

## **FACTORS ASSOCIATED WITH PREVALENCE OF HIV AMONG YOUTHS: A REVIEW OF AFRICA PERSPECTIVE**

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### **ABSTRACT**

Human immunodeficiency virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) is a global pandemic. Regarding the socio-economic factors, unexpectedly poverty was found to have an insignificant effect on the prevalence of HIV/AIDS among male and female respondents in the year 2005. The most significant socio-economic factors associated with prevalence of HIV infection among youths are alcoholism and poverty. The major cultural factors associated with prevalence of HIV infection among youths are polygamy and early marriage with low condom use. Multiple sexual partners is the behavioral factor associated with prevalence of HIV infection among youths with HIV.

**Keywords:** *HIV, AIDS, youths, African, factors associated with HIV*

### **INTRODUCTION**

Human immunodeficiency virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) is a global pandemic (Cohen *et al.*, 2008). Globally, Since the start of the epidemic, around 75 million have become infected with HIV (Fact *et al.*, 2015; Obeagu, 2023; Obeagu *et al.*, 2023). And according to WHO, an estimated 0.8% of adults aged 15–49 years worldwide are living with HIV, although the burden of the epidemic continues to vary considerably between countries and regions (WHO,

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2015). However considering UNAIDS' report, in 2012, approximately 17.2 million infected were men, 16.8 million were women and 3.4 million were less than 15 years old (Fact *et al.*, 2015).

Sub-Saharan Africa remains most severely affected, with nearly 1 in every 25 adults (4.4%) living with HIV and accounting for nearly 70% of the people living with HIV worldwide. (WHO, 2015)

According to Asia report, HIV infection is becoming endemic in sub-Saharan Africa, which is home to just over 12% of the world's population but two-thirds of all people infected with HIV; The adult HIV prevalence rate is 5.0% and between 21.6 million and 24.1 million total are affected. However, the actual prevalence varies between regions, presently Southern Africa is the hardest hit region, with adult prevalence rates exceeding 20% in most countries in the region, and 30% in Swaziland and Botswana (Asia, 2011).

Eastern Africa also experiences relatively high levels of prevalence with estimates above 10% in some countries, although there are signs that the pandemic is declining in this region. In Tanzania, HIV/AIDS was reported to have a prevalence of 6% among Tanzanian adults aged 15–49 in 2007–2008; this figure is lower than 2003 when the country's HIV/AIDS prevalence was 8.8% (Exavery *et al.*, 2011).

According to Division, 2015, Uganda is still classified as a high burden country with high number of persons living with HIV which has continued to increase; This is a result of continuing spread of HIV, and increased longevity among persons living with HIV (Division, 2015).

### **Socioeconomic factors associated with high prevalence of HIV infection among youths**

Regarding the socio-economic factors, unexpectedly poverty was found to have an insignificant effect on the prevalence of HIV/AIDS among male and female respondents in the year 2005. In the year 2011, unlike for male respondents poverty has been revealed to have a significant effect on the prevalence of HIV/AIDS for female individuals. Similarly, significant effects were found on the socio-economic variables: respondent occupation, level of education, place of residence and sex of head of household in the year 2011 for both sexes. In general, unlike 2005 most of the socioeconomic variables were found significant in the year 2011. However, employment status of the individuals and media exposure have been found to have insignificant effect on the prevalence of the epidemic for the two periods (Woldemariame, 2013; Obeagu *et al.*, 2022; Oloro *et al.*, 2022).

Many studies have shown that higher HIV prevalence is observed among more educated categories, but this is not always true. According to their study HIV prevalence was stable among those with no education after adjustment for potential confounding factors (sex, age, urban/rural residence and household wealth), on the other hand it was significant for both primary and secondary education. A study was conducted by (Bradley *et al.*, 2007), on educational attainment and HIV status among Ethiopian voluntary counseling and testing clients in order to examine the association between HIV infection and education attainment level among VCT clients. The study

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showed that HIV prevalence decreases significantly with each increase in education level for both men and women (Bradley *et al.*, 2007).

