

POLICY PAPER

The use of preventive HIV medication (PrEP) awaiting approval in Sub-Saharan Africa

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Sub-Saharan Africa (SSA) is experiencing a generalised HIV epidemic and has low levels of HIV testing, treatment and viral load suppression. Available data suggests that the region will not meet the UN's 90-90-90 targets unless more HIV preventive actions are taken. Pre-exposure prophylaxis (PrEP) for HIV has been identified as a new, safe and effective HIV prevention tool. It provides anti-HIV medication to HIV-negative people to stop them from becoming infected. The World Health Organization recommends its use for anyone at substantial HIV risk, as an additional method of prevention. Unfortunately, many Sub-Saharan African countries have not yet approved it and are therefore missing out on the opportunity to fight AIDS in the region.

The HIV epidemic in Sub-Saharan Africa

HIV remains a global public health burden, with unprecedented high incidence, prevalence and mortality regardless of gender or age. This constraint is highest in Sub-Saharan Africa. In 2017, 66% of the 5,000 new HIV infections per day were recorded in the region. While the HIV incidence across the world is often highest in key populations, Sub-Saharan Africa is experiencing a generalised epidemic with infections among young people and adults, male as well as female, and driven by heterosexual relationships.

The UN's 90-90-90 targets were introduced in 2014 to test, treat and suppress viral load in people living with HIV. It aims for 90% of all people living with HIV being aware of their status, 90% of all people with diagnosed HIV infection receiving sustained antiretroviral therapy, and of all those receiving antiretroviral therapy 90% having an undetectable viral load by 2020. Sub-Saharan African countries are particularly struggling to meet this target as their health systems are too weak to fully roll out treatment, which leads to a very slow uptake. For example, only 48% in Western and Central Africa knew their HIV status in 2017. Results for East and Southern Africa are slightly better, as three out of four know their status, but this still indicates a high number of people not having access to treatment.

What is PrEP?

Pre-exposure prophylaxis (PrEP) is a form of antiretroviral medication for HIV negative people. Research shows that the use of PrEP in conjunction with antiretroviral treatment for those already infected will significantly lower HIV infections among the population, as this medicine can help to keep the virus from establishing a permanent infection.

Strong and consistent evidence has shown that PrEP is highly efficacious in reducing HIV infections in high adherence situations among men who have sex with men as well as heterosexual men and women. Research also shows that PrEP can reduce new HIV infections among women in generalised epidemics by 30%. In Sub-Saharan Africa, individuals in serodiscordant relationships (where one partner is infected by HIV and the other is not), key population and adolescent girls and young women are especially likely to benefit from PrEP.

Therefore, as long as HIV vaccine trials are ongoing, the use of PrEP shows to be a very effective way to prevent HIV and can play a significant role in reversing the inability to meet the 90-90-90 UN targets.

Significant benefits

Research has shown that PrEP is safe for use and shows low incidence of acquiring HIV drug resistance. Its use is not associated with negative sexual risk behaviour, nor does it cause negative effects during pregnancy.

PrEP cannot prevent all sexually transmitted infections (STIs), as it was never developed to prevent other STIs except HIV. It should be part of a holistic approach, together with other preventive methods, such as regular HIV testing and condom use. However, PrEP does indirectly help prevent STIs, as PrEP users regularly visit health providers for HIV testing and experience a lower threshold to get information about STI prevention measures.

PrEP also gives its users a level of control over their bodies and health that is not generally achieved with condoms alone. Stigmatised key populations including men having sex with men, sex workers and less-empowered populations such as adolescent girls and young women may gain power over their bodies by experiencing full protection against HIV through the use of PrEP.

As HIV is sexually transmitted, it is most common among sexually active people in the reproductive age groups, many of whom still want to reproduce. Research found that PrEP can be used to protect pregnant women at risk of HIV or women planning to become pregnant. When it comes to using PrEP in the prevention of mother-to-child transmission, evidence from completed studies to date shows no increased negative child health outcomes at birth or soon after birth.

PrEP can be used while one is at high risk and be discontinued or suspended when risk levels subside. For example, if rolled out to the 15 to 25-year-old women and 24 to 35-year-old men in Sub-Saharan Africa who are most at risk, it can be discontinued when their partners' level of risk is lower or as users transit from adolescence and youth into adulthood.

Challenges

While the benefits and positive effects of PrEP are evident, we are also facing some concerns and challenges in its implementation.

