SEVEN publicações acadêmicas
EM PARCERIA COM: IEMS UNIASSELVI

Ethics in clear communication for proper guidance in the vertical transmission of AIDS

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ABSTRACT

AIDS was identified in the 1980s in the USA among homosexual men, associated with Kaposi's Sarcoma and pneumonia, and was initially an epidemic restricted to specific groups. HIV, the retrovirus responsible for the disease, uses reverse transcriptase to integrate its DNA into the host's genome. Over the decades, the epidemic has spread globally, affecting various strata of society and changing its epidemiological profile to include women, heterosexuals, and increasing among the elderly and people on low incomes. In Brazil, especially in the Southeast and South, prevalence is significant, with ongoing efforts to stabilize and reduce new infections since the 2000s. This review study aims to explore mother-to-child transmission of HIV and contribute to raising awareness of the ongoing challenges related to AIDS.

Keywords: AIDS, Mother-to-child transmission, Pregnant women.

INTRODUCTION

Acquired Immunodeficiency Syndrome (AIDS) was recognized in the mid-1980s, in the USA, based on the identification of a large number of adult male patients, homosexuals and residents of San Francisco, who presented with "Kaposi's sarcoma", pneumonia caused by *Pneumocystis jirovesi* and impairment of the immune system, which, we know, are now typical characteristics of AIDS (PINTO et al., 2013). Although the knowledge of the Human Immunodeficiency Virus (HIV) and the Acquired Immunodeficiency Syndrome (AIDS) occurred a little more than three decades ago, the number of infected and sick people has increased vertiginously in this short period of time (CANINI et al., 2013).

HIV is a retrovirus with RNA genome, of the *Retroviridae Family* (retrovirus) and subfamily *Lentivirinae,* belongs to the group of cytopathic and non-oncogenic retroviruses that need, in order to multiply, an enzyme called reverse transcriptase, responsible for transcribing viral RNA to a DNA copy, which can then be integrated into the host genome (TEIXEIRA et al., 2008).

In the beginning, AIDS was considered in reified knowledge a disease that affected only restricted groups, being called the "disease of the gays" and the "disease of the four H's" (homosexuals, hemophiliacs, Haitians and heroin addicts). With its dissemination, the epidemiological profile has changed, leading to its feminization, heterosexualization, aging and pauperization (GOMES et al., 2007).

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Being responsible for significant changes in fields other than health, mainly by combining sexual behavior and disease, AIDS has brought challenges to the scientific area, brought new actors to social movements and affects people in geometric proportions, without social, economic, racial, cultural or political distinction (VIEIRA, ALVES, 2007).

According to the Oswaldo Cruz Foundation, in Brazil, the first confirmed cases of AIDS were in 1982, in the state of São Paulo, and, from the beginning of the 1980s until today, there are approximately 600,000 Brazilians with the AIDS virus. Of the total number of cases, more than 80% are concentrated in the Southeast and South regions. The Southeast has been the most affected region since the beginning of the epidemic and, despite the high incidence rate, has shown moderate stabilization since 1998. In the South region, there was an increase in the incidence rates of cases until 2003, with a decrease in the rate in 2004 (PINHEIRO, 2007).

In view of the above, the present study aims to identify what AIDS is and vertical transmission and to raise hypotheses according to the aspects of the carriers, thus being an important means to alert and raise awareness among the population about the growth in relation to new AIDS cases in the region.

METHODOLOGY

This is a literature review, accessing the databases *Scielo, Pubmed and Google Scholar*, with approaches to the vertical transmission of AIDS.

According to LAKATOS (2003), the citation of the main conclusions reached by other authors allows us to highlight the contribution of the research carried out, to demonstrate contradictions or to reaffirm behaviors and attitudes. Both the confirmation in a given community of results obtained in another society and the enumeration of discrepancies are of great importance.

RESULTS AND DISCUSSION

According to the epidemiological bulletin of the Ministry of Health, in 2013 and 2014, 70,677 cases of human immunodeficiency virus (HIV) infections were reported among adults and 773 in children. Among these notifications, 7,219 are from pregnant women infected with the virus, that is, vertical transmission (MINISTRY OF HEALTH, 2015).

