Perspective

Protecting HIV service delivery for key populations in southern Africa in the context of the COVID-19 pandemic

Godfrey Musuka1, Tafadzwa Dzinamarira1,2,*, Roda Madziva3, Helena Herrera4, Wafaa El Sadr5,6,7

1 ICAP, Columbia University, Harare, Zimbabwe
2 School of Health Systems and Public Health, University of Pretoria, Pretoria, 0002, South Africa
3 School of Sociology and Social Policy, University of Nottingham, United Kingdom
4 School of Pharmacy and Biomedical Sciences, University of Portsmouth, United Kingdom
5 ICAP, Columbia University, New York, USA
6 Department of Medicine, Vagelos College of Physicians and Surgeons, and Department of Epidemiology, Mailman School of Public Health, Columbia University, New York, USA
7 Columbia World Projects, New York, USA

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A B S T R A C T

The 2025 UNAIDS targets prioritize reaching all subpopulations living with HIV and those at risk for HIV as the only pathway to achieving control of the HIV epidemic. This has brought to the fore the importance of addressing the needs of key marginalized groups and placing such communities at the center of HIV response strategies. However, the COVID-19 pandemic has resulted in a setback in terms of confronting HIV. With this in mind, it is important not only to protect services within HIV responses among key populations, but also to expand such services to meet the UNAIDS 2025 targets. Without this, gains in controlling COVID-19 may be achieved at the expense of losses in controlling the spread of HIV, which had been achieved after sustained and resource-intensive actions.

The 2025 UNAIDS targets prioritize reaching all subpopulations living with HIV and those at risk for HIV as the only effective pathway to achieving control of the HIV epidemic. This has brought to the fore the importance of addressing the needs of key marginalized groups and placing such communities at the center of HIV response strategies (UNAIDS, 2021b). The 2021 UNAIDS report estimated that, in 2020, these key populations and their sexual partners accounted for 65% of HIV infections worldwide and 39% of infections in sub-Saharan Africa (UNAIDS, 2021c). While the UNAIDS targets remain important, the advent of the COVID-19 pandemic has threatened progress in successfully achieving them.

The COVID-19 pandemic has resulted in a setback in terms of confronting HIV, as well as addressing other major health threats such as malaria and tuberculosis (The Global Fund, 2021). Two well-described models of HIV epidemics, published in the early days of the COVID-19 pandemic, estimated that a 6-month interruption of supply of ART across the whole population of people living with HIV (PLWH) on treatment would be expected to lead to a 1.63-times increase in HIV-related deaths (Jewell et al., 2020) over a 1 year period, or a 10% increase in HIV deaths over a 5-year period (Hogan et al., 2020) compared with the case with no disruption.

Recent evidence has shown that progress in the HIV response has reversed, with one study finding that testing alone dropped globally by 22% in 2020 (Brown et al., 2021). Another study involving 20 countries revealed that of 10 654 individuals surveyed, 30% had experienced interruptions to in-person HIV testing, with 55% reporting interruptions to HIV self-testing, a further 56% reporting interruptions to pre-exposure prophylaxis, and 10% reporting an interruption to condom access (Rao et al., 2021). Less than half of HIV-positive clients reported for ART collection appointments in the period March–April 2020 (Pierre et al., 2020). Many other reports have revealed evidence of reduced access to ART during the COVID-19 pandemic due to various barriers such as lockdowns, fear of acquiring COVID-19, and unavailability of healthcare services for HIV, which should be addressed to ensure viral suppression — a critical element of the 2025 targets.

Data from 46 countries in sub-Saharan Africa show a positive relationship between HIV prevalence and income disparity (UNAIDS, 2021a). COVID-19 has been shown to have severe economic

* Corresponding author: Tafadzwa Dzinamarira, 107 King George Avenue, Avondale, Harare, Zimbabwe.

E-mail addresses: gm2660@cumc.columbia.edu (G. Musuka), td2581@cumc.columbia.edu, anthonydzina@gmail.com (T. Dzinamarira), roda.madziva@nottingham.ac.uk (R. Madziva), helena.herrera@port.ac.uk (H. Herrera), wme1@cumc.columbia.edu (W.E. Sadr).

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implications globally (Nicola et al., 2020), and the impact is expected to be much stronger in already disadvantaged regions, such as sub-Saharan Africa. Moreover, the economic toll of the pandemic has been suggested to be much greater for women (UNWomen, 2020), which might have contributed to the already established gender inequality in HIV services in Africa. Addressing these key gaps in HIV responses is required to propel countries toward HIV epidemic control, in the context of a new pandemic.

