Hepatotoxicity due to highly active antiretroviral therapy (HAART) has gained prominent attention since it can be affected by many factors. The aim of this study was to determine the prevalence of hepatotoxicity and related risk factors of severe hepatotoxicity following HAART initiation.

A total of 100 newly diagnosed HIV drug naive patients within the age range of 18-61 years were recruited and followed up for 24 weeks and were placed on either Tenofovir(TDF) + Lamivudine(3TC)+Efavirenz(EFV) or Zidovudine(AZT)+Lamivudine +Nevirapine(NVP) or Zidovudine+Lamivudine+Efavirenz regimen. Socio demographic data was obtained using pretested questionnaires. Venous blood samples were collected to measure aspartate aminotransferase(AST), alanine aminotransferase(ALT), alkaline phosphatase(ALP), using colometric enzymatic reaction. Hepatotoxicity was classified based on age and sex. Data was analyzed using SPSS.

The level of significance was set at 5%. A total of 37(38%) and 49(49%) patients presented with hepatotoxicity while 15% and 28% of patients of them had severe hepatotoxicity at 4 and 24 weeks respectively. Serum levels of all enzymes increased significantly (p<0.05) with increased treatment duration. Univariate analysis revealed that the risk factor of developing severe hepatotoxicity was significantly (p<0.05) greater in patients <30years, males, low BMI, low monthly income earners and patient on AZT+3TC+ NVP regimen. While multivariate analysis at p<0.09 showed that age <30 years, Low BMI, low monthly income or and the use of AZT+3TC+ NVP regimen was an independent risk factors.

Low BMI, <30years, low monthly income and the use of AZT+3TC+NVP regimen were identifiable risk factors for the development of severe hepatotoxicity. As such these factors should be considered as an important strategy by clinicians in preventing the hepatotoxicity.