Vertical transmission of HIV occurs through the transmission of the virus from mother to baby during pregnancy, labor, delivery or breastfeeding, with about 35% of this transmission occurring during pregnancy, 65% occurring in the peripartum period and there is an increased risk of transmission through breastfeeding between 7% and 22% by exposure (MINISTÉRIO DA SAÚDE, 2016).

Vertical transmission is the main route of HIV infection in the child population, accounting for 90% of cases in children under 13 years of age (SECHIN, 2003).

According to Calvalcante (2004), many women become aware of their own seropositivity when they discover that their child is infected, or during prenatal care, or during childbirth.

Early identification of HIV in pregnant women during prenatal care is essential for children's health, so that possible treatment and drastic reduction of VT are possible. However, in practice, there is a large number of pregnant women who arrive at the maternity hospital in labor, without receiving antiretroviral treatment (MARQUES, 2006).

During prenatal care, the request for the test should be accompanied by pre- and post-test counseling. Once identified as HIV-positive, the pregnant woman should start treatment (UMintimo da Saúde, 2010).

The positive result in most cases can result in a serious impact on women's lives, especially when they are identified during the gestational period, as motherhood reveals itself as a sign of life and hope in contrast to the idea of AIDS-related death (ARAUJO et. al., 2008).

According to the Ministry of Health (2010), when health professionals reveal the HIV diagnosis, if positive, offer emotional support and guidance that help to alleviate anxiety and clear up doubts. Among these guidelines, the following stand out: the difference between HIV and AIDS manifestation, the availability of treatment and its provision by the Unified Health System, and care to avoid the possibility of vertical transmission of HIV.

Gonçalves and Piccinini (2008) followed mothers with AIDS in the first months after the birth of the baby and reported satisfaction on their part, having an effective relationship with the baby. But they also raised concerns about the diagnosis and health of the newborn.

The psychological impact on women can be even greater when the diagnosis of HIV infection occurs during labor or soon after birth, leading to the physical and emotional exhaustion that the moment involves (FARIA, 2010).

As prophylaxis of vertical transmission, regular prenatal care, administration of antiretroviral therapy (ARVs) or monotherapy with AZT (Zidovudine) from the 14th week of gestation, and CD4 cell count and viral load tests are recommended. If the viral load is greater than 1,000 copies/ml, in the 34th week of gestation, elective cesarean section is recommended; Otherwise, the indication of the mode of delivery is due to obstetric conditions. If delivery is normal, it is recommended that the woman does not remain with her water broken for more than four hours, because this time gradually increases the risk of transmission of the virus (Ministry of Health, 2015).

During labor, intravenous AZT is administered, and it is preferable that the bag of water remains intact until the expulsive period. When the woman does not undergo the HIV test during pregnancy or is not interested in the information, the rapid test is used at admission to the maternity ward, and when positive, prophylactic treatments begin quickly (CORREIA, 2003).

The newborn is medicated with AZT in the form of syrup from the first six hours and for six weeks of life. From the sixth week onwards, until the baby is diagnosed, the baby must take a medication to prevent pneumonia (PICCININI, 2010).

As for breastfeeding, it is forbidden by swaddling the breasts for at least ten days and by pharmacological succession of lactation, as well as by counseling mothers about the risk. Breastfeeding is replaced by artificial milk or pasteurized milk available in milk banks (LIMA, 2013).

Mothers have certain concerns, even during pregnancy, related to malformations or their possible infection. With regard to the baby's health, inherent to pregnancy, is intensified in the presence of HIV, and the presence of the virus refers to a context of vulnerability, highlighted by the possible infection of the baby (CARDOSO et. al 2010).

In the first three months of the baby's life, mothers still have certain concerns, but with great satisfaction regarding the development and physical appearance of the child, demonstrating the realization of mourning for the baby imagined in pregnancy. (LEBOVICI et. al. 2010).

Although babies do not present health problems in the first months, mothers show concern when their diagnosis, even with preliminary tests indicating a negative result and anxiously await the final diagnosis, which occurs in the baby's sixth month, showing confidence that their babies have developed well (STERN et. al 2010).

