

## ABSTRACT

Globally, the proportions of women of reproductive age living with HIV vary between regions, with significantly higher proportions in sub-Saharan Africa. The scale-up of multiple-drug antiretroviral therapy in Africa has transformed the context of childbearing for HIV-positive women, with an impact on pregnancy incidence among HIV positive women. There is however very little understanding of the factors related to pregnancy among confirmed HIV positive women, particularly in terms of incidence, the driving factors and associated challenges. This descriptive cross-sectional study sought to determine the incidence of pregnancy in this group, and identified the personal, medical and community factors that influence the same in Rangwe Sub-county. A total of 244 women on ART within Rangwe Sub-county were interviewed using a semi-structured questionnaire. Quantitative data was summarized using descriptive statistics, and further analyses performed using logistic regression, using SPSS v23 ( $\alpha = 0.05$ ). Over 95% of the respondents had become pregnant after being diagnosed HIV positive, and up to 147 (60.7%) were aged between 21 and 30 years. Age, marital status and CD4 cell count were significantly associated with pregnancy ( $p < 0.05$ ). Partner consent ( $p = 0.034$ ), unlike partner support and community or family acceptance of childbearing ( $p > 0.05$ ), was significantly associated with pregnancy. Partner HIV serostatus was significantly associated with pregnancy ( $p = 0.005$ ), while partner awareness of participant's, and defaulting from ARVS were not significantly associated with pregnancy ( $p > 0.05$ ). Women with undetectable viral load (HIV RNA  $< 50$  copies/mL) were 2.7 times more likely to get pregnant compared to women with detectable viral load (OR = 2.71; 95% CI = 1.8-3.22;  $p = 0.028$ ). About 73% had not defaulted on their ARV medication, knowledge of partner's HIV status as an independent predictor of pregnancy among HIV positive women. It is evident that there are personal, medical and community factors that influence pregnancy incidence among HIV positive women. The Ministry of Health, through NASCOP, together with Homa Bay County government and other relevant stakeholders, should improve on the strategies to enhance family planning among HIV-infected women, putting focus on the younger and married women, while improving viral load and CD4 cell count monitoring among the women. There is need for an enhanced HIV status disclosure between sexual partners, and adoption of strategies that promote male partners giving consent to the women to get pregnant as well as to use family planning methods of choice.