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Statistical analysis of the factors associated with loss to follow-up among HIV-infected adults in second-line regimens in Dar es Salaam

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This study analyzes the factors associated with loss to follow-up among HIV-infected adults in second-line regimens in Dar es Salaam. The Kaplan-Meier and the Cox proportional hazard models were used to analyze the longitudinal data of 4,002 patients who were followed for 5.36 years follow up time from July 2009 to June 2015. Among 4,002 patients who were followed up, 1,537 (38.4%) individuals were lost to follow-up. Of these patients who lost to follow-up, Males had higher risk of loss to follow-up (HR 1.329; 95% CI; 1.261 – 1.401; p-value less than 0.0001) when compared to Females. Also, the patients who had age more than 15 years exclusive but less than 30 years inclusive had higher risk of loss to follow-up (HR 1.571; 95% CI; 1.465 – 1.684; p-value less than 0.0001) when compared to the patients who had age of more than 30 years exclusive but less than 45 years inclusive. The patients who had lower Body Mass Index of less than 18.5Kg/m² inclusive had higher risk of loss to follow-up (HR 1.853; 95% CI; 1.740 – 1.974; p-value less than 0.0001) when compared to the patients who had normal weight. Similarly, the patients who were in the WHO stage IV had higher risk of loss to follow-up (HR 2.396; 95% CI; 1.976 – 2.904; p-value less than 0.0001) when compared to the patients who were in the WHO stage I. Thus, Sex, Age and the Body Mass Index have higher association with loss to follow-up among HIV-infected adult patients in second-line regimes in Dar es Salaam, mostly those who were in the WHO stage IV.