



## COMMENTARY

## Towards 90-90-90 Target: COVID-19 and HIV Response in Africa

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### Abstract

As cases of the novel coronavirus disease (COVID-19) continue to rise, so are the concerns of the effects this pandemic could have on people living with HIV. In response to the pandemic, measures have been put in place by African governments to limit the spread of the virus. We examine the impact of these measures on ensuring progress towards the HIV advocacy of “90-90-90” by 2020, i.e., 90% of all people living with HIV will know their status, 90% of people diagnosed will receive sustained antiretroviral therapy (ART), and 90% of people receiving ART will have viral suppression all by the end of 2020. COVID-19 arrival on the continent and measures implemented have a significant effect on the control of HIV epidemic and the achievement of the 90-90-90 goals. It is therefore essential that African health stakeholders continue to advance efforts to ensure access to HIV care services is sustained during this COVID-19 pandemic.

### Keywords

HIV/AIDS, COVID-19, HIV response, Pandemic, Africa

### Commentary

Novel coronavirus is a global public health threat [1-3]. As cases of COVID-19 experience a dramatic rise worldwide, so too are concerns of what implications this pandemic could have on people living with HIV (PLHIV). This is a further concern in Africa with fragile healthcare systems and double burden of diseases which include both communicable diseases and non-communicable diseases [4]. With the need to respond to COVID-19 in Africa, the healthcare sector is overwhelmed [5] and other health issues are likely to be deprioritized.

Africa is experiencing an upsurge in the number of confirmed cases. COVID-19 imposes additional stress on public health systems in Africa with pre-existing weaknesses, and this remains a concern throughout the continent [6,7].

In the WHO African Region, as of 25 April 2020, thirty-five countries are implementing total refusal of entry into their territories, nine countries are implementing refusal of entry of passengers from high-risk countries

and three countries allow entry with mandatory 14 days quarantine upon arrival [8]. As of 5 August 2020, twenty-four countries on the continent are implementing lockdown (nationwide lockdown in 13 countries and affected areas lockdown in 11 countries) and eight countries have started a phased easing of the lockdown measures [9]. This article aims at providing a critical commentary on COVID-19 response and its influence on people living with HIV as well as the potential impacts on the achievement of HIV 90-90-90 target by the end of 2020.

HIV/AIDS is a major health challenge facing Africa. Antiretroviral therapy (ART) has transformed a largely fatal disease to a mostly manageable chronic condition, allowing for reduced fatality rates and increased patient quality of life [10]. Clinical administration of ART coupled with evidence-based combination with prevention strategies has and continues to sustainably reduce new HIV transmissions and achieve epidemic control. Despite the advances in the use of ART over the years and the resulting downtrend in mortality, 34% of people in southern and eastern Africa and 60% of PLHIV in western and central Africa are not currently receiving any treatment, and HIV/AIDS remains one of the leading causes of death in sub-Saharan Africa [11].

In 2014, the Joint United Nations Programme on HIV/AIDS (UNAIDS) and partners launched the ambitious targets geared towards putting an end to the HIV/AIDS epidemic [12]. The objective of this resolution, popularly called “90-90-90”, is to ensure that 90% of all PLHIV will know their status, 90% of people diagnosed will receive sustained antiretroviral therapy, and 90% of people receiving ART will have viral suppression, all by 2020 [12]. The integration of community-based interventions in HIV service delivery is crucial to this goal and includes community promotion of treatment coverage and follow-up, reduction in transportation cost to treatment health centers and extension of responsibilities from overburdened and high-cost conventional health centers to local health staffs at community level. These measures aim to help improve ART adherence and delivery.

### Will 90% of PLHIV in Africa Know Their Status?

At the start of 2020, many African nations are still struggling to achieve the 90-90-90 goal. Globally, 30 countries account for 89% of all new HIV infections. More than 18 of these countries are in Africa, including Uganda, Côte d'Ivoire, Malawi, Ethiopia, the Democratic Republic of the Congo, Mozambique, Nigeria, and South Africa [13]. Even though some African countries like Rwanda and Botswana have made significant progress toward achieving 90-90-90, this unprecedented pandemic may likely impact this trend. For instance, COVID-19 testing is a challenge globally, and health authorities are more concerned to increase testing capacity for COVID-19 [1]. In countries with high burden of

HIV/AIDS, this challenge may redirect efforts away from testing for HIV, significantly impacting on the ability of countries to progress in achieving the first ‘90’ of the goal - ensuring 90% of all people living with HIV know their status.

