

**TIME TO TUBERCULOSIS TREATMENT DEFAULT AND ITS
DETERMINANTS AMONG ADULT TB PATIENTS IN JINJA DISTRICT,
A RESTROSPECTIVE COHORT STUDY**

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ABSTRACT

Introduction: Whereas Tuberculosis is both preventable and curable, the disease remains a global health problem causing ill-health among millions of people each year and ranks as the second leading cause of death from an infectious disease after the human immunodeficiency virus (HIV) worldwide. Despite substantial investments in implementing TB control activities including community based directly observed therapy (CB-DOTS), achievement of the World Health Organization recommended 85% treatment success rate (TSR) in smear-positive cases has not been attained in Uganda with a national TSR of 68% (2010). This rate is even lower in Jinja District given a treatment completion rate of 52.7 % from a survey in 3 facilities in the district.

Objective: To determine proportion of, time to and determinants of TB treatment default among adult TB patients in Jinja district.

Methods: This was a retrospective cohort study involving 1,233 patients. Secondary data from TB registers and TB drug dispensing logs at four healthcare facilities from the district was used. Kaplan-Meier Survival analysis was used to estimate and compare time to default. Cox regression analysis was used to determine characteristics associated with treatment discontinuation during the period of TB treatment.

Results: 239 (19.4%) defaulted from treatment, and the median time to default was 3 months (IQR 2-6). Default was higher among patients with extra pulmonary tuberculosis, patients who did not transfer from other facilities, patients not on DOTs, and those who did not get a smear microscopy done for TB diagnosis, patients with unknown HIV status, and patients not on HAART. After adjusting for confounding, factors associated with treatment default were: not being on DOTs (HR = 2.8; 95% CI: 2.0-3.9), being HIV negative (HR = 0.54; 95% CI: 0.39-

0.74) and not being on HAART (HR = 1.94; 95% CI: 1.32-2.86). Microscopy results though significant at both the basic and the final model failed the hazard proportion assumption violation test.

Conclusions: TB treatment default is relatively high in Jinja District and time to treatment default range from 2-6 months with a median time of 3 months. Patients not on DOTs, those on HAART those with unknown HIV status are more likely to default compared to their counterparts in this district.