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IDENTIFYING HIV-POSITIVE MOTHERS AND EXPOSED INFANTS IN MATERNAL CHILD SERVICES

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BACKGROUND

HIV retesting for women who previously tested HIV-negative or who were not tested during pregnancy and delivery is critical for identifying women living with HIV and initiating them on ART. Retesting also identifies infants at risk for HIV infection who need linkage to care. While many countries have adopted national guidelines for retesting pregnant and breastfeeding women, there is limited information about how effectively these guidelines are being implemented in high HIV burden, low resource settings including strains on the healthcare system from increased testing volume.

METHODS

In collaboration with the Mozambican Ministry of Health and the CDC, ICAP at Columbia University provided technical assistance to expand HIV retesting for mothers in maternal child health services (MCH) at 10 health facilities in Nampula, Mozambique from April through November 2019. The project was conducted in child wellness and immunization clinics (CWC). Retesting procedures followed national HIV guidelines which called for testing every 3 months during breastfeeding. Children of women who tested HIV-positive in CWC were referred to pediatric services for infant HIV testing (with polymerase chain reaction [PCR]) and referred for ART if determined to be PCR-positive.

To identify women eligible for retesting, health facility staff examined patient held health cards for date of last HIV test. Two additional HIV test counselors and one mentor mother were hired to identify eligible women and support testing at each health facility for the project. At some facilities, as a result of limited space, it was necessary to erect tents within courtyards to provide private spaces for testing in the CWC.

Routinely collected data were extracted from health facility registers from June through November (data from April-May were incomplete). We report the number and proportion of women: retested in CWC; tested HIV-positive; linked to ART services; number HIV-exposed infants (HEI) tested for HIV (with polymerase chain reaction (PCR) testing); HEI testing HIV-positive; HIV+ linked to ART services. We also report HIV test positivity for mothers according to the age of their infants in months.

RESULTS

Figure 1.

- A total of 26,503 women were tested for HIV in the CWC over 8 months; 212 (0.8%) tested HIV+ and 157 (74.1%) of those testing HIV+ were linked to ART services.
- Among HEI identified as a result of maternal HIV testing in CWC, 145 (68.4%) received PCR testing and 28 (19.3%) tested positive.
- All HEI (100%) with positive PCR were linked to ART services.

Figure 2.

- In the CWC, mothers of infants 1-3 months of age were the largest group who were retested, whereas few mothers of children who were 10 and 11 months of age received retesting
- Maternal test positivity in the CWC was 1.1% in infants 1-4 months of age. It was lowest (0.6%) among mothers of infants 5 months of age (and highest (1.6%) in mothers of children >12 months of age.

Low positivity rate among women retested for HIV in child wellness clinics but high risk of HIV infection among infants of mothers testing positive.

Figure 1. Maternal retesting, HIV-exposed infant testing and linkage to ART in Child Welfare Clinics (CWC), Nampula, Mozambique June-November 2019

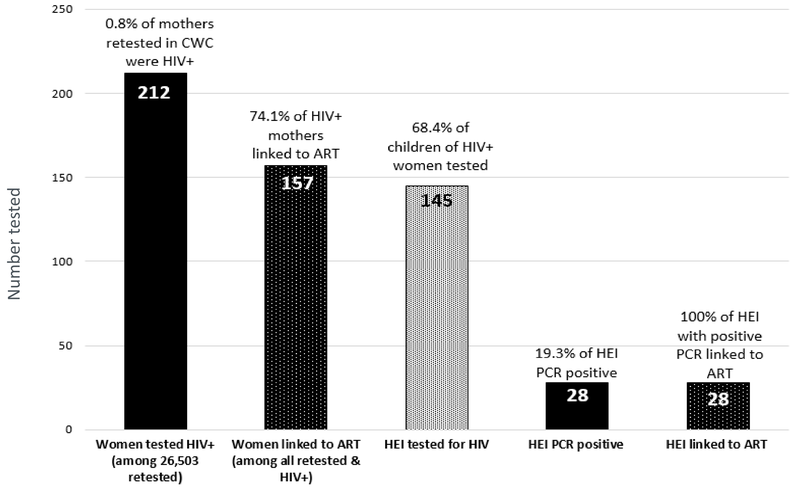
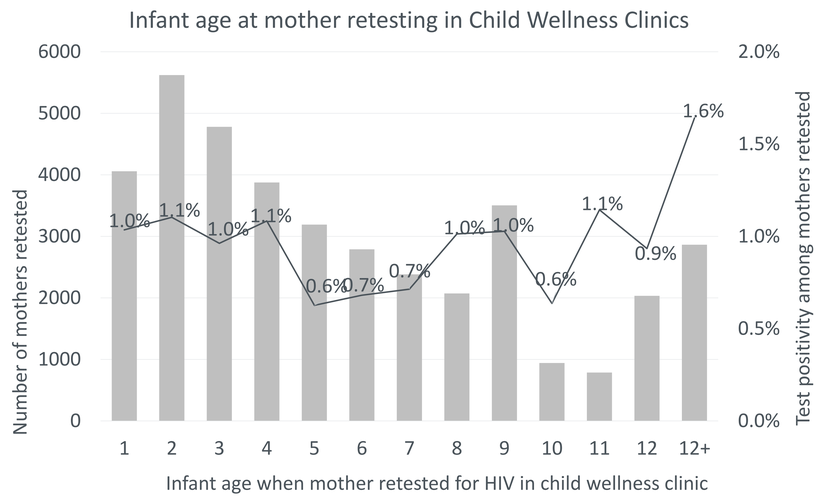


Figure 2. Number of mothers retested for HIV in Child Wellness Clinics and test-positivity among mothers according to age of infant, Nampula, Mozambique, June-November, 2019



CONCLUSIONS

- Testing yield for mothers was low in CWC services, linkage to infant testing was poor and 19.3% of infants of women testing HIV+ were found to have HIV infection. G
- We do not know whether and when these women previously tested HIV-negative but the high rate of positivity among infants was likely due to the combination of incident infections during pregnancy or breastfeeding, and from women with established infections who did not receive ART during pregnancy.
- Greater efforts are needed to ensure that all HEI receive diagnostic testing and have a final HIV status determination after the cessation of breastfeeding, and that mothers initiate ART (or restart).
- Given the challenges of retesting large numbers of women attending MCH services, effective methods for targeting testing in these settings will help identify more HIV+ women and their infants.

ADDITIONAL KEY INFORMATION

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