According to data from the Ministry of Health (Brazil, 2006), by using the drug AZT during pregnancy and at the time of delivery, together with the drug to the baby, the risk of HIV transmission from mother to child can be reduced by up to 67%. The rate of mother-to-child transmission of HIV, without any intervention, ranges around 25% (CONNOR, et al., 1994).

The Ministry of Health (2006) reports that there is a decrease in vertical transmission to levels of 0 to 2% with the use of ARVs combined with elective cesarean section and when the viral load is less than 1,000 copies per ml at the end of pregnancy.

Relating Brazil to developed countries, Brazil still has high levels of vertical transmission, due to deficiencies in the health system when diagnosing HIV infection in prenatal care, especially in the poorest populations. The low quality of prenatal care also compromises the distribution of ARVs, with only a few HIV-positive women estimated to receive the medication during childbirth. Despite these factors, the indecency of AIDS cases in children has been progressively decreasing in the country in recent years (UMinexério da Saúde, 2006).

Motherhood already involves intense psychological work in the woman, from the discovery to the first years of the child's life. The experience between mother and child makes her face the reality proposed to society. Therefore, the mother needs to organize her feelings about the pregnancy, positioning a place for the child to occupy in the relationship with her and the family. During this period, the woman

would be reliving her experiences and seeking to adapt to the pregnancy, creating a baby that has been imagined during pregnancy and idealizing birth and post-birth. For HIV-positive mothers, all this feeling would be no different (WIETHAUPER, 2010).

According to the literature, there are few studies that focus on the experience of HIV-positive mothers, and some Brazilian studies report that motherhood remains in a very idealized position for pregnant women, being placed above infection (CAMUS, 2008).

According to Gonçalves (2007), pregnancy in HIV-positive women enables them to reposition themselves in the face of the disease, since they need to assume it, in some way, in order to start prophylactic treatment in favor of their children. In this case, motherhood would strengthen the desire to continue living to take care of the children, indirectly promoting self-care in these women.

The baby brings happiness to women living with HIV, with positive expectations regarding a pregnancy and the ability to care for the child, especially when they have the support of their partner. The authors state that the positive expectations of the pregnant woman are greater when she has the support of her partner. Unstable marital and family relationships that do not support the HIV-positive pregnant woman make pregnancy very lonely (GONÇALVES, 2007).

However, feelings of guilt and fear are present in pregnant women and mothers with HIV, bringing with them psychological suffering. The guilt of putting the child at risk, infecting him and dying from the infection causes the mother to suffer psychological disorders, leading to the ability to commit impulsive actions that put the lives of the mother and child at risk (FARIA, 2010).

Some pregnant women claim that the main problem is the surprise of the diagnosis and the difficulty in revealing it to their relatives. Studies show that HIV-positive pregnant women are abandoned by family members or partners (LIMA, 2017).

Childbirth is a major cause for concern for these pregnant women. The lack of knowledge on how prophylactic measures are carried out in practice during labor generates anxiety and fantasies among HIV-positive pregnant women. Although the authors affirm that the fact that childbirth is a moment of great importance to avoid infection of the child, the tension and fear of mothers are still high. (MINISTÉRIO DA SAÚDE, 2010).

Thus, the birth period is given by the uncertainty regarding the child's diagnosis, generating an anxiety to resume or start the treatment itself. While the family members and the mother are waiting for the diagnosis, the health systems fail to provide psychological assistance for the moment faced, leading to discomfort in initiating or maintaining treatment (UMintimo da Saúde, 2010).

Breastfeeding is another factor that leaves the HIV-positive woman with a completely shaken psyche, because breastfeeding is highly recommended by doctors and advertising campaigns, up to two years of age, bringing beneficial actions to the child (PICCININI, 2010).

In the case of HIV infection, breastfeeding is forbidden and, according to prophylactic measures, include the administration of lactation inhibitors and even breast bandaging (MINISTÉRIO DA SAÚDE, 2006).

