

# ADOLESCENTS AND HIV: RESPONDING TO THE UNIQUE NEEDS OF TEENAGERS IN RESOURCE-LIMITED SETTINGS

## OVERVIEW

Adolescents undergo a period of rapid physical, emotional, and psychological change as they transition to being young adults. With these changes come challenges, choices, and risks; these are magnified in sub-Saharan Africa (SSA) where HIV prevalence is higher than in any other region of the world. Adolescents are at high risk of acquiring HIV, with 30 percent of all new HIV infections in SSA occurring in adolescent girls and young women (AGYW) under the age of 25.<sup>1</sup> This heightened risk is a consequence of the combination of the following factors: lack of formal and informal sex education; lack of dialogue about gender-based violence and sexual abuse; poor access to adolescent-friendly health services (AFHS); and social, gender, and income inequalities.

Worldwide, 1.8 million adolescents are living with HIV, 85 percent of whom reside in SSA.<sup>2</sup> Some acquired HIV from an HIV-infected mother around the time of birth or during breastfeeding, while others acquired HIV later in life through sexual exposure or other risky behaviors. Adolescents living with HIV (ALHIV) have poorer outcomes than HIV-infected adults and younger children; for example, poorer retention in care, poorer rates of viral suppression, and delay in antiretroviral treatment (ART) initiation. Recent data show an increase in AIDS-related deaths in this population,<sup>3</sup> making AIDS the leading cause of death in adolescents in SSA and the second leading cause of death among adolescents globally.<sup>4</sup> With a pregnancy prevalence<sup>5</sup> of 28 percent among adolescents 15–19 years old, SSA contributes the highest number of pregnancies; 19 percent of women aged 20–24 years have given birth before their 18th birthday and 3 percent before they were 15 years old<sup>i</sup>. Pregnant/breastfeeding ALHIV have poorer maternal and infant outcomes when compared to outcomes to adult HIV-infected pregnant women.<sup>2</sup>

Due to the unique needs and experiences of adolescents, targeted programs to reduce HIV infection and improve HIV-related treatment outcomes are necessary. The U.S. Centers for Disease Control and Prevention (CDC) is addressing these issues with the following programs:

- **DREAMS:** CDC supports the U.S. President's Emergency Plan for AIDS Relief (PEPFAR)'s initiative to reduce HIV infections among AGYW. Using a core package of evidence-based approaches that empower AGYW, strengthen families, mobilize communities for change, and reduce risk. CDC helps AGYW live Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe (DREAMS).
- **Families Matter! Program (FMP):** Through this evidence-based intervention for parents and caregivers of children and adolescents ages 9 to 19 years old, CDC supports program implementation aimed at promoting positive parenting and effective parent-child communication about sexual health. This intervention intends to raise awareness of child sexual abuse and gender-based violence, as well as help parents and caregivers build skills to address and prevent the occurrence of such events.
- **Treatment for ALHIV:** CDC works with countries to improve the provision of AFHS, through assessments, dissemination of tools and resources for healthcare workers and adolescents. In addition to contributing to the development of national policy and implementation of services in clinics and the community, CDC supports national governments in accelerating the introduction of Test and Start approaches for all people living with HIV. Test and Start methodologies will help decrease HIV transmission to AGYW and will also more rapidly expand access to and linkage-to-treatment for newly diagnosed ALHIV. Finally, CDC supports adoption of optimal ART, such as dolutegravir-based regimens in eligible adolescents, to improve viral suppression rates.
- **Care of pregnant/breastfeeding ALHIV:** In recognition of current antenatal care (ANC) and postnatal care (PNC) services not being responsive to the unique needs of pregnant/breastfeeding ALHIV, CDC is working with ministries of health to design and implement differentiated ANC and PNC service delivery models that address the special needs of this population. These contributions aim to keep these special populations and their HIV exposed infants in care, eliminate new infant HIV infections, and preserve the health of the teen mother.

<sup>1</sup> Dellar RC, Dlamini S, Karim QA. Adolescent girls and young women: key populations for HIV epidemic control. *HIV and adolescents: focus on young key populations* 2015:64

<sup>2</sup> UNAIDS 2017 estimates. <http://aidsinfo.unaids.org/>

<sup>3</sup> UNAIDS and WHO. 2013. Global Report: UNAIDS report on the global AIDS epidemic. Geneva: UNAIDS and WHO.

