

Abstract

Erectile dysfunction drug (EDD) use has gained popularity among older men for enhancement and treatment of erectile dysfunction in recent years. Increased number of sexual partners and sexual activity due to EDD use concerns about the rising rate of HIV infection among older men. Men who use EDD for erectile dysfunction are found to be two to three times more likely to have sexually transmitted diseases (STDs), particularly human immunodeficiency virus (HIV) or chlamydia, than those who did not use the drugs. In Kenya, the prevalence of HIV among men of age 50 to 54 years has increased from 5.7% in 2003 to 9.1% in 2008. **Objectives:** This study was aimed at determining the association between EDD use and risk of HIV infection among men aged 50 to 75 years. **Patients and Methods:** A hospital based case-control study was conducted among men aged 50 to 75 years. A total of 274 men (137 cases confirmed as HIV positive and same number of controls confirmed as HIV negative), consented to participate in the study. Pearson's chi-square test and odds ratio with corresponding 95% confidence interval were computed to establish the association between the dependent variable (HIV status) and independent variables (Key independent variable being EDD use). The level of statistical significance was set at p-value <0.05. Binary logistic regression analyses were performed to adjust for confounding factors in the relationship between HIV status and EDD use. **Results:** Out of 137 cases, 18(13.1%) used EDD before they found out that they were HIV +ve compared to 8(5.8%) of the controls. Even though the use of erectile dysfunction drugs was found to be significantly associated with serum HIV positivity in bivariate analysis (OR= 2.44; 95%CI: 1.04-5.93; p=0.039), it was not significant after adjustment for other factors at the multivariate analysis (AOR= 1.52; 95%CI: 0.43- 5.34; p=0.519). Multiple logistic regression revealed the following factors as independent predictors of HIV: having had sexually transmitted diseases (AOR=5.96; 95%CI: 2.43 – 14.63; p<0.001), taking alcohol/drunkenness (AOR=6.84; 95%CI: 3.22 – 14.56; p<0.001) and having multiple sexual partners (AOR=21.69; 95%CI: 8.82 – 53.33; p<0.001). **Conclusion:** This study shows that there is an increased risk of HIV infection among older men using EDD. However, this observation is not sustained after controlling for other associated factors. It is therefore recommended that a more robust study design (prospective cohort) with a large sample size to be undertaken to shed more light on this pressing topic.