In Ethiopia and Malawi, HIV prevalence was higher in more educated women in both surveys. In Lesotho, Kenya and Zimbabwe, HIV prevalence was lower in higher educated women in both surveys. In Ethiopia, HIV prevalence fell among no and secondary educated women only (interaction  $p < 0.01$ ). Only among young men in Tanzania there was some evidence that the association between education and HIV changed over time ( $p = 0.07$ ). Pooled analysis found little evidence for an interaction between survey year and the education-HIV association among men ( $p = 0.60$ ) or women ( $p = 0.37$ ). Interpretation: The pattern of prevalent HIV infection among young adults by level of education in different sub-Saharan African countries was heterogeneous. There was little statistical evidence that this pattern changed between 2003-5 and 2008-12. Explanations for the social epidemiology of HIV in Africa will need to account for time-trends and inter-country differences (Hargreaves *et al.*, 2015)

Alcohol is a leading cause of premature death and disability, from violence, assault and injuries as well as increasing the risk of STI/HIV (Laserson *et al.*, n.d.).

A population-based study in urban Arusha, Tanzania found the common risk factors for HIV transmission to be under-age marriage/cohabiting, alcoholism, multiple sexual partners, unprotected casual sex and sexually transmitted infections (STIs). Another study in Northern Tanzania found that alcohol consumption was a strong predictor of HIV infection. In the current study, some participants attributed the high HIV prevalence on complacency due to availability of antiretroviral drugs (Rubaihayo *et al.*, 2010)

The emerging epidemics among injection drug users across Eurasia are largely the result of needle sharing, but the drivers of disease spread include increases in opiate availability, limited HIV infection prevention and programs for drug users, and undermining policy environments. The epidemic in southern Africa, which is spreading largely through heterosexual exposure, is driven by high rates of labor migration, concurrent sexual partnerships, gender inequalities, and the limited availability of male condoms (Mayer and Beyrer, 2007; Obeagu and Obeagu, 2022).

### **Cultural factors associated with high prevalence of HIV among youths**

Culture plays a great role in determining the health condition of individuals, families and different communities. A cross-sectional study conducted by (Hallett *et al.*, 2007) on age at first sex and HIV infection in rural Zimbabwe using cross-sectional behavioral data on eligible individuals. The result showed that women who begin to have sex at an earlier age are more likely to be infected with HIV. This is because they have a greater life time number of sexual partners than those whose first sexual experience delayed. (Hallett *et al.*, 2007). Adair (2008) studied HIV status and age at first marriage among women in Cameroon. Using a multivariate analysis based on a nationally representative sample from 2004 Cameroon Demographic and Health Survey data, he showed that those who are married late and those who have a long period of premarital sex have highest odds

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of acquiring HIV. Such a relationship is observed in rural areas. Concurrent sexual partnerships are widely believed to be one of the main drivers of the HIV epidemic in sub-Saharan Africa. (Adair, 2008)

Concerning cultural factors many of them have significant effect on the prevalence of HIV/AIDS at least at 10% level of significance. Age at first marriage and number of sexual partners in the last 12 months including spouse had been found to have significant effect on the prevalence of HIV/AIDS for male and female respondents in both periods. However, number of sexual partners and age at first marriage had insignificant effect for female respondent in the year 2005 and 2011 respectively (Woldemariame, 2013).

### **Behavioral factors associated with high prevalence of HIV infection among youths**

According to Awotidebe *et al*, these risky sexual behaviors are predominantly higher in boys compared to girls of the same age, partly because of the high level of testosterone in boys, which increases early disposition to sexual activities. For example, condom use, measured by condom use for the last sexual encounter, was lower in girls (73.1%) compared to boys (87.4%). The lower proportion of girls who use condoms during sexual activities could be related to the fact that many girls have a sexual relationship with men who are 5–10 years older and might not have the needed skills to negotiate safe sex (Awotidebe *et al.*, 2014).

Having multiple sexual partners has been reported in Uganda as contributing to high HIV sexual transmission (Division, 2015). The association between most of the sexual behavior factors and HIV infection conform to what might be expected. For both males and females, the risk of infection was higher among the previously married (widowed or divorced/separated), those who initiated sexual activity at a younger age, had multiple sexual partners or had premarital sex.

### **Conclusion**

The most significant socio-economic factors associated with prevalence of HIV infection among youths are alcoholism and poverty. The major cultural factors associated with prevalence of HIV infection among youths are polygamy and early marriage with low condom use. Multiple sexual partners is the behavioral factor associated with prevalence of HIV infection among youths with HIV.

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