First and foremost, a lot of scepticism remains, mainly because of a lack of knowledge. In 2015, following high-quality evidence, the WHO recommended the use of PrEP by all people at substantial risk of HIV infection. By June 2017, only 13 countries in Sub-Saharan Africa (global count = 49) had formally adopted the WHO's recommendation to put all people on HIV treatment, regardless of their viral load, while 12 countries in Sub-Saharan Africa had a policy on PrEP by June 2018. By 2017, 15 countries, including fewer than 10 from Sub-Saharan Africa, had approved Truvada® for PrEP.

Sub-Saharan African countries need to speed up their uptake of PrEP to ensure people at risk have access to this medication. One of the reasons for this slow uptake is the low understanding of PrEP by policymakers, health workers and the public. Studies show that only half of the policymakers and leaders in health care were well-informed.

A number of misconceptions also remain very persistent, for example the concern that people taking PrEP would engage more in increased risky behaviours such as multiple sexual partnerships, condomless sex, and not seeking health care as they feel protected while using PrEP. As mentioned above, research has shown the contrary.

PrEP protects against HIV infection when taken between seven and 21 days before risky intercourse. Raising awareness of this timing among its users is important to prevent them from engaging in sex before they have gained protection from the drug. Providing PrEP information, education and communication to the general public and health workers is therefore required for PrEP roll-out.

Another challenge is the way in which PrEP use needs to be implemented in the health system. However, this challenge can easily be overcome by using the experience that was built up during the introduction of antiretroviral therapy in each country and setting up facility- and community-based HIV testing and counselling infrastructure as part of each country's health system. Each country should be prepared to distribute, market, create demand and supply, and manage PrEP.

Costs

PrEP has been found to cost less per averted HIV infections, quality/disability-adjusted life years, lives saved and also PrEP years per infections averted than some other HIV prevention methods used in the Southern African generalised epidemic.

Available evidence from systematic reviews shows that PrEP use in high-risk populations is a cost-effective addition to HIV prevention programmes. The exact level of cost-effectiveness of PrEP depends on a number of factors, including cost, the epidemic context, programme coverage and prioritisation strategies, participants' adherence to the drug regimen, and PrEP efficacy estimates. For example, in South Africa it is estimated that infections could be averted at a monthly cost of R264 (US\$ 17,4) per person. Models show a higher cost at the inception of the programme, but with time, and when more people take PrEP, these costs will come down. Cost calculations and implementation considerations should also factor in the dynamics of risk levels and the changing need for PrEP over a lifetime.

The marketing of the drug requires concerted efforts from politicians, stakeholders, health providers, leading behaviour change organisations and grassroots organisations, to meet people's concerns and to increase the demand and uptake of PrEP, which will in turn make PrEP more cost-effective. Forging relevant agreements with pharmaceuticals and the private sector could play a role in lowering drug costs and making PrEP available to populations in the fight against AIDS. Widespread use of the drug would make PrEP implementation affordable.

Policy recommendations

- Provide information, education and communication about PrEP safety, use, benefits and challenges to the general public and to health workers. Depending on what is appropriate for each country, this can be done in various ways, including social media (Facebook, Twitter, other online social networking sites), traditional media outlets, roadshows at facilities and in communitybased programmes.

- Ensure a good implementation in the health system by using successful experiences from the introduction of antiretroviral therapy, contraceptives and chronic care medicines which employ a broader mix of technologies to distribute products to all those who need them within their localities. This can focus on facility- and community-based HIV testing and counselling infrastructure.
- Ensure the promotion and marketing of PrEP use as an HIV prevention tool together with other tools of choice to those at substantial risk.
- Define clear PrEP guidelines: Who should receive PrEP? How can PrEP be rolled out safely and effectively? How can PrEP clients be targeted successfully? How will the supply, distribution and implementation of PrEP be managed? • Plan PrEP delivery models to ensure a strong and efficient supply in each setting or country.
- Plan, manage and sustain human resources and infrastructural requirements for PrEP distribution and sustainability.
- Develop role models and champions in PrEP use for the prevention of HIV in generalised epidemics in Sub-Saharan Africa.

**“PEOPLE AT RISK AND POLICYMAKERS HAVE TO MAKE A VERY RATIONAL CHOICE:
WAITING UNTIL PEOPLE ARE INFECTED WITH HIV AND HAVE TO USE
ANTIRETROVIRAL DRUGS FOR THE REST OF THEIR LIVES, OR PREVENTING HIV
WITH PREP AND KEEPING PEOPLE HIV NEGATIVE.”**

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