Key populations that are also hard-to-reach groups include men who have sex with men (MSM), transgender women, people who inject drugs, and sex workers. These are recognized as being at increased risk of HIV infection, while at the same time facing challenges in garnering the benefits to access to antiretroviral therapy. In one study conducted among key populations in Zimbabwe, viral load suppression was 48.7% among those newly diagnosed, and 61.5% among all living with HIV (regardless of self-reported HIV status) (ICAP, 2020). Common barriers to accessing health services during the COVID-19 pandemic in these groups are further compounded by the social and legal issues affecting them, which increase their vulnerability (Musuka and Dzinamarira, 2021). Some studies have shown that HIV-positive individuals, particularly with advanced disease and not on ART, are at increased risk of severe COVID-19 (Karmen-Tuohy et al., 2020). In addition, evidence suggests that persons living with HIV, particularly those with advanced disease, face the potential risk of prolonged SARS-CoV-2 infection and contribute to the evolution of viral variants that are more transmissible, may cause more severe illness, or may undermine protection provided by current COVID-19 vaccines (Tafadzwa Dzinamarira et al., 2021). The COVID-19 pandemic, in this manner, has exacerbated existing inequalities in these key and vulnerable populations (Eghtessadi et al., 2020), while affecting more severely people living with HIV in general.

For these reasons, it becomes crucial to ensure that access to HIV services is not only maintained, but rather protected and expanded during the COVID-19 pandemic (Musuka and Dzinamarira, 2021). A study conducted in specialized HIV clinics for MSM has shown that, during the March to August 2020 lockdown in Kenya, these were not classified as providing essential services, and experienced disruption and closures (Macharia et al., 2021), with similar circumstances being reported in Zimbabwe (Mukwenha et al., 2020) and Uganda (Kavala et al., 2020). Additionally, COVID-19 restrictions, such as curfew and lockdowns, have had a considerable effect on mental wellbeing among these populations. Reports from several countries indicate an increase in the prevalence of depression, substance misuse, and loss in income in these groups (Santos et al., 2021), with findings from several studies in African countries showing that lockdown measures have disrupted the livelihoods of sex workers, resulting in breaches of the lockdown regulations in a bid to make ends meet (Wheeler, 2020), thereby further exposing themselves and others, and contributing to transmission not only of COVID-19, but also HIV. These findings underscore the need to identify strategies to prevent interruptions in HIV-related services, particularly for key populations in the region, where impact is particularly marked. With this viewpoint in mind, it is important not only to protect services within HIV responses among key populations, but also to expand such services in order to meet the UNAIDS 2025 targets. Without this, gains in controlling COVID-19 may be achieved at the expense of losses in controlling the spread of HIV, which had been achieved after sustained and resource-intensive actions.

Firstly, it is critically important to obtain accurate data on the impact of COVID-19 on HIV responses among key populations in order to refine mitigation actions. Secondly, countries must work towards addressing criminalization and stigmatization of key population groups. This could influence behavior in terms of compliance with COVID-19 risk-minimization measures. Thirdly, there is a need to strengthen prevention and treatment approaches, in particular by engaging with trusted civil society groups serving these populations. Fourthly, there is a need to expand innovative methods of ensuring continued ART access during COVID-19. These include intensified focus on community-based, rather than facility-based, ART refilling; immediate initiation of newly diagnosed PLHIV on 3-month ART starter packs; and broadened access to multi-month dispensing among PLHIV established in care (Boyd et al., 2021; Grimsrud and Wilkinson, 2021). HIV service delivery methods used during the pandemic, such as tele-medicine (Rogers et al., 2020), mobile delivery of ART (Wilkinson and Grimsrud, 2020), mobile testing units (Middleton et al., 2020), and self-testing (Mhango et al., 2020) could also be leveraged to reach key populations.

Finally, as COVID-19 vaccine access continues to improve in low-resource countries, efforts must be made to ensure that key populations, including those living with HIV, have facilitated access to vaccines through convenient and trusted providers and service points. Vaccines are the mainstay of ending the COVID pandemic, and equal access to vaccines is a crucial part of the response to the epidemic and the way forward to achieving the UNAIDS targets for HIV. However, Africa has been disproportionately affected by the inequity in COVID-19 vaccine distribution, with less than 9% of people on the continent being fully vaccinated by the end of 2021 (Dzinamarira et al., 2022; Loembé and Nkengasong, 2021). Ensuring COVID-19 vaccine access in Africa will provide gains not only for COVID-19 control, but also for other endemic infectious diseases, such as HIV.

In conclusion, while key populations have been prioritized by UNAIDS in its new strategic plan, they continue to face substantial challenges in accessing HIV-related services and have been disproportionately impacted by the COVID-19 pandemic. This situation compels national HIV control programs to focus on these and other vulnerable groups. This requires addressing fundamental structural barriers, such as stigma and discrimination, which, combined with COVID-19 restrictions, put these populations at enormous risk and lead them to defer accessing critical services. Additionally, providing access to COVID-19 vaccines and other protective measures remains a critical priority.

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Declaration of Competing Interest
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