## Abstract

Introduction: Globally the number of cases of HIV infection in prisons is greater than the general population with a prevalence ranging from six to fifty times more than the general population. When inmates are released back into the general population, they pose a threat to the population as they could serve as a reservoir of HIV infection. Methods: The study was a cross sectional study which was conducted at the male prison in Nakuru West Sub-county in Kenya to assess the practice of high risk sexual behaviors and HIV knowledge among male inmates. A total of 295 prisoners were selected using stratified random sampling and interviewed. A structured interviewer administered questionnaire was used to collect quantitative data from the study participants. The data collected was analyzed using SPSS version 21.Findings: The level of awareness of HIV among the prisoners was 98% with majority citing the source of information as media. 52% of the inmates did not know the meaning of HIV, 58 % knew that HIV is a virus. 86% of the respondents were aware that HIV can be transmitted from one person to another. 97.6% of the respondents were aware of sexual contact as a mode of transmission of HIV. Knowledge gaps existed in the modes of transmission with mosquito bites, sharing of clothes/ utensils and witchcraft/ spiritual being reported as modes of transmission of HIV. Masturbation was the most predominant mode of sexual practice, other sexual practices reported included oral sex, homosexuality and observing ladies. Majority (49%) of the respondents reported having multiple sexual partners, 26% reported having casual sexual contact under the influence of alcohol or drugs and 67% had had unprotected sex before incarceration. 27% of the respondents practiced oral sex while 22.7% practiced homosexuality in prison. 75% of the inmates practicing homosexuality had been coerced into the practice. Among the respondents practicing homosexuality 31% had multiple partners. Conclusion: The level of general knowledge on HIV was high with myths and misconceptions existing on the modes of transmission and prevention of HIV. The prisoners were at risk of HIV infection as a significant number of the prisoners were practicing high risk sexual behaviors.