LETTER TO THE EDITOR



Antiretrovirals shortage in Kenya amid COVID-19

To the Editor.

The human immunodeficiency virus (HIV) continues to be one of the major public health challenges around the world. While proper treatment is crucial, statistics show that only 67% of patients with HIV are adherent to antiretroviral therapy (ART). Thus, highlighting nonadherence or shortage of antiretrovirals. Specifically, seven medications are at a higher risk of shortage: tenofovir, efavirenz, zidovudine, lopinavir, ritonavir, abacavir, and darunavir.² In sub-Saharan Africa, it is estimated that 25.7 million people are living with HIV but only 64% of this population are taking ART: its shortage may even lead to 500 000 additional AIDS-related deaths.3 This raised the concern about access to ART treatment during the COVID-19 pandemic. Moreover, as per the United Nations agency, millions of people may be at increased risk of HIV transmission. Therefore, regarding essential health services during the pandemic, World Health Organization has successfully developed interim guidance that showcases emergency preparedness and response plan.⁴

Like other countries in sub-Saharan Africa, Kenya is also suffering from an ART shortage. As of 2019, 1.5 million Kenyans are living with HIV. Nearly 42 000 new HIV infections and 21 000 AIDS-related deaths are reported. However, ever since the pandemic started, treatment for children and lab testing kits have been significantly running low in stock.⁶ Consequently, acquiring HIV medications became a problem due to decreased ART supply; thereby, leading to the development of resistance to certain medications and an overall increase in HIV-related deaths. According to African news, the main reason for the current shortage of HIV drugs is the coronavirus pandemic, along with the hoarding in customs warehouses due to the surge in government taxation. As a result, according to the chief executive officer at Blast (an organization for young people living with HIV patients), patients are more likely to skip doses of their treatment as amid the COVID-19 pandemic it is unfeasible for them to travel to the clinic every week, taking leaves from work, paying for transport, and hence exposing themselves to the virus. This, however, has severe repercussions, as the Civil Society Organizations warned that missed doses may further increase the chances of mother-to-child and sexual transmission of HIV. In addition to that, the disrupted treatment also leads to certain opportunistic infections, such as tuberculosis, pneumonia, and diarrhea; thereby, adding to the overall suffering of already debilitated HIV patients.8

Further ahead, as stated by the United Nations Children's Emergency Fund, the leading cause of death in children in Kenya was HIV in 2008, where only around 27%–30% of children were receiving HIV treatment. In an already deprived zone of HIV medications, its current shortage is adding to the vulnerability of the HIV pediatric population.

The dire consequences of decreased HIV drug supply are largely affecting children since they are forced to eat crushed tablets instead of syrup, or if they were consuming pediatric tablets, they have no other option than to break up adult tablets. This can lead further to incorrect dosage as the medicine is not equally distributed in the tablet always. ¹⁰ Besides, the inability to receive proper HIV treatment in infants results in their death within 2 years, owing to certain opportunistic infections. ¹¹

Given the current situation in Kenya, many people are protesting for their basic living rights, and as per the United States Agency for International Development spokesperson, there is a possibility that the situation might resolve in the future.8 However, to increase the HIV drug supply and to find appropriate alternatives, it is necessary to make well-planned strategies and informed decisions. According to a review published in 2018 facility fast-track drug refills and appointment spacing, facility or community-based ART groups, community ART distribution points or home-based care, and task-shifting or decentralization of care provided a similar efficacy in suppressing viral load proving to be acceptable alternatives to standard HIV therapy. 12 Further studies are still required to validate the alternative models for HIV treatment along with proper implementation. Apart from this, to further increase the life expectancy of HIV patients and to prevent sex partners and children from transmissible HIV infection, the Ministry of Health in Kenya should devise plans and strategies to resolve the ART treatment shortage issue as soon as possible, thereby, making it easily accessible for everyone.

CONFLICTS OF INTEREST

The authors declare that there are no conflict of interests.

AUTHOR CONTRIBUTIONS

Irfan Ullah conceived the idea. Wardah Hassan, Irfan Ullah, Muhammad Junaid Tahir, and Ali Ahmed retrieved the data, did a write-up of the letter. Ali Ahmed and Muhammad Junaid Tahir reviewed and provided inputs. All authors approved the final version of the manuscript.

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REFERENCES

- 1. Global HIV/AIDS overview. HIV.gov. November 25, 2020.
- Straube T. Updated: COVID-19 could cause a shortage of HIV meds this summer. POZ. July 8, 2020.
- 3. The cost of inaction: COVID-19-related service disruptions could cause hundreds of thousands of extra deaths from HIV. UNAIDS. 2020.

- World Health Organization. Maintaining essential health services: operational guidance for the COVID-19 context interim guidance. 2020.
- HIV and AIDS in Kenya. Avert. https://www.avert.org/professionals/hiv-around-world/sub-saharan-africa/kenya. Accessed May 20, 2021.
- 6. People in Kenya say lives at risk as HIV drugs run short. *Al Jazeera Times*. April 24, 2021.
- A cry for help!: HIV/AIDS patients in Kenya decry ARV drugs shortage. Africa News. April 23, 2021.
- 8. Supplies run low as Kenya and US standoff over HIV drugs by Sara Jerving. *devex*. April 21, 2021.
- UNICEF. HIV attributable deaths in children aged under 5 in ESAR. 2008.
- American Academy of Pediatrics. Increasing antiretroviral drug access for children with HIV infection. 2007. http://aappolicy.aappublications.org/cgi/reprint/pediatrics;119/4/838.pdf. Accessed October 13, 2008.
- https://www.hrw.org/report/2008/12/16/question-life-or-death/ treatment-access-children-living-hiv-kenya#_ftn26
- Hagey JM, Li X, Barr-Walker J, et al. Differentiated HIV care in sub-Saharan Africa: a scoping review to inform antiretroviral therapy provision for stable HIV-infected individuals in Kenya. AIDS Care. 2018;30(12):1477-1487.