Vertical HIV transmission rate in the Midwest region of Brazil

Vanessa T. G. de Matos¹,², Fabiani de M. Batista³, Naiara V. Versage³, Michela P. P. Mauro⁴, Clarice S. Pinto², Tatiana M. Sakamoto⁵, Izylianne R. Facco², Márcia Maria F. J. D. Fabbro⁵, Ana L. L. de Oliveira²,⁶

1. Faculty of Medicine, Federal University of Mato Grosso do Sul, Campo Grande, Grosso do Sul, Brazil.
2. Postgraduate Program in Infectious and Parasitic Diseases, School of Medicine, Federal University of Mato Grosso do Sul, Campo Grande, Mato Grosso do Sul, Brazil.
3. Faculty of Pharmacy, Catholic University Dom Bosco, Campo Grande, Grosso do Sul, Brazil.
4. Epidemiological Surveillance, Municipality of Campo Grande, Mato Grosso do Sul, Brazil.
5. Infectious and Parasitic Diseases Center, Municipality of Campo Grande, Mato Grosso do Sul, Brazil.
6. Maria Aparecida Pedrossian University Hospital, Brazilian Company of Hospital Services, Campo Grande, Mato Grosso do Sul, Brazil.

The increased transmission of Human Immunodeficiency Virus (HIV) among heterosexuals has contributed to raise the incidence of HIV in women and consequently in pregnant women. This process enhances the risk of vertical HIV transmission. Thus, the aim of the study was to estimate vertical HIV transmission rate in a capital city of the Midwest region of Brazil and describe the factors related to transmission. A descriptive epidemiological study based on the analysis of secondary data from the Notifiable Diseases Information System (SINAN) was conducted. The analysis considered all HIV-positive pregnant women with delivery in Campo Grande-MS in the years 2007 to 2013 and the HIV-exposed infants. We identified 218 births of 176 HIV pregnant women during the study period, of which 187 infants were exposed and uninfected, 19 seroconverted and 12 were inconclusive in July 2015. Therefore, the overall vertical HIV transmission rate in the period was 8.7%. Most (71.6%) of HIV pregnant women were less than 30 years at delivery, housewives (63.6%) and studied up to primary level (61.9%). Prenatal information was described in 75.3% of the notification forms and antiretroviral prophylaxis was used in approximately 80% of pregnant women. Among the infants, 86.2% received prophylaxis, but little more than half received it in the period recommended by the Ministry of Health. Among the exposed children, 11.3% were breastfed. The recommendations of the Brazilian STD / AIDS Program to reduce vertical HIV transmission are not being applied properly. There is a lack of integration between health services and effective biomedical interventions do not seem to be sufficient without concomitant interventions on the social environment.

keywords: Vertical transmission of infectious disease, HIV, disease prevention, antiretroviral drugs.