

Antenatal HIV, maternal and child health outcomes in low income urban Harare, Zimbabwe: A cross sectional study

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Introduction: Maternal and neonatal health remain one of Africa's biggest health challenges in high HIV prevalence settings. This study investigated the association between antenatal HIV serostatus and postnatal depression and child health outcomes in low income urban settings.

Methods: A cross sectional survey was conducted among 2042 women attending a 10-day or six-weeks postnatal clinic in six public primary care clinics in Harare, Zimbabwe. Postnatal depression symptomatology was measured using the WHO (2005) version of the Centre for Epidemiological Studies-Depression scale among women interviewed at six weeks postpartum (n=842). Clinic records were reviewed for mother's antenatal HIV sero-status and birth weight. Women were interviewed to collect information on any past miscarriages, neonatal deaths and stillbirths. Multivariate analyses assessed the associations between mother's HIV sero-status and postnatal depression and child health outcomes whilst controlling for covariates.

Results: 15.3% (95% Confidence Interval (CI): 13.7-16.9)) tested HIV positive (N=1951) while 15.9% (CI: 13.4-18.3) met the criteria for postnatal depression symptomatology and 8.6% (CI: 7.3-9.8) babies were underweight (\leq 2500g). HIV positive women were more likely to have low birth weight babies (adjusted odds ratio (AOR) 1.78; CI: 1.16-2.75); they

were more likely to report a miscarriage (OR1.66; CI:1.17-2.35), neonatal death (OR 1.50; CI: 1.00-2.35) and were insignificantly less likely to report a still birth (0.92 (0.33-2.58). HIV was associated with postnatal depression (OR1.71; CI: 1.25-2.35) but the association disappeared when controlled for co-variates (AOR 0.90; CI: 0.49-1.64). Postnatal depression was significantly associated with HIV risk factors including ever having transactional sex (AOR 2.85; CI: 1.74-4.69). Being treated for a sexually transmitted disease during pregnancy was strongly associated with reporting a neonatal death (AOR 2.28; CI: 1.35-3.86).

Conclusion: HIV status was associated with low birth weight, miscarriage and neonatal death but not postnatal depression while risk factors for HIV were associated with postnatal depression symptomatology and neonatal death.