



HIV/AIDS in Sub-Saharan Africa: Challenges of Stigma, Treatment Access, and Economic Barriers

Anirudh Dinesh

In 2023, a study that was conducted showed that in the Sub-Saharan country of Eswatini, the HIV prevalence rate among adults was 27.5%. Human immunodeficiency virus infection and acquired immune deficiency syndrome, or HIV/AIDS, is a very prevalent disease caused by the passing of bodily fluids through intercourse. To begin with, to understand how HIV/AIDS works, we must delve into how diseases work. Viruses are infecting agents that inject RNA or DNA into the host cell, depending on the virus type. This leads to the hijacking of cellular machinery to replicate, resulting in disease symptoms. Bacteria are microscopic unicellular organisms, with certain types being beneficial and certain types being detrimental. Genetic disorders are caused by the mutation of genes, causing a disease or sickness. For example, the flu uses proteins known as hemagglutinin to bind to respiratory cells, while bacteria like *Staphylococcus aureus*, or Staph, cause infections that vary from mild skin issues to sepsis. An example of a viral mechanism would be reverse transcriptase in HIV. According to an article, “HIV uses reverse transcriptase (RT) to convert its RNA into viral DNA ... Non-nucleoside reverse transcriptase inhibitors (NNRTIs) prevent HIV from replicating by blocking RT” (HIV.gov, 2025). Genetic disorders, like cystic fibrosis, result from mutations in the Cystic Fibrosis Transmembrane Conductance Regulator (CFTR) gene, affecting mucus development and leading to major lung complications (National Heart, Lung, and Blood Institute, 2024, para. 1). To compare these types of diseases, they all cause an abnormal state of the body. In contrast, however, viruses need a host cell to replicate, whereas bacteria can reproduce independently. However, genetic disorders are inherited from the parents rather than caused by external pathogens such as viruses and bacteria.

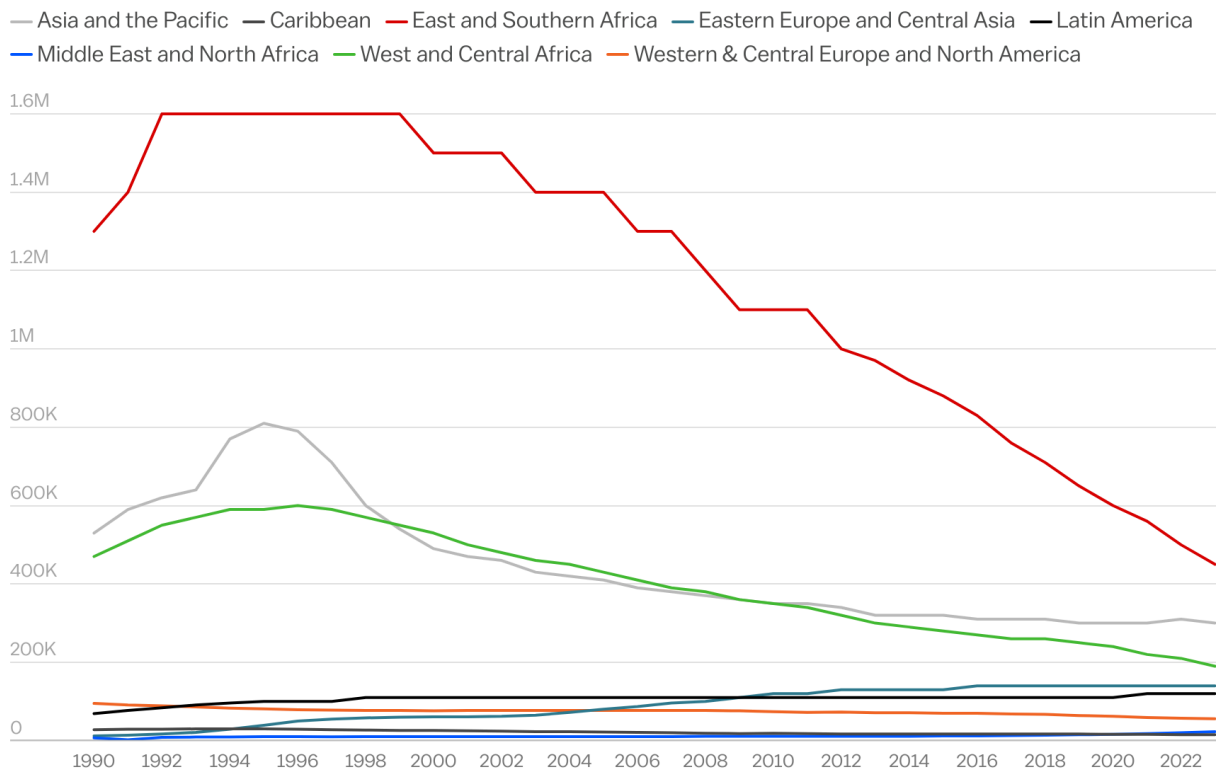
Introduction:

HIV/AIDS is a viral infection that is predominantly caused by the passing of bodily fluids during intercourse, and it primarily affects the Sub-Saharan Africa region. Antiretroviral therapy (ART) is a “treatment of people infected with [HIV] using anti-HIV drugs” (Pan American Health Organization [PAHO], 2020, para. 1). Science in the modern day addresses infections like HIV through ART, preventing the virus from replicating and reduces the amount of the virus in a person’s bloodstream. Unlike antibiotics that kill viruses or stop the growth of bacteria, ART doesn’t cure HIV. Rather, it restrains the virus from spreading further, helping patients live longer. In recent times, Sub-Saharan Africa has been affected by a higher HIV-to-AIDS-progression rate due to limited access to ART. The graph below demonstrates how, even if HIV/AIDS cases are dropping in Sub-Saharan Africa, it still bears the burden of having more cases than any other region. Below, the graph shows how, despite the huge drop in HIV cases, East and Southern Africa still have the highest number of HIV/AIDS cases globally in present times:



New HIV infections in sub-Saharan Africa have plummeted

In other regions, progress has stagnated or reversed.



Regional classifications are per the United Nations which places Somalia, Djibouti, and Eritrea in the Middle East and North Africa regional group.

Chart: Jess Craig • Source: UNAIDS

Vox

Figure 1. Global Trends of HIV Cases by Region Over Time (Source: Craig, 2024, vox.com)

The fear of social stigma in Sub-Saharan Africa prevents many people from getting tested or disclosing their HIV status. This lack of diagnosis leads to higher transmission rates since people who do not even know they have HIV are less likely to take preventive measures (HIV/AIDS, 2025). Many who want to have children are in fear that, since AIDS is a sexually transmitted disease (STD), the stigmatization of infected people occurs, which causes people to avoid testing to determine their status (Souleymane Mboup et al., 2025). Africa also faces a low socioeconomic status, since “About 464 million people in the region are still living in extreme poverty in 2024” (World Bank Group, 2024, para. 2). The main reason why Sub-Saharan Africa isn’t doing so well with AIDS is because AIDS reduces the availability of human capital. Therefore, we can derive that countries, more prevalent in Sub-Saharan Africa, with lower gross national incomes (GNIs) per capita have lower rates of ART coverage (Metin Dinçer et al., 2024, para. 2). Ultimately, Sub-Saharan Africa experiences a lot of damage with preconceived stigmatization, without the necessary antiretroviral therapy, and especially without a proper economy, leading to high numbers of cases and deaths of HIV/AIDS in Sub-Saharan Africa.

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