## LETTER TO THE EDITOR



# Challenges of HIV amidst COVID-19 in Africa: Can we conquer them?

Dear Editor,

Human immunodeficiency virus (HIV) has been predominant in Africa since the 1920s. However, it came to light by the 1970s, when the primary epidemic of HIV/acquired immunodeficiency syndrome (AIDS), believed to have happened in Kinshasa, entered a wide urban sexual network and spread rapidly around the world. Concerning West Africa, it was only slightly impacted by HIV disease compared to other districts of sub-Saharan Africa (SSA). In Senegal, HIV predominance has stabilized at a moderate level. In 2018, around 800 000 people in southern Africa were contaminated with HIV. The worst of the epidemic has been seen in South Africa, a country in the south of Africa region that has the greatest and most high-profile HIV plague within the world, with a record of 7.7 million individuals living with HIV in 2018.

As the most affected country by HIV globally, South Africa has the world's biggest antiretroviral treatment (ARV) program. In 2015, it was the primary nation within the locale to completely favor pre-exposure prophylaxis, utilizing antiretroviral drugs to secure HIV-negative individuals from HIV even before potential clinical presentation of the infection. Uganda has brought the estimated predominance rate down to 5% by the conclusion of 2001 from an evaluated peak of close to 14% within the early 1990s with solid prevention campaigns. ARV programs have been scaled up drastically in east and southern Africa regions over the past decade.<sup>2</sup> South Africa, for example, has made a noteworthy advance in later years in getting more people to test. Through which more than 10 million individuals in South Africa test for HIV each year. In 2017, South Africa was the first with the 90-90-90 targets, with 90% of individuals living with awareness of HIV. In 2018, 90% of individuals living with HIV were mindful of their status, of which 68% were on treatment.3

Greater advancements have also been made to prevent mother-to-child transmission of HIV in eastern and southern Africa regions. Between 2010 and 2018, new HIV contaminations among children (0–14 a long time) fell from 170 000 to 84 000. Ninety-two percent of HIV-positive pregnant women acquired ARV to protect their health and prevent HIV transmission to their babies.<sup>3</sup>

Awareness and educational programs focusing on keeping girls in school, comprehensive sexuality education, girl-friendly sexual and reproductive health (SRH) administrations, dispensing with gender-based viciousness and female genital mutilation, and financial and political strengthening also were developed and helped to decrease HIV rates among African countries. International Organizations such as DREAMS, UNAIDS, and UNICEF, all, in conclusion, youthful help

continue working to diminish modern HIV contaminations among women and their children.<sup>4</sup>

However, these advances and future perspectives in the control of HIV/AIDS on the African continent have been severely impacted by the COVID-19 pandemic. The COVID-19 pandemic reached Africa in less than 3 months after it had been confirmed in the Republic of China, with Nigeria being the first SSA country to report a confirmed case.<sup>5</sup> Government countries rapidly developed response plans to help combat the virus, and, as expected, this redirection of resources resulted in the reduction of services for the control and treatment of other diseases. However, while in acute infectious diseases, a lack of epidemiological control has been observed resulting in under or misdiagnosis, 7-9 concerning HIV, the pandemic has mainly impacted educational and testing programs, the provision of protection methods, and the life of people already living with HIV. For example, in South Africa, ARV provision was generally maintained during the 2020 COVID-19 lockdown, but HIV testing and ARV initiations were heavily impacted. 10 In other countries, such as Kenya and Nigeria, up to 50% of people living with HIV could not get their ARV provision. 11 Despite steady advances in scaling up treatment coverage—with more than 25 million people in need of ARVs receiving them in 2019—one of the key 2020 global targets was missed. 12 Besides, HIV prevention and testing services also were not reaching the groups that need them most.

