

EFFECTIVENESS OF A COMPREHENSIVE PMTCT PROGRAM

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Background;

Although theoretical efficacy of prevention of mother-to-child HIV transmission (PMTCT) interventions has been established in randomized clinical trials, it is important to determine their effectiveness in program settings. We evaluated the uptake of antiretrovirals, elective caesarean section and replacement feeding for PMTCT in Kenyatta National Hospital. Infants were tested by DNA PCR at 6 weeks to 1 year.

Methods

We used service delivery data collected between January 2004 and December 2005.

Results

Of 933 HIV positive women, 910 (97%) received antiretrovirals for PMTCT, 570 (61%) opted for replacement feeding and 330 (35%) were delivered by elective caesarian section for PMTCT.

Among 910 women who received ARVs for PMTCT 269 (30%) received short course AZT with nevirapine, 377(41%) received HIVNET 012, 89 (10%) received HAART and infants of 175 (19%) mothers who had not received ARV received post exposure prophylaxis.

The median age of the 106 tested infants was 6 months (range 1.2-12 months) and 22 (21%) tested HIV positive. Eighteen percent of infants delivered by caesarean section compared to 23% of those delivered vaginally were HIV infected $P=0.5$. Compared to ever breastfed infants, never breastfed infants were less likely to be HIV infected (46% vs 20% $P=0.04$). Twenty nine percent of infants whose mother received HIVNET 012 regimen were HIV infected compared to 11% whose mothers received short course zidovudine with nevirapine and 12.5% whose mothers received Highly active antiretroviral therapy (HAART) $P=0.09$.

Conclusion

The uptake of PMTCT antiretrovirals and replacement feeding are high while that of caesarean section is low. HIVNET 012 and infant PEP account for 60% of the antiretroviral interventions due to late presentation of women. There is need for further research into the relative effectiveness of different antiretroviral regimens and infant feeding options in program settings.