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Perspective

## HIV and adolescent girls and young women in sub-Saharan Africa: A call for expedited action to reduce new infections

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### ABSTRACT

Adolescent girls and young women (AGYW) from sub-Saharan Africa (SSA), aged 15–24, remain at substantial risk of acquiring HIV. AGYW accounted for 63% of all new HIV infections in 2021. Reducing incident infections in AGYW and among the other key populations is key to eliminating HIV infections. Expedited prioritization and actions to reduce incident infections among AGYW from sub-Saharan Africa are therefore required to attain the UNAIDS 95–95–95 targets by 2030. In this article, we discuss the factors contributing to higher HIV infections among AGYW and strategies that can be used to reduce HIV infection among them. Several biological, socio-economic, religious, and cultural factors continue to put the AGYW at a disproportionately high risk of acquiring HIV. Many AGYW in SSA are economically marginalized and therefore are unable to negotiate condom use and monogamy. Patriarchal culture predominant in SSA also exacerbates AGYW's inferiority in sexual matters. To address these factors, a multi-pronged approach is required. Some of the strategies we recommend are passing stricter sentences for sexual offenders and abusers, economically empowering AGYW, increasing the provision of sexual and reproductive health and rights (SRHR) education and services to AGYW, increasing access to pre-exposure and post-exposure prophylaxis, treatment of HIV as prevention, and engaging and educating communities on SRHR matters.

### Introduction

The latest UNAIDS statistics show that adolescent girls and young women (AGYW) from sub-Saharan Africa (SSA), aged 15–24, remain at substantial risk of acquiring HIV (UNAIDS, 2022). Every week, an estimated 4900 incident infections occur among women in this age group globally (UNAIDS, 2022). In SSA, approximately six out of seven new infections occur among adolescents aged 15–19 years, and young women aged 15–24 years are twice likely to be living with HIV than their male counterparts (UNAIDS, 2022). AGYW accounted for 63% of all new HIV infections in 2021 (UNAIDS, 2022). Hence, despite a 54% reduction in HIV incidence since its peak in 1996, the population of AGYW in Africa in SSA remains a key population for HIV epidemic control. Reducing incident infections in AGYW and among the other key populations of sex workers, gay men and other men who have sex with men, intravenous drug users, and transgender people is key to eliminating HIV infections (Musuka, G., Dzinamarira, T., Madziva, R., Herrera, H., & El Sadr, W.; 2022). Expedited prioritization and actions to reduce incident infections among AGYW from sub-Saharan Africa are therefore required to attain the UNAIDS 95–95–95 targets by 2030 (UNAIDS, 2022). Hence, in

this article, we discuss the factors contributing to higher HIV infections among these AGYW and strategies that can be used to reduce HIV infection among them. Several biological, socio-economic, religious, and cultural factors continue to put AGYW at a high risk of HIV acquisition in SSA (Mabaso et al., 2018).

#### Biological factors

Biologically, women are more vulnerable to HIV infection than men because of the greater mucosal area that is exposed to HIV during penile penetration. Because of an underdeveloped cervix and low vaginal mucus production, AGYW are at an even greater risk of acquiring HIV (Maje; 2019). If AGYW develop candidiasis or bacterial vaginosis, or acquire ulcerative and non-ulcerative sexually transmitted infections (STIs), they will have an increased risk of acquiring HIV if they are exposed to the virus through sexual contact. This is because the vaginal infections stimulate an inflammatory response that enhances HIV transmission through increasing HIV replication in Langerhans cells (LC), increasing LC capture of HIV, and the subsequent infection of T-cells

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(Botting, R.A., Rana, H., Bertram, K.M., Rhodes, J.W., Baharlou, H., Nasr, N., Cunningham, A.L. and Harman, A.N., 2017)

#### *Socio-economic factors*

Economic marginalization among AGYW in SSA forces some young women to be involved in transactional, age-disparate, and multiple concurrent sexual relationships for survival. Transactional sex has been shown to have a positive correlation with HIV infection in women (Choudhry et al., 2015). In South Africa, the prevalence of transactional sex varies with gender and age. A study conducted in South Africa reported a prevalence of between 2.1% and 14% among young women below the age of 26 years. The same study reported that women who reported transactional sex were about 3 times more likely to be infected by HIV than their counterparts who did not have transactional sex (Wamoyi et al., 2016). Transactional sex has been correlated with the use of alcohol and drugs, multiple and concurrent partnerships, history of experiencing intimate partner violence, non-use of condoms, and having less power in the relationships, and all of these factors lead to increased chances of HIV infection (Choudhry et al., 2015).

