

**Track and Category: D13****Title: Introduction of Rapid Syphilis Testing within Prevention of Mother-to-Child Transmission of HIV Programs in Uganda and Zambia: A field acceptability and feasibility study****Authors:** Edward Bitarakwate, Susan Strasser, Tabitha Sripipatana, Katherine Shelley, Namwinga Chintu, Othiniel Musana, Anne Phiri, Alex Ncube, Michelle Gill, Catherine Wilfert

**Background:** As a result of the President's Global Health Initiative, Maternal and Child Health (MCH) and HIV integration is gaining renewed focus. In Zambia and Uganda, we tested the hypothesis that the introduction of rapid syphilis testing (RST) alongside rapid HIV testing is acceptable and feasible in facilities offering PMTCT services, and will improve identification and treatment of syphilis in pregnant women. The rate of HIV and syphilis co-infection in pregnant women was also explored.

**Methods:** A pre-post test study design was applied. Modified Ministry of Health registers collected service delivery data. Contingency tables and chi-square tests were used to summarize data and test for associations between frequencies of events. A quantitative and qualitative methods questionnaire was administered to healthcare workers who performed HIV and rapid syphilis testing.

**Results:** Urban (17.1% to 95.6%;  $p < 0.0001$ ) and rural sites (88.3% to 97.1%;  $p < 0.0001$ ) in Zambia saw significant increases in syphilis testing with the RST. In Uganda, syphilis testing was not available pre-intervention.

**Table 1.** Post-intervention data for pregnant women

Country	Attended ANC	Syphilis Tested	Syphilis Positive	Syphilis Treatment	Same day treatment
Uganda	14,540	13,131 (90.3%)	690 (5.3%)	715 (103.6%)*	708 (99.0%)
Zambia	11,985	11,460 (95.6%)	1050 (9.2%)	1000 (95.2%)	958 (95.8%)

\*Higher than 100%, due to women being treated presumptively when their partners tested positive.

In Uganda, 14.3% of syphilis positive pregnant women were co-infected with HIV. In Zambia, 24.2% of women were co-infected with HIV. Healthcare workers found RST to be easy to perform, benefits patients by providing same day testing and treatment, and improved quality of services.

**Conclusions:** RST introduction into ANC is feasible in urban and remote rural clinics and resulted in high levels of same-day testing and treatment. The high rate of HIV-syphilis co-infections and the increased risk of MTCT further justifies the importance of syphilis testing as part of the PMTCT package.