ARV Impact to mother to child transmission of HIV in 21 provinces/cities in Vietnam, 2011-2012: Retrospective descriptive study

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Background: PEPFAR has supported National Prevention Mother to Child transmission (PMTCT) Program in Vietnam since 2003. Short course AZT with single-dose NVP and an AZT/3TC “tail” following WHO guideline (Options A) is being applied. Studies on antiretroviral (ARV) effectiveness for PMTCT were still limited in Vietnam. The objective of the study was to determine the impact of maternal ARV to mother to child transmission of HIV (MTCT) to provide evidences for developing National PMTCT Policy in Vietnam.

Methods: A retrospective study was conducted in 21 provinces/cities. Mother infant pairs data were collected from the chart records of HIV positive mothers who gave birth from 10/2011 - 6/2012 at 34 PMTCT comprehensive service sites currently in service, consists of provider-initiated HIV testing and counseling, ARV prophylaxis, safe delivery, patient referral to HIV outpatient clinics (OPC). HIV status of the infant is determined by DNA Polymerase Chain Reaction Roche test at 2-9 months of age in 22 Pediatric OPCs.

Results: 398 mother and infant pairs were accessed. Of those 18 infants were HIV positive, bringing the rate of MTCT to be 4.5%. Among 353 mothers received any kind of ARV, 10 (2.8%) their infants were infected versus among 45 untreated mothers, 8 (17.8%) infants were infected (RR=0.16 95% CI 0.06-0.37). Among 97 mothers received AZT prophylaxis during antenatal care, 4 (4.1%) their infants were infected versus among 115 received single-dose NVP at labour and “tail”, 6 (5.2%) infants were infected (RR=0.16 95% CI 0.06-0.37). Of 141 (40%) mothers received triple ARV therapy (ART), 100% their infant were confirmed as HIV negative.

Conclusions: The risk of MTCT of HIV in mother group who took ARV less than 7.7 times that in the mother group not treated any ARV regimen. Triple ART is the highest effective for PMTCT. Limited sample size made insignificantly difference between HIV mothers receiving AZT prophylaxis and single-dose NVP. National Guideline on PMTCT should revise to provide lifelong ART regardless of CD4 count/disease stage (Option B+) to all HIV pregnant women. Further investigate the effects of other factor such as length of time of mothers’ ARV, mother health condition.

Biography

N Thi Thuy Ha completed her Medical Doctor degree from Hanoi University of Medicine in 1995 and her Master’s degree of Public Health from Hanoi University of Medicine in 2002. She is now Deputy Brand Chief of HIV/AIDS care and treatment, Section chief of Prevention of Mother to Child HIV of transmission of project on supporting HIV/AIDS Prevention and Control in Vietnam (VAAC-US.CDC) managed by Ministry of Health in Vietnam. nthuyha@gmail.com