

MODULE 12

ADOLESCENTS AND YOUNG ADULTS

WHO IMPLEMENTATION TOOL FOR PRE-EXPOSURE PROPHYLAXIS (PrEP) OF HIV INFECTION



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Introduction

Following the WHO recommendation in September 2015 that “oral pre-exposure prophylaxis (PrEP) should be offered as an additional prevention choice for people at substantial risk of HIV infection as part of combination HIV prevention approaches”, partners in countries expressed the need for practical advice on how to consider the introduction of PrEP and start implementation. In response, WHO has developed this series of modules to support the implementation of PrEP among a range of populations in different settings.

Although there is growing acknowledgement of PrEP’s potential as an additional HIV prevention option, and countries are beginning to consider how PrEP might be most effectively implemented, there has been limited experience with providing PrEP outside research and demonstration projects in low- and middle-income countries. Consequently, there is often uncertainty around many implementation issues. The modules in this tool provide initial suggestions for the introduction and implementation of PrEP based on currently available evidence and experience. However, it is recognized that this evidence may evolve following wider PrEP use; therefore, it is likely that this tool will require regular updating.

PrEP should not replace or compete with effective and well-established HIV prevention interventions, such as comprehensive condom programming for sex workers and men who have sex with men and harm reduction for people who inject drugs. Many people who could benefit most from PrEP belong to key population groups that may face legal and social barriers to accessing health services. This needs to be considered when developing PrEP services. Although the public health approach underpins the WHO guidance on PrEP, the decision to use PrEP should always be made by the individual concerned.

Target audience and scope of tool

This PrEP tool contains modules for a range of stakeholders to support them in the consideration, planning, introduction and implementation of oral PrEP. The modules can be used on their own or in combination. In addition, there is a module for individuals interested in or already taking PrEP. (See summary of modules below.)

This tool is the product of collaboration between many experts, community organizations and networks, implementers, researchers and partners from all regions. The information presented is aligned with WHO’s 2016 consolidated guidelines on antiretroviral medicines.

All modules make reference to the evidence-based 2015 WHO recommendation on PrEP. They do not make any new recommendations on PrEP, focusing instead on suggested implementation approaches.

Guiding principles

It is important to adopt a public health, human rights and people-centred approach when offering PrEP to those at substantial risk of HIV. Similar to other HIV prevention and treatment interventions, a human rights-based approach gives priority to issues concerning universal health coverage, gender equality and health-related rights including accessibility, availability, acceptability and quality of PrEP services.

SUMMARY OF MODULES



Module 1: Clinical. This module is for clinicians, including physicians, nurses and clinical officers. It gives an overview of how to provide PrEP safely and effectively, including: screening for substantial risk of HIV; testing for HIV before initiating someone on PrEP and how to follow up PrEP users and offer counselling on adherence.



Module 2: Community educators and advocates. Community educators and advocates are needed to increase awareness about PrEP in their communities. This module provides information on PrEP that should be considered in community-led activities that aim to increase knowledge about PrEP and generate demand and access.



Module 3: Counsellors. This module is for staff who counsel people as they consider PrEP or start taking PrEP and support them in coping with side-effects and adherence strategies. Those who counsel PrEP users may be lay, peer or professional counsellors and healthcare workers, including nurses, clinical officers and doctors.



Module 4: Leaders. This module aims to inform and update leaders and decision-makers about PrEP. It provides information on the benefits and limitations of PrEP so that they can consider how PrEP could be effectively implemented in their own settings. It also contains a series of frequently asked questions about PrEP.



Module 5: Monitoring and evaluation. This module is for people responsible for monitoring PrEP programmes at the national and site levels. It provides information on how to monitor PrEP for safety and effectiveness, suggesting core and additional indicators for site-level, national and global reporting.



Module 6: Pharmacists. This module is for pharmacists and people working in pharmacies. It provides information on the medicines used in PrEP, including on storage conditions. It gives suggestions for how pharmacists and pharmacy staff can monitor PrEP adherence and support PrEP users to take their medication regularly.



Module 7: Regulatory officials. This module is for national authorities in charge of authorizing the manufacturing, importation, marketing and/or control of antiretroviral medicines used for HIV prevention. It provides information on the safety and efficacy of PrEP medicines.



