ART in seven urban and rural health facilities located in the Tigray. We analysed the retention in care and its associated determinants in over 1000 patients followed for two years. The main outcome measure was the retention in care rate, defined as the proportion of patients alive and receiving ART at the same health facility as at ART initiation. Kaplan-Meier method was used to estimate the probability of retention at different time points. Cox Proportional Hazards model with robust sandwich estimates to account for within health facility correlation was used to identify factors associated with retention.

Results Kaplan–Meier estimates of retention in care were 83.9%, 80.6% and 77.6% at 12, 18 and 24 months of follow-up, respectively. Attrition was mainly due to lost-to-follow-up and transferred-out patients. Multivariate Cox proportional hazard model showed that being male (HR 1.35, 95% CI: 1.04–1.75), CD4 count<200 (HR 1.49, 95% CI: 1.13–1.96), haemoglobin level <= 10 (HR 1.40, 95% CI: 1.11–1.76), the presence of active TB co-infection at ART initiation (HR 1.47, 95% CI: 1.04–2.08) and the type of health facility were significantly associated with attrition.

Conclusions According to our prospective data, combined interventions aimed to improve ART retention shall include expansion of HIV testing and earlier initiation of therapy, nutrition supplementation, early detection and treatment of TB. Observed retention differences among health facilities and according to gender suggest that innovative models of HIV care shall also be explored.

| PA-079 | **PREDICTORS OF RETENTION IN CARE OF HIV-INFECTED ADULTS IN TIGRAY, ETHIOPIA: A PROSPECTIVE COHORT STUDY** |

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Background HIV/AIDS represents one of the major health challenges of Ethiopia, despite a proven record of universal access to HIV care and treatment. Long-term antiretroviral therapy (ART) retention is a key factor for personal and public health benefits. Identification of determinants of attrition is needed to design appropriate interventions.

Methods We used data from the CASA project, a prospective, multisite study of a cohort of HIV-infected patients who started