ABSTRACT

Introduction: Pulmonary Tuberculosis among HIV positive patients remain a significant medical and public challenge. The prevalence of TB is increasing in many countries and is the leading infectious cause of death worldwide (WHO, 2013).

Study Objective: The general objective of the study was to determine the factors that contribute to prevalence of pulmonary TB among HIV positive patients attending ART clinic at Atutur Hospital in Kumi, district.

Methods: A descriptive, cross sectional study design was used to determine the prevalence of Pulmonary Tuberculosis among Human Immune Virus (HIV) infected patients attending ART Clinic in Atutur Hospital and the associated factors. Sample size was determined using Martin's formula of 2003 and sample of 101 respondents were obtained. Systematic random sampling technique was used to select participants as they get admitted in the hospital for services. Data was collected using structured questionnaire and collected data was entered into Microsoft excel, cleaned and exported to SPSS for statistical analysis. Data was analyzed at Univariate and Bivariate levels and results were presented into pie-charts, bar- graphs and tables. **Results:** The response rate was 100%. More than half 59(58.4%) of the HIV positive patients were females. The mean age of the patients was 42 ($\pm$12.96) years. The prevalence of pulmonary tuberculosis was 31.7% (n=32). Bivariate analysis using chi-square test revealed statistically significant difference with following medication schedules (p=0.011) and history of pulmonary tuberculosis (p<0.001). On the other hand, ARV stock out experience also had significant difference with pulmonary tuberculosis. Via logistic regression analysis,HIV positive patients who had not followed the medication schedules were 3.06 times more likely to develop pulmonary tuberculosis compared to those who followed it (UOR=3.06 95%CI: 1.265-7.398 p=0.013).HIV patients who never had PTB were less likely to develop PTB compared to those who did (UOR=0.39 95%CI: 0.012-0.125, p=0.000).

Conclusion: Prevalence of pulmonary Tuberculosis was 31.7% and 16.8% among females. Following medication schedules reduces PTB prevalence and history of PTB and ARV drug stock-outs increases prevalence of PTB.

Recommendations: Conduct periodic assessment of PTB status among HIV clients, educate clients on the importance of following medication schedules, assess all HIV clients for past PTB experience and ensure adequate ARV drugs for ART clients attending clinics.