Module 8: Site planning. This module is for people involved in organizing PrEP services at specific sites. It outlines the steps to be taken in planning a PrEP service and gives suggestions for personnel, infrastructure and commodities that could be considered when implementing PrEP.



Module 9: Strategic planning. As WHO recommends offering PrEP to people at substantial HIV risk, this module offers public health guidance for policy-makers on how to prioritize services, in order to reach those who could benefit most from PrEP, and in which settings PrEP services could be most cost-effective.



Module 10: Testing providers. This module is for people who provide testing services at PrEP sites and laboratories. It offers guidance in selecting testing services, including screening of individuals before PrEP is initiated and monitoring while they are taking PrEP. Information is provided on HIV testing, creatinine, HBV and HCV, pregnancy and STIs.



Module 11: PrEP users. This module provides information for people who are interested in taking PrEP to reduce their risk of acquiring HIV and people who are already taking PrEP – to support them in their choice and use of PrEP. This module gives ideas for countries and organizations implementing PrEP to help them develop their own tools.



Module 12: Adolescents and young adults. This module is for people who are interested in providing PrEP services to older adolescents and young adults who are at substantial risk for HIV. It provides information on: factors that influence HIV susceptibility among young people; clinical considerations for safety and continuation on PrEP; ways to improve access and service utilization; and inclusive monitoring approaches to improve the recording and reporting of data on young people.

ANNEXES

Review of evidence. A wide range of evidence including the following two systematic reviews informed the 2015 WHO recommendation on PrEP for people at substantial risk of HIV infection: (i) Fonner VA et al. *Oral tenofovir-based HIV pre-exposure prophylaxis (PrEP) for all populations: a systematic review and meta-analysis of effectiveness, safety, behavioural and reproductive health outcomes*; (ii) Koechlin FM et al. *Values and preferences on the use of oral pre-exposure prophylaxis (PrEP) for HIV prevention among multiple populations: a systematic review of the literature*.

Annotated Internet resources. This list highlights some of the web-based resources on PrEP currently available together with the stakeholder groups they are catering to. WHO will continue to provide updates on new resources.

The PrEP module on adolescents and young adults

This module is intended to complement the 11 other modules that are part of the WHO PrEP tool. It addresses unique aspects and considerations for delivering HIV prevention and care services to sexually mature adolescents and young adults – typically, people ages 15–24 years. The intended audience for this module is the range of stakeholders for other modules in this WHO PrEP tool who may also have interest in or provide services to at-risk populations of vulnerable young people, including those from five key populations (men who have sex with men, people in prisons and closed settings, people who use drugs, people who sell sex and transgender people).