Therefore, improved targeting of proven prevention and testing services will be critical to reinvigorating the global response to HIV. <sup>12</sup> Tarkang recommended that the SSA governments must ensure that HIV treatment adherence is not compromised owing to a shift of focus to the fight against COVID-19. They should ensure that everyone on HIV treatment gets an adequate supply of ARVs. <sup>13</sup>

Importantly, African civil society organizations have an opportunity to capitalize on the global pause-button activated as a result of the pandemic. They can leverage this opportunity to define a new norm that enables a more sustained SRH response that can withstand crises and new hazards post-COVID-19. This will allow better continental preparedness in potential future shocks and preserve the trajectory towards achieving the sustainable development goals by 2030 and the African Union Agenda 2063. Out of the looming crisis, a reframed social contract that places health at its center could be a legacy of COVID-19. However, the importance of promoting effective containment strategies is ever more crucial in the pandemic era.

It is evidenced that the COVID-19 pandemic took the spotlight from HIV cases in Africa. Organizations such as WHO, CDC, and UNICEF need to stress the importance of reducing the burden of HIV. Encouraging various nongovernmental organizations (NGOs) is essential to sustain the HIV endemic. It might be useful to remind them that in Africa, there are two coexistence viruses. The surveillance network built for HIV can be handy to use for the COVID-19 response. Since HIV reporting occurs weekly, depending on the needs, COVID-19 data reporting can be added with its subfractions such as cause of death, time spent in ICU, and medications are given. The government and NGOs must provide personal protective equipment to the staff responsible for surveillance.

As in the case of other infectious diseases, 14,15 awareness campaigns are paramount whilst making use of all local promotional materials, throwing more light on the symptoms and risk factors of both diseases. These materials are to stress the importance of water sanitation, hygiene, social distancing, and wearing masks. If possible, these campaigns should be done nationwide, involving public figures such as political leaders, celebrities, and religious leaders to draw more attention. Therefore, with multidisciplinary actions involving the different spheres of society and improved health planning and management in African countries, it will be possible to reduce the impact of the pandemic on the management and control of AIDS in the continent.

# **CONFLICT OF INTERESTS**

The authors declare that there is no conflict of interests.

## **AUTHOR CONTRIBUTIONS**

Mohammad Yasir Essar developed the concept for this letter. Mohammad Mehedi Hasan, Parvathy Mohanan, and Nzeribe Emmanuella wrote the first draft. Ana Carla dos Santos Costa and Mohammad Mehedi Hasan edited the second draft and improved the manuscript. Shoaib Ahmad, Sayed Hamid Mousavi, and Mohammad Yasir Essar made the critical comments and revisions. All authors revised and approved the final draft.

Mohammad Mehedi Hasan<sup>1,2</sup>

Parvathy Mohanan<sup>3</sup>

Nzeribe Emmanuella<sup>4,5</sup>

Ana Carla dos Santos Costa<sup>6</sup>

Shoaib Ahmad<sup>7</sup>

Sayed Hamid Mousavi<sup>8,9</sup>

Mohammad Yasir Essar<sup>8</sup> (D)

<sup>1</sup>Department of Biochemistry and Molecular Biology, Faculty of Life Science,

Mawlana Bhashani Science and Technology University, Tangail, Bangladesh

<sup>2</sup>Division of Infectious Diseases,

The Red-Green Research Centre, BICCB, Dhaka, Bangladesh

<sup>3</sup>Department of General Medicine, Medical University Sofia, Sofia, Bulgaria <sup>4</sup>Faculty of Pharmacy and Pharmaceutical Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana <sup>5</sup>Department of Child Health, Tamale Teaching Hospital, Tamale, Ghana <sup>6</sup>Faculty of Medicine, Federal University of Bahia, Salvador, Bahia, Brazil <sup>7</sup>Department of Medicine and General Surgery, Punjab Medical College, Faisalabad, Pakistan <sup>8</sup>Medical Research Center, Kateb University, Kabul, Afghanistan <sup>9</sup>Afghanistan National Charity Organization for Special Diseases

## Correspondence

Mohammad Yasir Essar, Medical Research Center, Kateb University, 1001 Kabul, Afghanistan.

