

## ABSTRACT

National AIDS program, Myanmar, estimated that numbers of people living with HIV/AIDS is 237,684 in 2009, and HIV prevalence among adult population is 0.61%. Now, there are total of 31 ART hospitals across the country and estimated numbers of ART taking PLHIVs are about 22000 including services from government and NGOs.

Understanding sexual behaviour among people living with HIV (PLHIV) is the key to developing prevention strategies. There has been increasing concerns that people receiving ART treatment will live longer, healthier and practice unsafe sex. The general objective of the study is to compare the sexual behaviours between PLHIVs who are taking ART and those who are not taking ART. Cross sectional questionnaire study was conducted among 200 HIV (100 on ART and 100 not on ART) infected individuals attending the outpatient clinic of Waibargi specialist hospital in 2010. We collected demographic data, health status, disclosure, ART treatment seeking and sexual behaviour over the past year and past 3 months using a face to face questionnaire.

CD4 count and general health status were obtained from the patient's record book. For qualitative data, in-depth interviews with 7 PLHIVs were done. Mean age of the respondents was 35 years and 34% are dependents. HIV diagnosis periods of the PLHIVs vary from one month to thirteen years; about half of the respondents were diagnosed with HIV for more than one year. About 40% of respondents had HIV positive partner. There was an association between currently taking ART treatment and perceived good health which is statistically significant. ART taking people are more likely to receive 3 or more counseling sessions than non-ART patients. Majority of respondents (69%), were sexually active during past 1 year. PLHIVs who were not taking ART were more likely to be sexually active in past one year than those who were taking ART (56.1% Vs 43.9%,  $P=0.009$ ). Twelve percent report multiple partners and young PLHIV are more likely to report multiple sex partners than older PLHIV. Among the 139 respondents who are sexually active in one year, 59(42.4%) report consistent condom use and sexual activities with nearly 60% of negative or unknown partner are not protected or inconsistent condom use.

The findings showed that about half of the PLHIVs are practicing sexual risk behaviour, and sexual risk behavior are significantly more likely in patients not taking ART. (40.7 % VS 59.3 %,  $P=0.016$ ).

In the multivariate analysis with logistic regression, it explained that respondents currently non ART were 1.845 times more likely to engage in risky sexual behaviour than those who are taking ART (adjusted OR, 1.845; 95% CI, 1.019- 3.339;  $P = 0.043$ ).

Qualitative findings also point out that majority is still sexually active, and sexual risk behaviour was reduced but still exists to certain extent among the respondents.

After the study, recommendations had been made to promote safe sex counseling with the attention on ART as well as non ART patients. Prevention programs should also target the PLHIV population and counseling program has to make adaptations to meet the needs of the PLHIVs population, especially to increase frequency and quality of counseling services received by the PLHIVs.