

REVIEW ARTICLE

Global health policy: Does the 90-90-90 treatment target address the burden of HIV/AIDS?

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ABSTRACT

Acquired Immune Deficiency Syndrome (AIDS) is caused by the virus known as the Human Immunodeficiency Virus (HIV) and continues to be one of the world's most pressing public health challenges. This paper reviews the global health policy in the HIV/AIDS response, its challenges, and its impacts on addressing the burden of HIV. There is a global commitment to stopping new HIV infections, ensuring that everyone with HIV can access HIV treatment, and end the pandemic. UNAIDS's 90-90-90 goals were set to end the HIV pandemic crisis by 2020. The Goal was 90% of all people with HIV will know their HIV status, 90% of all people who know their status will be on ART, and 90% of all people receiving ART will have viral load suppression. From the UNAIDS 2018 reports, there is promising progress towards meeting the 90-90-90 target. For instance, as of 2018, 79% knew their HIV status, 78% of all people who knew their status were accessing ART, and 86% of all people receiving ART had viral suppression. Also, new HIV infections fell by 39% between 2000 and 2019. HIV-related deaths fell by 51% over the same period, and 15 million lives were saved because of appropriate policy implementation. Conversely, the new figures from the World Health Organization (WHO) and the Joint United Nations Programme on HIV/AIDS (UNAIDS) revealed progress towards ending AIDS as a public health threat by 2030 was already off track before the COVID-19 pandemic.

INTRODUCTION

Human Immunodeficiency Virus (HIV) is a virus that attacks the body's immune system. HIV is one of the world's most pressing public health challenges. Nevertheless, there is a global commitment to stopping new HIV infections, ensuring that everyone with HIV has access to HIV treatment, and ending the pandemic. The global incidence of HIV was 4.4% in 2019, lower than the

7.0% in 2010; this reflects the vital progress made against the epidemic in the past decade. Indeed, the global health policy of HIV Strategic Plan for the period 2016-2021 was developed as a set of evidence-informed strategies focused on building one consolidated, unified, rights-based, and decentralized HIV program with services that are integrated into the general health services of countries (President's Emergency Plan For AIDS Relief [PEPFAR] & Global AIDS, 2019 & World Health Organization [WHO], 2016a).

To mount efforts that are directed at ending the HIV crisis, UNAIDS's 90-90-90 goals were set as a target by the year 2020, with the aim of 90% of all people with HIV will know their status, 90% of all people who know their status will be on ART, and 90% of all people receiving ART will have viral load suppression (PEPFAR & Global AIDS, 2019). Monitoring the progress of the goals, as indicated by the UNAIDS report in 2018, revealed that there was promising progress in trying to meet the targets. Hence, of all people with HIV worldwide: 79% knew their status, 78% of all the people who knew their status were accessing ART, and 86% of all the people receiving ART had viral suppression. This scale-up of treatment has declined HIV disease—from a peak of 1.7 million in 2004 to 770,000 in 2018 ((Joint United Nations Programme on HIV/AIDS [UNAIDS], 2020c).

On the other hand, the new figures from the World Health Organization (WHO) and UNAIDS estimated that if the ongoing policy-guided efforts are disrupted to mitigate and overcome interruptions in health services and supplies during the COVID-19 pandemic, notably, a six-month pause in treatments, this could result in an additional 500,000 deaths from AIDS and related diseases in sub-Saharan Africa in 2021. Strikingly, the consequence will bring the region back to the 2008 AIDS mortality levels. Even a 20% disruption could cause an additional 110 000 deaths. (UNAIDS, 2020c).

This review paper assesses the global health policy's opportunities and challenges in the HIV/AIDS response and its impacts on addressing the burden.

THE GLOBAL BURDEN OF HIV/AIDS PANDEMIC

The Joint United Nations Program on HIV/AIDS reports that in 2018, the number of people with HIV was approximately 37.9 million people across the globe. Of these, 36.2 million were adults, and 1.7 million were children (<15 years old). However, in 2018 alone, an estimated 1.7 million individuals worldwide became newly infected with HIV (the incidence of HIV infection). Of these new infections, 1.6 million infections were among people aged 15 and older, and 160,000 infections were among children aged 0-14 (PEPFAR & Global AIDS, 2019).

