

Category: B3 Acute and early infection

Title: HIV incidence during pregnancy and post-partum period in southern Mozambique: impact on vertical HIV transmission.

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Text: Background:

Incident HIV infection among pregnant or breastfeeding women significantly increases the risk of vertical transmission. HIV prevalence among pregnant women in Mozambique is 15% but incidence data do not exist. A prospective cohort study is being carried out in six health centers in southern Mozambique to determine HIV incidence among pregnant and postpartum women.

Methods:

Women were recruited during the antenatal period and followed until delivery. A second cohort followed women from their first postpartum visit until 18 months. All participants tested negative for HIV antibodies at inclusion. HIV antibody testing and specimen collection for DNA-PCR were performed quarterly. The impact of the observed HIV incidence on infant infection was estimated using annual birth rate, HIV prevalence and vertical transmission rate.

Results:

A total of 1,238 pregnant and 1,225 postpartum women were included in the cohorts. So far, 98% of pregnant and 76% of postpartum women have completed the study, with average follow-up periods of 3.2 and 13.9 months, respectively.

The overall HIV incidence is estimated at 6.2 (3.8-10.1)/100 person-years during pregnancy and 4.0 (3.0-5.4)/100 person-years during the first 18 months postpartum. Half of the seroconversions during pregnancy were detected before delivery and half at time of delivery. Forty percent of postnatal infections occurred during the first six months postpartum.

Based on these findings, in southern Mozambique, 21% of the yearly vertical transmissions are due to recent maternal HIV infection, of which 82% result from a postpartum maternal seroconversion.

Conclusion:

HIV incidence during pregnancy and postpartum period is high in southern Mozambique. Our results reinforce the need for routine HIV testing during pregnancy and postpartum, and for expanding PMTCT regimens during breastfeeding, particularly in high incidence regions. However, ultimately, effective primary prevention strategies targeted at pregnant and breastfeeding women are urgently required in this region.

Keywords: 1. Incidence
2. PMTCT
3. Sub-saharan Africa
4. Pregnancy
5. Postpartum