Editorial
Volume 13:2, 2022

Journal of AIDS & Clinical Research

ISSN: 2155-6113 Open Access

HIV-exposed Uninfected African Infants

Maria Jose Miguez Burbano*

Department of Epidemiology, Public Health Florida International University, Florida, USA

Editorial

Infant morbidity and mortality has been greatly affected by the HIV epidemic in many resource-limited settings. Although the numbers of new infant HIV infections are expected to decrease as antiretroviral prophylaxis is now recommended by WHO during gestation, delivery, and breastfeeding for HIV-infected women the number of infants who are HIV-exposed but uninfected will proportionately increase. Examining the determinants of these infants' morbidity and mortality is, therefore, of increasing importance. Infant mortality is affected by many factors such as geographic and socioeconomic setting, feeding type, and the mother's HIV status and disease stage. Pooled analyses of data from African studies indicate a mortality of HIV-exposed infants between 39.3 and 49 per 1000 Mortality of these infants is two to four times as high as that of HIV-unexposed infants in the same setting and is even higher for infants of mothers who had advanced HIV disease or who died [1,2].

Morbidity is also higher among HIV-exposed infants compared to their unexposed counterparts. In the ZVITAMBO cohort, HIV-exposed uninfected infants made an average of 30% more sick clinic visits and had 20% more hospitalizations than unexposed infants Respiratory and gastrointestinal infections are the main causes of infant morbidity and mortality with malaria also contributing substantially in endemic areas. The Breastfeeding, Antiretrovirals, and Nutrition (BAN) study, conducted from 2004 to 2010 among 2369 mother–infant pairs in Lilongwe, Malawi, provides an opportunity to examine morbidity and mortality in a large cohort of HIV-exposed infants in a resource-limited setting, almost all of whom were weaned at about 6 months of age. We examined the effect of several prognostic factors on infant morbidity and mortality [3].

Study design and participants

All infants were enrolled in the BAN randomized controlled trial, which has been described in detail elsewhere. Briefly, investigators recruited women who tested HIV-positive through a prevention of mother-to-child transmission program at antenatal clinics in Lilongwe, Malawi, from April 2004 to January 2010. Primary eligibility criteria included age of at least 14 years, gestation of 30 weeks or les s, a CD4+ T-cell count of 250/μl or more (before 24 July 2006, count ≥ 200/μl; change in accordance with Malawi Ministry of Health guidelines for HIV treatment), and no history of antiretroviral drug use (including the HIVNET 012 regimen) . Mothers or infants who had postnatal conditions that would preclude study interventions were excluded from the study, as were infants with birth weight less than 2000 g. All women provided written informed consent. The BAN study protocol was approved by the Malawi National Health Science Research Committee and by institutional review boards at the University of North Carolina (UNC) at Chapel Hill and the US Centers for Disease Control and Prevention (CDC).

Mother–infant pairs were randomized within 1 week of delivery to a two-group maternal nutritional intervention and to a three-group antiretroviral intervention consisting of a triple-drug antiretroviral regimen for the mother (maternal-regimen group), daily dose of nevirapine for the infant (infant-regimen group), or neither (control antiretroviral group). Irrespective of antiretroviral treatment assignment, all mothers in labor and their newborn infants were given single-dose nevirapine and zidovudine and lamivudine for 7 days. The interventions began after delivery and were continued until the cessation of breastfeeding, but no longer than 28 weeks. Infants found to be HIV-infected at birth or in the first 2 weeks of life were disenrolled from the BAN study and referred for care. All mothers in the study were counseled to breastfeed exclusively for the first 24 weeks of life, and to wean over a 4-week period infants were provided with a weaning supplement (a locally produced ready-to-use therapeutic food). Exclusive breastfeeding was defined as providing no other liquids or foods except breast milk [4,5].

Conflict of Interest

None.

References

1. Nguyen, Sau Huu, Anh Kim Dang, Giang Thu Vu Cuong and Thu Hoai Thi Le, et al. "Lack of knowledge about sexually transmitted diseases (STDs): Implications for STDs prevention and care among dermatology patients in an urban city in Vietnam." *Int J Environ Res Public Health* 16 (2019): 1080.

2. Kharsany, Ayesha B.M, Quarraisha A. Karim, "HIV infection and AIDS in sub-Saharan Africa: Current status, challenges and opportunities." *Open AIDS J* 10 (2016): 34.

3. Nubed, Colins K., Jane-Francis and Tatah Kihla Akoachere,."Knowledge, attitudes and practices regarding HIV/AIDS among senior secondary school students in Fako Division, South West Region, Cameroon." *BMC Public Health* 16 (2016):1-10.

4. Amsale, Cherie and Berhane Yemane. "Knowledge of sexually transmitted infections and barriers to seeking health services among high school adolescents in Addis Ababa, Ethiopia." *J AIDS Clin Res* 5 (2012).

5. Exavery, Amon, Angelina M. Lutambi, Godfrey M. Mubyazi, and Khadija Kweka, et al. "Multiple sexual partners and condom use among 10-19 year-olds in four districts in Tanzania: What do we learn." *BMC Public Health* 11 (2011): 1-9.

How to cite this article: Burbano, Maria Jose Miguez. "HIV-exposed uninfected African infants." J AIDS Clin Res 13 (2022): 872.

***Address for Correspondence:** Maria Jose Miguez Burbano, Department of Epidemiology, Public Health Florida International University, Florida, USA, E-mail: mjmiguez@fiu.edu*

Received 04 February 2022, Manuscript No. jar-22-56754; **Editor assigned:** 05 February, 2022, PreQC No. P-56754; **Reviewed:** 18 February 2022, QC No. Q-56754; **Revised:** 19 February 2022, Manuscript No. R-56754; **Published:** 26 February, 2022, DOI: 10.37421/jar.2022.13.872