In line with this, the 2020 UNAIDS report also revealed that in 2019 alone, globally, an estimated 1.7 million individuals acquired new HIV infection; more than three times the 2020 target. Plus, 690,000 lives were lost to AIDS-

related illnesses, despite the availability of effective treatments and concerted efforts to halt the pandemic. Moreover, the data shows that 62% of new adult HIV infections globally are among key populations and their sexual partners. Again, adolescent girls and young women account for 1 in 4 infections in Sub-Saharan Africa. Sadly, in 25 countries, more than 50% of adults have discriminatory attitudes toward People Living with HIV (PLHIV) (UNAIDS, 2020a).

To this end, the development of the global health policy, such as the "HIV Strategic Plan for the period 2016-2021" was a welcome development (WHO, 2016a). Implementing this strategy has witnessed the maximization of treatment access and has declined HIV disease—to the lowest in 2018. In the meantime, to leverage the strategic efforts of ending the HIV crisis, UNAIDS's 90-90-90 goals were set as a target by the year 2020. (UNAIDS, 2020).

Despite the global commitment to the target, many challenges to improve the HIV pandemic ending response remain.

HIV TREATMENT: GATEWAY TO PREVENTING ILLNESS AND MAKING TRANSMISSION RARE

Antiretroviral medicines have been instrumental in saving millions of lives from AIDS-related illnesses. Many scholars have proved that HIV treatment is a unique tool in the AIDS response, preventing disease and death, averting new infections, and saving money. To that end, presently, of the 38 million people living with HIV, 25.4 million people are now on treatment. 12.6 million people are still waiting (UNAIDS, 2020a). Likewise, the study conducted on the effects of early treatment by the WHO presented considerable evidence of earlier treatment initiation's clinical benefits. And it recommended an increase in the CD4 count threshold for initiation of HIV treatment from 350 to 500 cells/mm³. Additionally, the randomized trial conducted on an early treatment cohort revealed that they were 27% less likely to experience a primary clinical event, 36% less likely to experience an AIDS-defining clinical manifestation, and 51% less likely to be diagnosed with tuberculosis (WHO, 2016b).

Similarly, the national institutes of health study indicated that early antiretroviral treatment lowered the risk of serious AIDS-related events by 72%. Moreover, it can minimize the risk of serious non-AIDS events by 39%

(National Institutes of Health [NIH], 2015). Furthermore, the consolidated guidelines on HIV prevention and treatments recommend that Anti-Retroviral Therapy (ART) should be initiated in all adults living with HIV, regardless of WHO clinical stage and at any CD4 cell count. Also, retesting all people living with HIV before starting ART is recommended to ensure a correct diagnosis of HIV infection. Besides, it underscored that ART initiation must be seen as a non-emergency intervention, and various approaches are used to help prepare people to begin treatment (WHO, 2016b).

GLOBAL HEALTH POLICY RESPONSE TO THE HIV/AIDS EPIDEMIC

Health policy refers to decisions, plans, and actions undertaken to achieve specific health care goals within a society (Kaur, 2016). The United Nations (UN) General Assembly in 2016 agreed that ending the AIDS epidemic by 2030 required an accelerated expansion of HIV services alongside rights affirming and enabling environments for those services (UNAIDS, 2016).

In parallel, according to the WHO (2016), interim targets were set to be achieved by the end of 2020. For this reason, as a response to the pandemic of HIV, numerous international and regional response policies were developed and implemented. Without a doubt, the WHO developed a health sector strategic policy to end the HIV epidemic called the "2016-2021 HIV strategic plan". According to the UNAIDS (2020d), the UNAIDS 2016-2021 Strategy calls stakeholders to take action (urgently) with boldness to speed up the efforts to reach those who are not meeting up to enhance the speedy achievement of the 90-90-90 treatment target. This will help to close the testing gap and protect the health of the 22 million people living with HIV who are finding it difficult to access treatment, still. And this includes children living with HIV.

According to WHO (2016b), this plan is comprehensive and it established five strategic directions:

1. strengthening and focusing national HIV programs and plans through vital sound information and good governance;
2. defining a package of essential HIV services and high-impact interventions along the HIV services continuum;

3. adapting and delivering the HIV services continuum for different populations and locations to maximize quality and achieve equitable coverage;
4. implementing systems to fund the continuum of HIV services fully and to minimize the risk of financial hardship for those requiring the services, and
5. embracing innovation to drive rapid progress.