<sup>4</sup> Dick and Ferguson. Health for the world's adolescents: a second chance in the second decade. *Journal of Adolescent Health*. 2015; 56 (1): 3-6.

<sup>5</sup> Refers to the percentage of women within a certain age bracket who are pregnant at a given time or given year.

## ACCOMPLISHMENTS / RESULTS

- CDC supports over \$190 million in DREAMS programming and funds 55 implementing partners in 15 countries. CDC-supported DREAMS programs empower AGYW through promoting and distributing condoms, community-based HIV testing and counseling, post-violence care, Pre-Exposure Prophylaxis, building social assets, safe spaces, and expanding the types of available contraception. Efforts including Voluntary Medical Male Circumcision and linkage to antiretroviral treatment services have also been incorporated to reduce risk in sex partners of AGYW. Additionally, DREAMS programs are working to mobilize communities for change through programs such as SASA! and Stepping Stones.
- For over fifteen years, the Families Matter! Program has been delivered in 15 sub-Saharan Africa countries and has reached more than 950,000 families. The program includes interventions to strengthen families as part of the DREAMS initiative. In addition, recent enhancements to the curriculum have included material covering child sexual abuse, gender-based violence, and helping ALHIV address disclosure issues and manage stigma and discrimination in their community.
- CDC continues to review existing data that will help better characterize the burden of HIV among adolescents, their utilization of services, and health outcomes of HIV-infected pregnant and non-pregnant adolescents. This process will contribute to improving the understanding of factors associated with treatment failure and loss-to-follow-up among this group, thereby better guiding program development. CDC identifies and shares evidence-based best practices to improve adherence, retention and viral suppression in adolescents.
- CDC completed a literature review that highlighted major gaps in the care of pregnant/breastfeeding ALHIV. As a result of this evidence, routinely collected Prevention of Mother-to-Child Transmission (PMTCT) data is now broken down by age. Moving forward, CDC will review age specific PMTCT data at the country level and assist with planning and monitoring of progress for providing HIV care for this vulnerable population.

## FUTURE EFFORTS

- During the four years of delivering the DREAMS program, FMP has been implemented in nine of the 15 DREAMS countries. As the program becomes even more widely known and accepted in communities, CDC continues to widen its reach and scope.
- CDC plans to evaluate the differentiated service delivery models for pregnant/breastfeeding ALHIV and to engage with stakeholders to reach consensus on service packages for implementation across all levels of the health care system, particularly in rural, semi-urban, and urban settings. Two projects in Kenya and Uganda will assess the implementation and effect of ANC and PNC differentiated service delivery models for pregnant/breastfeeding ALHIV on their PMTCT outcomes.
- CDC will conduct formative research to understand the unique barriers and facilitators of service uptake among adolescents and will support the development of key operational documents to guide implementation of AFHS. A recent Implementation Science Award recipient plans to evaluate the effect of multiple interventions targeting ALHIV in Zimbabwe on several clinical outcomes.
- CDC plans to utilize program, surveillance, and research findings to improve targeted HIV testing and linkage-to-care services for vulnerable adolescents.
- Through DREAMS programming, CDC will identify and promote interventions that reduce HIV-infection risks, increase HIV testing, and improve early HIV diagnosis and linkage-to-care for adolescent girls and young women.
- CDC will continue to advocate for the expansion of AFHS and meaningful youth engagement in developing policies and designing, implementing, and evaluating programs.

## BENEFITS OF OUR WORK

Lessons learned from U.S. based interventions were adapted and modified for implementation in SSA communities. An evaluation using equally rigorous standards demonstrated similar results to U.S. evaluations, reaffirming that interventions for adolescents are working, no matter the setting or context. Expanding AFHS will decrease mortality in ALHIV, HIV transmission from adolescent mothers to their children, and the risk of transmission through sex. Takeaways from the implementation of these programs for adolescents living in resource-limited settings, especially regarding sexual and reproductive health education, may inform U.S. based programs aimed at reaching adolescents living in poverty in rural and inner-city settings.