

Oral presentation

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Effectiveness of a district-wide programme for the prevention of mother-to-child transmission of HIV in Cambodia. Experience from six maternity units in Phnom Penh and Kandal

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Background

Despite the great advances in developing and implementing effective interventions to prevent HIV transmission from infected mothers to their infants, almost 2,000 infants are infected every day through MTCT in resource-poor countries. In these settings, where prevention of mother to child transmission of HIV-1 (PMTCT) programs are in place, the uptake and effectiveness of the PMTCT comprehensive program need to be regularly monitored.

Main objective

To estimate the field efficacy of a district-wide PMTCT programme, in Phnom Penh and Kandal province.

Methods

Six maternity units were included: five in Phnom Penh (NMCHC, Daun Penh HC, Tuol Kork HC, Pochentong HC) and one in CCH Takmao, Kandal Province. Individual and group counseling were conducted. Prenatal HIV testing were performed using rapid tests. HAART, or preventive ARV drugs, were administered to the mothers and children according to the national recommendations. Diagnosis of HIV infection in babies (heel prick blood spotted on DBS and/or EDTA blood specimen) was done

at the Pasteur Institute of Cambodia by mean of HIV-1 DNA or RNA real time PCR (ANRS kits).

Results

From March 2006 to December 2008, 38,398 pregnant women visited the ANC (total number of ANC attendees = 117,739). 33,811 (88%) accepted pre-test counseling and 33,436 (98%) the HIV testing. 28,236 received post-test counseling (84%). Finally 320 women joined the PMTCT programme and 215 delivered. 201 (93,48%) received an effective PMTCT intervention. Eighty-eight received HAART (3TC+d4T+NVP) during pregnancy. Zidovudine (AZT) was provided antenatally from week 28 of gestation and during labour with single dose of Nevirapine (sdNVP) to 104 women, including 7 enrolled in the TEMAA ANRS clinical trial who received AZT and both sdNVP and Truvada® at the onset of labour. Six women received AZT only, and 2 a single dose of NVP only. Finally, 14 did not receive any antiretroviral interventions. 177 infants received a sdNVP and AZT twice a day for 7 days, 33 received a sdNVP and AZT for 1 month, 1 received sdNVP and AZT on delivery only, 2 only sdNVP and 1 no treatment. Infant formula milk was provided to 214 mothers choosing the formula feeding option and 1 was exclusively breastfed. Nine out of 215 infants (4.2%) were early diagnosed and confirmed HIV-1 infected

before the age of 2 months. Two of them were born from mothers receiving no therapy, 2 from mothers receiving sdNVP only. One was on HAART and 4 received AZT.

Conclusion

The 4.2 % rate of MTCT of HIV-1 we report here confirms the feasibility and effectiveness of a large-scale PMTCT programme in an urban and sub urban settings.

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