The distribution of STIs, as well as HIV incidence and prevalence in heterosexuals, is shifted toward younger age groups for females in comparison to males. In SSA age disparity is positively associated with HIV prevalence. The incidence of HIV increases swiftly from young to middle age, and consequently, young females in age-disparate relationships are at an increased risk of HIV infection compared with being in a sexual relationship with an individual of their own age (Harling et al., 2014). AGYW from poor households are at an increased likelihood of being involved in age-disparate relationships (Schaefer et al., 2017). AGYW orphaned by HIV deaths are usually left vulnerable to predatory sexual behavior of older men who may be respected figures in some communities. Some of the orphaned AGYW may be forced into sexual relationships or even polygamous marriages, which put them at a higher risk of acquiring HIV. The limited access to secondary and tertiary education among AGYW in SSA results in them being financially reliant on men, mostly older men, who expose them to a higher risk of HIV. Reports indicate that the COVID-19 pandemic might have added to the risk through prolonged school closures, increased school dropouts, and loss of families' sources of income, forcing AGYW to engage in risky trades including vending and cross-border trading, and being married off to older men (Goga et al., 2020).

#### *Religious and cultural factors*

Marrying off young girls remains rife in some African communities where bride price is the norm, as it is a source of income for some families. Patriarchal culture in some African communities exacerbates women's inferiority in sexual matters. Women in general, and AGYW in particular, are usually not allowed to express their sexuality and their male partners may turn violent if women suggest condom use or refuse sexual advances. Some African communities still believe that after a miscarriage or giving birth, a woman should have unprotected sex with a man identified by community elders to cleanse her or the baby. Such practices put the AGYW at a greater risk of HIV and STIs because the identified man may have multiple sexual partners (Ramjee & Daniels, 2013). In addition, some AGYW in the continent still use substances to keep the vagina dry due to a belief that it is more pleasurable for men. This makes the vagina prone to injury during sex, which increases the risk of acquiring HIV. Furthermore, to pass virginity testing, some AGYW in SSA prefer to have anal sex instead of vaginal sex, and this results in a higher risk of HIV transmission among them. Some religious sects also give away young girls to older men, resulting in polygamous marriages that increase HIV exposure risk (Sovran, 2013).

### **Strategies to reduce HIV transmission among AGYW**

Reducing HIV infections in AGYW requires a multi-pronged approach from public health and political players, women's activist groups, sexual and reproductive health and rights (SRHR) policy and program makers, the civic society, and legislators across SSA. It is important to understand that control of HIV spread among AGYW is not just a public health but a societal and economic challenge that requires a strong will and commitment from many different levels.

#### *Strict legislation on sexual offenders*

Strict legislation against sexual offenders is critical for preventing sexual abuse of AGYW, but this requires strong political will and commitment. The age of sexual consent and marriage in some countries may need to be increased to reduce sexual exploitation of AGYW while sentences for sexual offenders and perpetrators of sexual violence should be so harsh that they are prohibitive. Lowering the age of consent laws for accessing HIV and SRHR services may increase access to condoms, HIV testing services, and other preventative measures that will reduce HIV transmission among AGYW. Furthermore, legalizing sex work in the continent may help reduce the sexual exploitation of AGYW who engage in sex work, which puts them at an increased risk of HIV transmission (Govender et al., 2018).

#### *Providing SRHR education to AGYW*

There is limited access to confidential SRHR education for AGYW in SSA. Increasing early SRHR education is therefore critical for empowering AGYW, as it will enable them to resist sexual predators, negotiate condom use, and resist being given away for bride price at a young age (McGranahan et al., 2021). Peer education should target AGYW who are at risk of getting HIV but who might not trust adult educators. Peer educators should visit AGYW in familiar environments where they are comfortable. Such places may include their hostels at colleges and schools or at youth conferences. For this strategy to work, peer educators must come to the level of the participants. This is because AGYW are likely to conceptualize the messages and hence modify their behaviors and attitudes if there is a belief that the person delivering the message is similar to them and faces similar challenges (Simoni et al., 2011).