### Will 90% of PLHIV in Africa Receive ART?

The global spread of the virus has triggered governments around the world to place restrictions on international trade and travel. The fallout from this policy will be felt more by countries, especially those in Africa, who rely on importation to satisfy their medicine needs [14,15]. Majority of countries in Africa obtain antiretroviral (ARVs) drugs and other active pharmaceutical ingredients (APIs) from countries such as China and India [15]. It is also estimated that about 95% of the Africa's API needs are met by imports [14]. Currently, more than 80% of ARVs dispensed in Africa are imported and are primarily paid for through external financial aid. Lockdown policies in these countries may significantly disrupt the supply chain. A dire implication of these arrangements is a disruption in access to ARVs as the pandemic progresses. It has been documented in the literature that local production of medicines ensures enhanced availability and accessibility of medicines [14-17]. This unprecedented pandemic further reinforces the need for the continent with the majority of HIV/AIDS cases and mortality to develop its capacity to manufacture ARVs and render them accessible and affordable to PLHIV. They should be able to do this at a level that allows competition with foreign pharmaceutical firms.

Building African nations' capacity to manufacture ARVs will not only improve the reliability and sustainability of ARV's supply chain, but also have significant benefits for the HIV-specific response during pandemics. On the other hand, increasing local production of ARVs in African countries during this pandemic is unlikely to occur, due to a redirection of resources to addressing the outbreak. This places HIV patients at risk of lack of access to much-needed medications. Thus, supply chain building efforts may be more appropriately placed during interpandemic stretches of time. With these disruptions taking place, it may be difficult for antiretrovirals to make it to PLHIV in Africa.

### Will 90% of PLHIV in Africa Achieve Viral Suppression?

While healthcare providers are concerned about the potential effect of the virus on the health of PLHIV, there are threats on the effect of the toll on HIV testing, diagnosis, and treatment cascade. With the growing number of people infected with the virus, health systems are now focusing on developing strategies to contain the spread and treatment of confirmed COVID-19 cases resulting in little or no attention to people living with HIV. The lockdowns and movement restrictions in some major cities in Africa may potentially prevent this

population from living their homes to get the ARV regimen they require to stay healthy. This may expose them to danger of disease progression associated with HIV and even greater risk of contracting COVID-19. Thus, this further threatens the achievement of the third '90' of the goal – ensuring 90% of people receiving ART will have viral suppression.

## Beyond 2020 Targets

At the end of 2019, 14 countries had achieved the 73% target including some African countries e.g., Botswana, Eswatini, Namibia, Rwanda, Uganda, Zambia, and Zimbabwe. These countries used epidemiological and programme data to dig deeper and bring HIV services to underserved subpopulations. By the end of 2020, Eswatini is the first African country to have made the remarkable achievement of surpassing the 2030 targets of 95-95-95. However, COVID-19 has reversed some gains in HIV response in some African countries. Despite considerable progress made in reaching people in Africa with treatment, more still needs to be done. Community-led services within differentiated care approaches should be strengthened. Furthermore, the pandemic provides an opportunity to strengthen HIV responses in many African countries so that public health emergencies would not affect response activities. COVID-19 has also provided the unique avenue for the African countries to prepare for the next milestone of 95-95-95 targets - 95% of people living with HIV knowing their HIV status; 95% of people who know their status are on treatment; and 95% of people receiving ART will have viral suppression - by 2030.

## Strengthening Differentiated Services Delivery (DSD) for HIV in Africa

COVID-19 pandemic further reinforces the need to adopt differentiated services delivery (DSD) for HIV in Sub-Saharan Africa [18]. DSD aimed at location modification, frequency, and package of services as well as the service core providers, having in mind the clinical needs, specific population and the context including urbanization, stability of context and HIV epidemic type [18]. DSD was endorsed by The Global Fund for HIV, Tuberculosis and Malaria, the Global Network of People Living with HIV, UNAIDS, the United States President's Emergency Plan for AIDS Relief and the WHO in response to the pandemic, [18] and it is important to continue to advance efforts to implement DSD on African continent.

While there is currently no evidence to support the hypothesis that HIV infections increase vulnerability to COVID-19 [19], PLHIV with advanced disease, especially those with low CD4 count and high viral load, and those who are not taking antiretroviral treatment have an increased risk of infections e.g., tuberculosis and related complications. Of utmost concern is the fact that individuals who may require antiretroviral drugs or treatment may have little or no access to them during this period,

reinforcing the need for DSD. Additionally, access to HIV care services among sex workers, men who have sex with men, people who inject drugs and other key populations of HIV that are highly stigmatised is a further concern during this unprecedented time [20-22]. African governments and other stakeholders should continue to make effort to ensure the hard-won progress in HIV response on the continent is not reversed.

## Conclusion

HIV/AIDS remains a significant public health threat in Africa. COVID-19 arrival on the continent and responses implemented have a significant effect on the control of HIV epidemic and the achievement of the 90-90-90 goal. It is therefore essential that governments, civil society organizations, donors, national authorities, and non-governmental organizations continue to consider the PLHIV population in policy and ensure HIV care services are minimally disrupted during this pandemic. In addition, African nation's stakeholders should ensure measures are put in place to allow for regional manufacturing of ARVs.

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