

ABSTRACT

Background: Scaling up Highly Active Antiretroviral therapy in resources-limited settings is a global health goal. However the emergence of resistance to first line ARV drugs leads to the need of less tolerable and more expensive second line drugs. In Rwanda no study has yet reported the rate and high risk factors to treatment failure. The objective of this study was to assess the rate and predictors of treatment failure among HIV infected patients of 15 years old and above on first line regimen of HAART in Kibogora District Hospital. Methods: A retrospective study was conducted among a sample of 250 patients HIV infected patients of 15 years old and above followed in ART service of Kibogora District hospital from January 1, 2005 up to June 31, 2013. Data were collected using a questionnaire, entered and analysed using SPSS version 16.1. Logistic regression was used to assess the association between Independent variables and treatment failure.

Results: Data of 250 patients were analysed. 70.4% were female. The mean of baseline CD4 at ART initiation were 293 copies/ml (SD=168.9) and the commonest prescribed first regimen was D4T/3TC/NVP (41%). Overall 15.2% failed on first line regimen of HAART using virological failure definition. The married were 8 times more likely to fail on HAART compared to singles (OR=8, P=0.000). The patients with poor adherence were 10.8 more likely to fail to HAART compared to good adherent (OR=10.817, P=0.000); Patients who did not benefit from psychosocial support were 15 times more likely to fail on HAART compared to those who benefited from it (OR=15.9 P=0.001). Patient with recent CD4 count less than 100cell/ml were 9 time more likely to fail to HAART than the patients with CD4 count above 100cell/ml. Among the patients with virological failure, only 50 % had been recognised by Health care providers, with a delay of 118.7(mean) days (SD 40.844). Conclusion: The incidence rate of treatment failure in Kibogora Hospital was 15.2%. Being married, poor adherence, lack of psychosocial support, not improving in CD4 count over time were independent predictors of treatment failure. Most of the cases of failure were not detected early. Patients with above risk factors should closely be monitored.

Key Words: HIV, AIDS, High active antiretroviral therapy, viral load, treatment failure.