#### *Economic empowerment of AGYW*

Social protection measures that we recommend include educational scholarships, cash transfers, feeding programs at schools, career skills training, livelihood training, early childhood development interventions, micro-credit, and self-help projects. Educational scholarships will ensure that AGYW from vulnerable families remain in school. Cash transfers to vulnerable AGYW may also help reduce HIV transmission among them (Roxby et al., 2014). According to a study done in Malawi, cash transfers for adolescent girls for staying in school demonstrated reduced prevalence. The decrease in prevalence was believed to be partly due to a reduction in age-disparate relationships and reduced frequency of sexual activity (Adimora et al., 2013). Feeding programs at schools will reduce food insecurity among the AGYW while career skills training will equip them with skills for self-sustenance (Govender et al., 2018).

#### *Community engagement and education on sexual matters*

Controlling HIV transmission among AGYW is premised upon effectively dealing with African patriarchal tendencies and child molestation. To address these issues, communities should be engaged. Community engagement and education may help increase HIV knowledge among them, which will reduce harmful practices that put the AGYW at an increased risk of HIV, and improve attitudes of communities towards

people living with HIV, resulting in reduced stigma and discrimination. These actions may contribute toward the empowerment of AGYW, which will lead to change in sexual norms and generation of demand for SRHR services (Hanson et al., 2015).

#### *Increasing AGYW's access to pre-exposure and post-exposure prophylaxis*

AGYW often experience challenges in accessing pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP). These challenges emanate from the stigma and discrimination they experience from healthcare workers while trying to access these services, and the lack of financial resources to travel to health centers that offer the services (Skovdal et al., 2022; Ajayi et al., 2020). Increasing access to PrEP and PEP among AGYW will help reduce HIV transmission. Access can be increased by establishing youth-friendly corners at health facilities, eliminating costs associated with the services, and introducing long-acting formulations, such as the recently approved long-acting injectable cabotegravir for PrEP (Skovdal et al., 2022; Moyo et al., 2022).

#### *Treatment as prevention*

African countries should adopt the test and treat policy because when people are started on treatment early, their viral loads in blood, semen, and vaginal fluids will decrease and the chances of infecting others will be reduced (Sorensen et al., 2012). Furthermore, since HIV-positive people will live longer, healthier lives, problems associated with orphaned children like child labor, teenage pregnancies, school dropouts, and childhood marriages, which all increase risk of HIV transmission among AGYW, may reduce (Nachege et al., 2014).

#### *Increasing women's access to SRHR services*

Increasing accessibility and utilization of SRHR services, including family planning, screening and treatment for HIV, and other STIs and bacterial vaginosis, are critical for the control of HIV. Accessibility can be increased by offering the services for free to AGYW at facilities that are closer to where they live in youth-friendly corners. Utilization can be increased by availing SRHR education through the different digital and social media platforms that AGYW use (Askew & Berer, 2003).

#### **Conclusion**

AGYW account for most of the new HIV infections in SSA, and reducing incident infections among them is key to the HIV epidemic control. Several biological, socio-economic, religious, and cultural factors continue to put the AGYW at a disproportionately high risk of acquiring HIV. Many AGYW in SSA are economically marginalized and therefore are unable to negotiate condom use and monogamy. Patriarchal culture predominant in SSA also exacerbates AGYW's inferiority in sexual matters. There is therefore an urgent need to meet the HIV prevention needs of AGYW in SSA. Behavioral, biomedical, and structural interventions should be used in combination to reduce HIV transmission among AGYW.

#### **CRedit authorship contribution statement**

**Grant Murewanhema:** Writing – original draft. **Godfrey Musuka:** Writing – original draft. **Perseverance Moyo:** Writing – review & editing. **Enos Moyo:** Writing – review & editing. **Tafadzwa Dzinamarira:** Writing – review & editing, Supervision.

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#### **Ethical Approval Statement**

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