

HIV Vertical Transmission: Why is it Still Happening in Brazil?

Vanessa Terezinha Gubert de Matos^{1*}, Márcia Maria Ferrairo Janini Dal Fabbro², Rivaldo Venancio da Cunha¹ and Ana Lúcia Lyrio de Oliveira³

¹Faculty of Medicine, Federal University of Mato Grosso do Sul, Campo Grande, Mato Grosso do Sul, Brazil

²Infectious and Parasitic Diseases Center, Municipality of Campo Grande, Mato Grosso do Sul, Brazil

³Department of Pediatrics, Federal University of Mato Grosso do Sul, Campo Grande, Mato Grosso do Sul, Brazil

Introduction

From the beginning of the HIV epidemic until 2013, 686,478 Brazilians had been notified as AIDS cases. More than 240,000 of these were women and almost 153,000 were aged between 15 and 39 years [1]. The first Brazilian case of HIV vertical transmission was reported in 1985 in the southern region of the country [2]. Since then, 14,464 cases of vertical transmission have been reported [1].

In 1996, the government decision to offer free treatment to all citizens with HIV/AIDS, including pregnant women, was a milestone in the fight against the epidemic. Besides the treatment, the government offers HIV counseling and testing during prenatal and labour, scheduled cesarean delivery, zidovudine administration during labour, delivery and to the newborn, as well as lactation inhibitors and breast milk substitutes. All of these treatment and prevention efforts collaborated to control epidemic spread in Brazil and to have a relatively low and stable HIV prevalence [3,4]. This new reality combined with the significant decrease in new cases of pediatric HIV infection raised the possibility that perinatal HIV infection could be eliminated.

Some years later, national and international plans recommended the increased coverage of HIV testing in prenatal and increased coverage of HIV vertical transmission prophylaxis actions in pregnant women and in exposed children in order to reduce the prevalence of HIV infection to less than 1%. The Operational Plan for Reducing HIV Vertical Transmission in Brazil has been running since 2008 [5]. In 2009, during the Latin American and Caribbean STD, HIV and AIDS Forum, the Pan American Health Organization proposed the elimination of HIV vertical transmission. In 2011 the Joint United Nations Program on HIV/AIDS (UNAIDS) published the Global Plan to both eliminate new HIV infections among children by 2015 and keeping their mothers alive [6]. Despite government measures and international initiatives, the Brazilian surveillance reached only 58.3% of HIV pregnant expected cases in 2012 [1] pointing out that the goals to reach an HIV-free generation are both major challenges.

Why HIV Vertical Transmission has yet to be Eliminated

The risk factors associated with perinatal HIV transmission are better understood [7] and it has made even clearer that the early identification of HIV-1 infection in pregnant women is crucial for the implementation of strategies to prevent transmission of the virus from mother to child. However, this early identification of HIV-1 infection alone is not enough to eliminate HIV vertical transmission as well as the availability of rapid tests and follow-up tests isolated, antiretroviral drugs or technical material for ethical and competent professional work are also insufficient.

HIV-1 vertical transmission is a complex multifactorial process, where the social determinants of health play an important role [8]. The behavior and individual lifestyle, the influence of community support networks, the conditions of life and work, the availability of food and access to essential services and environments as well as

macro-determinants related to economic, cultural and environmental conditions of society have great influence on health [9,10].

Besides the deep inequalities and regional differences that are characteristics of the Brazilian society, weakness of the health system of the country, particularly the Primary Care Network and the Network of Health Surveillance, results in low coverage, low quality of actions and professionals along with insufficient support of the mental health. The way the health system is organized does not inform the maternity hospital about the current HIV pregnant women and the mental health is not prepared to support the pregnant woman who is drug addicted. All of this reflects the neglect of antenatal HIV screening, difficulty in assisting, counseling and making laboratory diagnoses, pregnant women's poor adherence to prenatal and/or delayed diagnosis not to mention the low quality of prenatal care [11-18].

The most effective way to make an HIV-free generation a reality starts with the organization of the local service network and improvement of the quality of the Brazilian social determinants of health. It includes referral and counter-referral services, adherence to technical recommendations by health services such as guidelines, prenatal of good quality in all regions but especially in regions with less access to health care services, increased coverage of HIV testing in prenatal, increased coverage of HIV vertical transmission prophylaxis actions, efforts to reduce health inequity and finally fully integration of the care and prevention.

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*Corresponding author: Vanessa TG de Matos, Pharmacist, Federal University of Mato Grosso do Sul, Rua Amazonas, 2952, Campo Grande-MS, Brazil, CEP 79022-130, Tel: 55 67 9955-6500; E-mail: vanessa.matos@ufms.br

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