

# *Predictors of drug resistant and extra-pulmonary tuberculosis in HIV-infected patients at Raleigh Pitkin Memorial Hospital in Manzini, Swaziland*

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**Setting:** Raleigh Pitkin Memorial Hospital, Manzini, Swaziland

**Objective:** Information on predictors of drug resistant (DR-TB) and extra-pulmonary TB (EPTB) on HIV-infected adults in Swaziland is not available. We undertook a project to study predictors of DR-TB and EPTB.

**Design:** All HIV infected adults diagnosed with TB at the hospital between 1<sup>st</sup> January 2015 and 31<sup>st</sup> December 2016 were included in the study.

**Results:** 294 patients were enrolled in the study. We found that in both univariate and multivariate analysis, age, sex,

previous history of tuberculosis infection and length of time on ART were not associated with DR-TB. In the univariate analysis of EPTB predictors, age (OR 0.97, 95% CI 0.94-0.99; P = 0.035), and not on ART at time of TB diagnosis (OR 3.04, 95% CI 1.61-5.72; P = 0.001) were strongly associated. However, in the multivariate analysis, sex (females) (OR 1.83, 95% CI 1.03-3.25; P=0.041) and not on ART at time of TB diagnosis (OR 3.42, 95% CI 1.78-6.55; P < 0.001) were found to be strongly associated.

**Conclusion:** Patients not on ART need to be assessed carefully for EPTB and record keeping strengthened to enable accurate reporting for programs.