

**Sexually Transmitted Infections and the Associated Risk Factors  
among Young Women Aged 18-24 Years in Kisumu City, Kenya.**

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## ABSTRACT

Sexually transmitted infections including HIV/AIDS are common in developing countries. Young women continue to be one of the populations at greatest risk for HIV infection. The STIs and HIV epidemics are inter-dependent. Behaviours such as frequent unprotected intercourse with different partners, place people at high risk of both infections, and there is clear evidence that conventional STIs increase the likelihood of HIV transmission. The main objective of this study was to investigate the prevalence of and risk factors for STIs among young women (aged 18-24 years) in Kisumu city. This was a cross-sectional analysis of 312 women screened for participation in a phase 1 randomized placebo controlled microbicide trial. Prevalent cases of gonorrhoea, chlamydia, trichomoniasis were identified through Nucleic acid amplification test (NAAT), HIV and herpes simplex virus (HSV)-2 were diagnosed using enzyme linked immunosorbent assay (ELISA), syphilis was tested using rapid plasma reagin (RPR) test, bacterial vaginosis was identified through Nugent scoring criteria and yeast infection was identified through wet mount. Demographic information and behavioral risk factors were assessed using structured questionnaires. Data analysis was carried out using Epi Info™ version 3.3. Results showed that herpes simplex virus type 2 was the most prevalent STI at 30.4%, HIV was 6.7%, in addition, non-classical STIs such as bacterial vaginosis and yeast infection were diagnosed in 19.9% and 10.6% of the women, respectively. *Neisseria gonorrhoeae* and syphilis had a prevalence of 0.6% while *Chlamydia trachomatis* was 4.5%. In bivariate analysis results indicated that, sexual debut before 18 years of age, HSV-2 sero-positivity, and low levels of education were associated with HIV infection. Whereas in multivariate analysis, only HSV-2 sero-positivity (Adjusted

(A) OR 7.2 95% CI 2.0-26.4) was associated with HIV infection. Being married was the only risk associated with HSV-2 sero-positivity (AOR 8.6, 95% CI 1.8-39.8) in multivariate analysis. In conclusion, from the data above HSV-2 is the most prevalent STI in young women aged 18-24, where as HSV-2 and HIV as the most prevalent co-infections. Factors such as early sexual debut and low levels of education are the high risk factors for HSV-2 and other STIs. Based on these findings, issues such as advocacy for delayed sexual debut, condom use and development of female-controlled methods need to be an integral part in interventional strategies such as educational campaigns which are aimed at minimizing the risk of sexually transmitted infections.



