Background

- In 2014, there were 3.2 million new cases of TB and 480 000 deaths due to TB in women
- Women of reproductive age are disproportionately affected, and TB during pregnancy has been associated with adverse pregnancy and perinatal outcomes, particularly in the presence of HIV

Methods

- Consecutive women attending their first visit at a primary care antenatal clinic completed a brief questionnaire, underwent CD4 enumeration, and had an ultrasound for pregnancy dating.
- TB cases were diagnosed via passive detection by routine public sector services based on symptom screening with or without bacteriological confirmation; TB notification data were obtained for the period extending from 18 months before the estimated date of conception to 6 months postpartum.

Results

- Among 1507 HIV+ women (median age 29 years), 989 initiated ART in pregnancy (66%); median CD4 377 cells/μL (IQR 250-543) and 518 (34%); median CD4 393 cells/μL (IQR 271-527) were on ART at conception (Table 1).
- Overall incidence of TB during preconception, during pregnancy and postpartum was 2445 (95% CI 1846-3174), 1125 (95% CI 595-1923), and 1613 (95% CI 773-2963) per 100 000 PY, respectively (Table 2).
- Increasing age, CD4 cell count, and ART status are associated with reduced risk of TB preconception compared to pregnancy (Table 3).
- Postpartum vs preconception - TB incidence was reduced compared to preconception (IRR 0.64; 95% CI 0.30-1.39), but was increased slightly relative to pregnancy (IRR 1.39), but was increased slightly relative to pregnancy (IRR 1.39; CI 1.01-2.00).

Discussion

- TB incidence appears reduced in HIV+ women during pregnancy compared to preconception; incidence peaks postpartum, but not to preconception levels.
- Reduced incidence during pregnancy and postpartum may be related to increased ART coverage in these periods.
- Limitations of the study include reliance on routine TB case detection data, meaning that only clinically presenting cases are included and dates could be inexact.
- The absolute incidence of TB is high throughout; intensified TB case detection interventions in PMTCT services warrant consideration.

- Additionally, expanded ART access in pregnancy may further reduce the TB burden in this population.