Email: m.yasir.essar@kateb.edu.af

(ANOCD), Kabul, Afghanistan

### ORCID

Mohammad Mehedi Hasan https://orcid.org/0000-0002-3871-889X

Parvathy Mohanan https://orcid.org/0000-0002-2380-7048 Ana Carla dos Santos Costa b https://orcid.org/0000-0001-8486-7899

Shoaib Ahmad http://orcid.org/0000-0002-7241-7724 Mohammad Yasir Essar https://orcid.org/0000-0002-6554-7619

## REFERENCES

- 1. The History of AIDS in Africa. Accessed May 14, 2021. https:// www.blackhistorymonth.org.uk/article/section/real-stories/thehistory-of-aids-in-africa/
- 2. UNAIDS and WHO. A history of the HIV/AIDS epidemic with emphasis on Africa. Accessed May 14, 2021. https://www.un. org/development/desa/pd/sites/www.un.org.development. desa.pd/files/unpd-egm-200309-unaids whopaper2.pdf
- 3. HIV and AIDS in South Africa | Avert. Accessed May 14, 2021. https://www.avert.org/professionals/hiv-around-world/subsaharan-africa/south-africa
- 4. HIV and AIDS in East and Southern Africa regional overview | Avert. Accessed May 14, 2021. https://www.avert.org/professionals/hivaround-world/sub-saharan-africa/overview
- 5. Golin R, Godfrey C, Firth J, et al. PEPFAR's response to the convergence of the HIV and COVID-19 pandemics in Sub-Saharan Africa. J Int AIDS Soc. 2020;23(8):25587. https://doi.org/10.1002/ iia2.25587
- 6. Çavdaroğlu S, Hasan MM, Mohan A, et al. The spread of Yellow fever amidst the COVID-19 pandemic in Africa and the ongoing efforts to mitigate it. J Med Virol. 2021;93:5223-5225. https://doi. org/10.1002/jmv.27027
- 7. Rabiu AT, Mohan A, Çavdaroğlu S, et al. Dengue and COVID-19: a double burden to Brazil. J Med Virol. 2021;93:4092-4093. https:// doi.org/10.1002/jmv.26955
- 8. Costa A, Hasan MM, Xenophontos E, et al. COVID-19 and Zika: an emerging dilemma for Brazil. J Med Virol. 2021;93:4124-4126. https://doi.org/10.1002/jmv.27006

- Ahmad S, Tsagkaris C, Aborode AT, et al. A skeleton in the closet: the implications of COVID-19 on XDR strain of typhoid in Pakistan. *Public Health Pract*. 2021;2:100084. https://doi.org/10.1016/j. puhip.2021.100084
- Dorward J, Khubone T, Gate K, et al. The impact of the COVID-19 lockdown on HIV care in 65 South African primary care clinics: an interrupted time series analysis. *Lancet HIV*. 2021;8(3):e158-e165. https://doi.org/10.1016/S2352-3018(20)30359-3
- Livelihood impacts of Covid-19 in Kenya, Nigeria and South Africa -TechCentral. Accessed May 17, 2021. https://techcentral.co.za/livelihood-impacts-of-covid-19-in-kenya-nigeria-and-south-africa/97669/
- 12. WHO: access to HIV medicines severely impacted by COVID-19 as AIDS response stalls. Accessed May 14, 2021. https://www.who.

- int/news/item/06-07-2020-who-access-to-hiv-medicines-severely-impacted-by-covid-19-as-aids-response-stalls
- Tarkang EE. The fight against COVID-19 in sub-Saharan Africa—a threat to the continuous management of HIV patients: application of the action areas of the Ottawa charter for health promotion. *Pan Afr Med J.* 2020;35(suppl 2):25. https://doi.org/10.11604/pamj.supp. 2020.35.2.23224
- Phadke R, Mohan A, Çavdaroğlu S, et al. Dengue amidst COVID-19 in India: the mystery of plummeting cases. J Med Virol. 2021;93: 4120-4121. https://doi.org/10.1002/jmv.26987
- Jain S, Rocha ICN, Maheshwari C, et al. Chikungunya and COVID-19 in Brazil: the danger of an overlapping crises. J Med Virol. 2021;93:4090-4091. https://doi.org/10.1002/jmv. 26952