Age group definitions

Adolescent: 10–19 years

Youth: 15–24 years

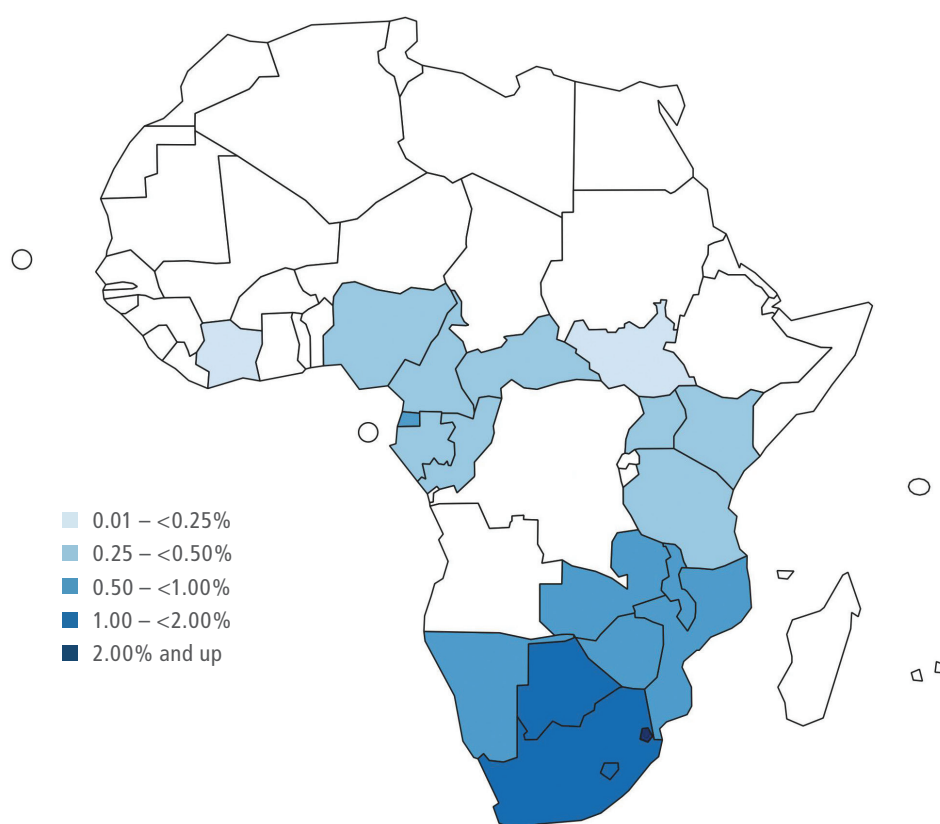
Young adult: 18–24 years

Young person: 10–24 years

Epidemiology of HIV among adolescents and young adults

The HIV epidemic among young people has many faces around the world. Each day, 37% of the approximately 4,500 daily new HIV infections occurring beyond childhood, are among youth ages 15 to 24 years (1). Adolescent girls and young women make up approximately one in every five of these new infections, and in sub-Saharan Africa where the youth population has expanded by nearly 100 million over the past three decades, infection rates in adolescent girls and young women outpace those in their male counterparts by three to one (Fig. 1) (2).

Fig. 1. Twenty countries with the highest HIV incidence rate among young women ages 15–24 years



Source: UNAIDS, 2018 estimates.

Globally, the HIV epidemic has disproportionately impacted key populations and their sexual partners (3). In regions including Central Asia, Europe, North America, the Middle East and North Africa, new HIV infections among members of these key populations account for more than 90% of all new infections (4). The few data that are available on young key populations suggest that they are even more disproportionately affected by HIV in most settings (3, 5). Young members of key populations often face tremendous challenges, including legal and socio-cultural issues related to societal attitudes about sexuality in youth, compounded by behaviours that are highly stigmatized (for example, same-sex relationships, transactional sex, alcohol and drug use, teenage pregnancy), leading to increased vulnerability to HIV infection and considerable barriers to care including HIV testing and treatment services. These issues can also impede an appropriate public health response for these vulnerable populations, resulting in gaps in areas such as crucially needed epidemiologic surveillance across regions (3) and vital research on how to address knowledge gaps concerning the care and treatment of HIV-affected young communities (6, 7).

In both generalized and concentrated epidemic settings, HIV in young people often occurs within the context of a range of conditions such as poor mental health, substance use (alcohol and other drugs) and emotional and social issues including gender-based violence. These conditions can place young people at substantial risk of acquiring HIV and other sexually transmitted infections (STIs) (8–12). Although data on adolescents and young adults infected with HIV are limited in resource-constrained settings, it is clear that these comorbidities can also make health-seeking behaviours more challenging for youth (13). Further contributing to risk in this population is poor access to and uptake of effective biomedical HIV prevention interventions, such as PrEP (14, 15), due to structural challenges in the form of ethical, legal, policy and regulatory hurdles (16). Furthermore, perceived challenges in working with adolescents often leads to their exclusion from critical research studies that are conducted in adults, resulting in an absence of data that can help to inform guidance and policy on programme implementation among young people (17).

Factors influencing HIV susceptibility among adolescents and young adults

A number of factors are associated with the risk of the transmission and acquisition of HIV by young people, including biologically mediated conditions and events, compounded by psychosocial, behavioural and structural drivers.

Biological factors

Biological factors that are linked with the transmission and acquisition of HIV by young people include perturbations of the mucosal microbiome (18) and inflammatory milieu, which can be the result of early sexual debut in young women (19). STIs, including herpes simplex virus (20, 21), human papillomavirus (22), gonorrhoea, chlamydia and syphilis (23), which lead to inflammation and disruptions in the mucosal epithelium (24), increase the risk of HIV acquisition and disproportionately affect young people. The data are mixed on the role of cervical ectopy in increased HIV risk. Cervical ectopy occurs when the columnar epithelium of the endocervical canal extends outwards into the ectocervix, which is common in developing adolescent girls. Methodological limitations with many studies preclude definitive conclusions about ectopy and HIV risk (25).

