These epidemics have multiple impacts on both the population and the health system in various ways. The death rate is considerable and fear of contracting the diseases has resulted in the population underutilizing the health services. The pandemic led to people being disillusioned with health services and many people preferred to self-medicate or be cared for at home, which may have led to other health problems.

In addition, epidemics weaken the human resource capacities of our health system, which is already short of healthcare professionals. During the epidemic waves, our health facilities were saturated, and many professionals became infected and died. Our country lacks the financial means to support health services to meet the population's health requirements, and epidemics exacerbate this by placing a heavy and immediate burden on the system.

What lessons have you learned from your response to the latest Ebola and COVID-19 outbreaks?

We have learned a lot from the management of Ebola epidemics: our human resources have been trained in the management of the epidemic, and we have also strengthened community-based surveillance, particularly in the provinces of North and South Kivu, Katanga, and Ituri. In Kinshasa, health facilities supported by certain partners, such as the BDOM (Bureau Diocésain des Oeuvres Médicales, a Congolese faith-based organization that runs health centres in Kinshasa), identified many cases of chronic diseases and put them on treatment. This creates a virtuous circle, as chronic diseases are detected through the search for cases of infectious diseases, which are themselves particularly lethal in patients with co-morbidities.

Unfortunately, most of the actions taken remain emergency responses that are neither built on nor sustained, which is why we often return to square one at the end of each epidemic. Our challenge remains in defining how to use our experience in managing epidemics to better prepare for resurgences, not only limited to the training of human resources and rapid response teams that are effectively operational, but also the rest of the system. Given the fragility of our health system, we need to find ways to optimize investments and gains related to the support received. We need to equip our health facilities, organize the patient referral system and strengthen the surveillance system to detect, alert in time, and react effectively and early. This would reduce the scale of epidemics, which cause avoidable deaths and put the health system under strain.

How can donors support you in this process?

We have benefited from the support of many donors, and we are grateful for the aid that has been given to us in order to respond to these emergencies. There are improvements to be made in particular in the streamlining of emergency procedures in order to avoid a cumbersome and slow response, as results on the ground come late. And in dialogue, so that the country's priorities and long-term vision are taken into account by our technical and financial partners.

We also need to engage in productive discussions with donors to ensure that investments made in an emergency response benefit the health system as a whole. For example, we need oxygen for hospitalized COVID-19 patients, but we do not produce it locally. Faced with the emergency, we import it from neighbouring countries or use non-medical oxygen. However, the problem will arise again, and it would be better to install medical oxygen production units. Let's take advantage of this experience to better equip ourselves, because oxygen is also needed to respond to acute respiratory pathologies and pneumonia.

Similarly, we know that many Ebola patients had kidney failure and required dialysis. The installation of

dialysis units would have been useful both for addressing the complications of many patients (20% of Ebola patients died of renal complications during the last wave), and for the management of renal patients, who represent 12% of cases of patients with chronic non-communicable diseases.

More prosaically, why spend a fortune on renting vehicles as was the case during the Ebola response, when these could have been purchased and used today for the COVID response? Unfortunately, this strategy was not adopted, which means that we are currently negotiating the purchase of vehicles from donors, and we have to struggle with the movements of providers and patients.

Finally, our referral system is still weak, due to the poor mobility noted above, as the country lacks medical ambulances, and staff must be trained in referral from the community to the highest level of the health pyramid. We have been working on this strategy since the beginning of the response to COVID-19 to determine circuits and functions according to the degree of the severity of the pathology, the state of the technical platforms in the different health facilities, how patients are categorized, and the availability of ambulances and well-trained personnel for patient transport. The system that we are putting in place with COVID-19, which includes home care for mildly ill patients, hospitalization in general hospitals in the health zone, and then referral to more specialized facilities with a higher technical capacity for resuscitation, intensive care and access to oxygen, is a first attempt to organize referral systems that must continue beyond COVID-19. This is how we will manage to organize our health system and meet the needs of our population. And for which the support of donors is necessary.

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