

## Characterization of Human Papillomavirus Genotypes and Their Correlates among Women Living with HIV Attending Antiretroviral Therapy Clinic in Mukono, Uganda

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**Abstract :** Background: Human Papilloma Virus (HPV) is a prevalent sexually transmitted infection (STI) in the world. It is important to screen for HPV so that women found positive receive early treatment to prevent the development of cervical cancer. The broad aim of the research was to explore the types, occurrence, and associated correlates of HPV infection by genotyping Human papillomavirus among a cohort of WLHIV attending an antiretroviral therapy clinic in Mukono, Uganda. Methods: A cross-sectional study was used to collect data for socio-demographic, sexual practices, and medical history factors associated with HPV genotypes using a pretested interview guide subjected to 342 WLHIV. The respondents' results for HPV genotypes were obtained retrospectively from respective laboratory records. Data was entered in Epidata v4.6 and analysed using STATA V14. The prevalence of hr-HPV was estimated as a proportion of the entire sample size. Analysis for the correlates of hr-HPV infection was done using a modified Poisson regression model. Results: Slightly more than a half of respondents were aged below 35 years (56.7%), married (52.6%), and with a primary level of education (51.2%). The prevalence of hr-HPV was 39.8% at a 95% confidence interval (CI: 34.40- 44.78). The hr-HPV was higher among those between 30-34 years of age (n= 41, 30.2%) than those between the age of 45-49 years (n=16, 11.8%). In terms of associated correlates, age 45-49 years (aPR: 1.95, 95% CI: 1.41- 2.69), being married (aPR: 1.30, 95% CI: 1.00, 1.69), use of condoms (aPR: 1.31, 95% CI: 1.00 -1.71) and age of sexual debut (aPR: 1.42, 95% CI: 1.08-1.87) were significantly associated with Human papillomavirus genotypes. Conclusion and Recommendation: The prevalence of hr-HPV infection was high, indicative of a risk to the health of WLHIV in Mukono, Uganda, and worldwide at large. The correlates are age 45-49 years, being married, use of condoms, and age of sexual debut. Based on the results, it is recommended that the implementing teams in such projects put more emphasis on the diagnosis of hr-HPV infection and monitoring the treatment. More research is required to determine the effect of ART therapy on hr-HPV persistence.

**Keywords :** human papillomavirus genotypes, and their correlates, among women living with HIV, attending antiretroviral clinic

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