Behavioural and psychosocial factors

Behavioural and psychosocial factors experienced by adolescents and young adults may further increase their susceptibility to HIV infection. Beginning with lower levels of overall health literacy, adolescents and young adults ages 15–24 years in 79 countries that contributed data to the Joint United Nations Programme on HIV/AIDS (UNAIDS) in 2016 had very low levels of knowledge about HIV risk and prevention, with a median rate of 29% across these countries (26). Stigmatized behaviours among key populations, such as sex among men, injecting drugs or selling sex, also can lead to increased HIV risk (27–29). Furthermore, common behaviours during adolescent development (for example, poor impulse control, risk taking, inadequate planning for safe sex, and mood disorders) (30–33) place some individuals at risk for HIV infection and correlate with poor health-seeking behaviours and poor adherence to health care. Adolescents who have older partners, difficulty negotiating condom use, rely on transactional sex for basic material needs, experience high rates of sexual violence, or use substances with sex, can have very high rates of STIs (34). Adolescents and young adults attending PrEP programmes need to be routinely screened for STIs and promptly treated. Adolescents and young adults will need youth-friendly services and strategies to ensure that they adhere to daily PrEP as an HIV prevention tool (14, 35–37).

Lerato's story: Risky relationships

Lerato is 22 years old. She lives in Soweto, South Africa. She has a grade 12 certificate, and she is unemployed. Lerato lives with her mother and her young daughter, who was fathered by a previous partner. She is currently in a relationship that she describes as "on and off" and "complicated". After a series of risky relationships, Lerato started taking PrEP to protect herself from HIV. She first heard about PrEP from the clinic nurse when visiting the adolescent clinic in Hillbrow just over 6 months ago, to collect her monthly supply of contraceptive pills.

"I'm lucky to have escaped HIV this far in my life. I want to keep it that way."

She and Sizwe, her current boyfriend, have been together for about 18 months. Lately, there has been intense conflict and mutual mistrust. Sizwe is "a jealous man", who regularly checks the messages on her phone to see if she is conducting other relationships in secret. Sizwe works in a town several hours' drive from Johannesburg, which means that they cannot spend much time together. Over the course of their relationship, Sizwe has assaulted Lerato physically several times, during arguments when he accuses her of infidelity. Lerato says she loves Sizwe, despite his temper and increasingly possessive behaviour. She also trusts him and believes that he has been faithful to her even while living far away in another town, although her friends tell her that he probably has other partners because "that's just how men are". When he comes to visit on weekends, they have sex without condoms. Lerato believes it would be futile to try to insist on using them, as they have been together for too long and because to do so would simply trigger an argument.

Before Sizwe, Lerato had a relationship with Isaac, the father of her child. She describes him as "a good man" and someone whom she had hoped to marry. They had been together only six months when she fell pregnant (at the age of 18). Initially, they had used condoms "most of the time", but condom use became more erratic as the relationship became more serious. Lerato had also stopped using the injectable contraceptive because of the frequent spotting between periods that it was causing. When her pregnancy became known, Isaac deserted her and was never seen or heard from again. Lerato was deeply hurt by his abandonment and sees this break up as the start of a risky period for her.

Initially, Lerato found it challenging to fit PrEP into her lifestyle. She was also worried about possible side effects and whether she would manage to take a pill every day. The clinic nurse gave her useful tips on how to remember – such as taking the pill every evening at the same time when her daily TV soap opera started, or setting up an alarm on her phone. She has now become accustomed to the routine of daily pill-taking, although she has not yet told Sizwe that she is taking PrEP. She regards it as "none of his business" and knows she is "doing something good and taking control of [her] life."

Lerato sees PrEP as a fresh start and a chance to start planning her future – for herself and her daughter. Looking back on her relationships, Lerato says, "I'm lucky to have escaped HIV this far in my life. I want to keep it that way".

* Name changed for confidentiality.

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