It follows that the United Nations (UN) General Assembly later articulated interim 2020 milestones in the 2016 Political Declaration on Ending AIDS with the global health actors. They set a policy known as "The Fast Track Target 90-90-90" to accelerate the HIV response towards ending the AIDS pandemic by 2030. The Fast-Track targets include the 90-90-90 target: 90% of the people living with HIV know their status, 90% of the people who know their status are accessing treatment, and 90% of the people receiving treatment have suppressed viral loads (UNAIDS, 2014; WHO, 2016b).

Ultimately, the Fast-Track target applies to everyone - children, adolescents, and adults; rich and poor; women and men; and all key populations (including sex workers, people who inject drugs, men who have sex with men, transgender people, and prisoners). Hence, to take this HIV program to a new level, the plan recommends UN member-countries to follow these critical points:

- i) Use focused, high-impact prevention interventions and services,
 - ii) Innovate with HIV testing,
 - iii) Treat all in need and start treatment earlier,
 - iv) Devote more attention to quality and
 - v) Reduce disparities
- (WHO, 2016b).

Consequently, the global response to HIV/AIDS policy can mobilize the international community's financial commitment and reach significant results. Hence, the HIV response policy application has saved millions of lives and reduced new infections, especially through the scale-up of antiretroviral therapy and the 2020 Fast Track Strategy.

OPPORTUNITIES AND CHALLENGES OF THE HIV POLICY

By the very conceptualization, design, and prospect of the policy, every UN member-country has the opportunity to achieve the treatment target. It is heartwarming that

several member countries are striving to do so, supported by the government and other partners. According to UNAIDS (2020b), evidentially, at the end of 2019, fourteen (14) countries have achieved the 90-90-90 HIV treatment target. For instance, Eswatini, which has one of the highest HIV prevalence rates globally, at 27% in 2019, surpassed the targets to achieve 95-95-95. This is the right step in the right direction! Other countries may align themselves with this success. Despite this feat in Eswatini and some other ongoing efforts in some other countries, UNAIDS (sadly) inferred in a recent report that even though the 2020 UNAIDS report revealed significant progress, only a few countries have taken sufficient action to reach the interim milestones, proving that the target can be achieved with adequate political will, financial resources, and community engagement. However, the global aggregate data towards ending AIDS by 2030 was already off track to achieve the three zeros because of limited resource allocation in many countries, funding gap, discrimination, entrenched inequalities, and failure to bend the curves of new HIV infections and AIDS-related deaths as significantly as was envisioned in the UNAIDS 90-90-90 Fast Track Strategy (UNAIDS,2020b & UNAIDS,2020d).

The 2020 joint UN reports underscored the fact that the global health community was already off track to meet HIV targets for 2020. Despite advances in the HIV prevention and treatment knowledge and years of significant effort by the global health community, organizations, and government, too many people with HIV or at risk of HIV still do not have access to prevention, care, and treatment. Many of the countries hardest hit by HIV also suffer from other infectious diseases, food insecurity, and other serious problems (UNAIDS, 2020b).

CONCLUSIONS

This paper reviewed the scientific documents, strategic plan, and annual report on global health actors' commitments and policy application to end the HIV/AIDS pandemic burden. UNAIDS and WHO noted that sustained progress was made in HIV testing and antiretroviral therapy coverage in different countries, leading to a reduction in HIV transmission rates. Also, new HIV infections fell by 39% between 2000 and 2019. HIV-related deaths fell by 51% over the same period, and 15 million lives were saved using appropriate policy implementation.

Moreover, the UN General Assembly's 2016 Political Declaration on Ending AIDS "the 90-90-90 targets" was the prominent global health policy with core commitments contributing gains in treatment effectiveness, as well as increases in the number of people who know their status and are on treatment. Despite the tremendous achievement, significant gaps remain, and some critical aspects of HIV prevention may be sliding backward, according to the latest data. For now, the occurrences of COVID-19 have disrupted the entire efforts; thus, globally, there is an urgent need to scale up HIV prevention services, especially in the countries facing a critical shortage of HIV medicine and a weak health system. In summary, the global HIV response policy has played a significant role in testing, treating, and preventing HIV/AIDS transmission. Even if progress towards global targets is stalling, enhanced targeting of proven prevention and testing services and minimizing the inequalities will be critical to heightening the global response to ending HIV.

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