Therefore, as the breast milk of a woman with HIV is not beneficial for the child, it can awaken several feelings in the mother in the face of her experience in motherhood. The mother is prevented from feeding her child at the breast, knowing the great importance of human milk for the development of the children's immune system and how much breastfeeding can contribute to the relationship with the child (ARAÚJO, 2008).

Some studies are debated in the international scientific community due to the nutritional dilemmas faced, especially by countries in sub-Saharan Africa. Thus, with the prohibition of breastfeeding, babies would end up dying more from malnutrition and infections caused by poor hygiene conditions than from an eventual HIV infection (COUSTSOUDIS, 2005)

In the first months of the child, a study conducted by Manopaiboon et al. (1998), which followed 129 Thai women living with HIV in the period between birth and two years after delivery, recorded substantial changes in their families. Changes that included the manifestation of the disease or death of the partners, family separation, decrease in income, changes in responsibilities in relation to the child's care, and isolation. Another study conducted with the same group of women, on the other hand, states that indicators revealed depression two years after childbirth (BENNETTS et al., 2008). For married mothers, depression rates were associated with their husband's health. During the studies, some mothers kept their diagnosis secret, making it difficult for them to seek support and increasing their isolation (GONÇALVES, 2007).

Poverty and lack of socioeconomic resources is considered a psychosocial risk among women living with HIV. According to the authors, the results of some studies affirm that HIV infection is just one of the difficulties faced by women from low-income populations (LIMA and SILVA, 2017).

According to analyses of interviews with some women with HIV, most of these women who discovered the infection during the prenatal period affirm that despite the desired pregnancy, they did not know if they would carry the pregnancy to term, due to the shock of the news and information about the future of their baby. They did not know if they would have the physical and emotional structure to take care of an HIV-positive baby (MINISTÉRIO DA SAÚDE, 2010).

In the first tests of the children when they tested negative for HIV, some mothers claim that they were answers to their messages of prayers with God and that He had a divine purpose for their child. Thus, it strengthened the mother to continue with her pregnancies and become mothers in the context of HIV, as that baby had become an important source of support and hope (FARIA, 2010).

As it is a chronic condition, it is possible to understand its impact on the family, especially when it comes to such an important event, which is the birth of children. Chronic disease is characterized as a vital crisis with significant effects for families, and there are phases of evolution of chronic diseases, such as uncertainty, loss of control and confirmation of the diagnosis. Faced with these phases, the individual can activate defensive mechanisms such as denial of the disease, isolation, desire for death, guilt and shame (UMintimo da Saúde, 2010).

Regardless of the chronic disease, the family is the main source of emotional and financial support for the person, so family members need to maintain good relationships to mobilize around this situation. For an HIV patient, especially a pregnant woman, there must be a good relationship with family members. Since the pregnant woman carries with her several hormones that leave her with a psychological shake (GONÇALVES, 2007).

The individual with HIV, in particular women, live in a unique and singular situation, as they have a sexually transmitted and fatal disease, which the vast majority belong to marginalized social groups, leading to challenges such as lack of financial resources and violence. In view of these facts, the family is fundamental in the individual's life, being the greatest source of support (CECHIN, 2003).

Based on a survey conducted with 135 North American families, with an emphasis on HIV-positive mothers, the symptoms of depression were related to family sociability. The same study was also carried out with 150 Brazilian women with HIV, in which the main source of stress in daily life was found in affective relationships, family and marital conflicts, and concern for children. (MURPHY, MARELICH, DELLO STRITTO, SWENDEMAN, & WITKIN, 2007)

It is important to remember that mothers living with HIV are often alone in their mission to raise their children and plan for the future of the family. This is a fairly common situation affecting single or divorced mothers. For mothers who do not have a close relationship with the family, their concern revolves around the child's vulnerability and the possibility of having to leave the child in the care of someone other than the family. For many, resisting the disease would be a way to ensure the child's care until he reaches financial independence (UMintimo da Saúde, 2010).

This internal work carried out by the mothers would include three objectives: to prevent the transmission of the disease and the suffering involved; prepare the child for the future loss of his figure; taking control of one's own thoughts, in order to protect oneself from negative feelings and ideas related to the disease. Mothers focus their efforts on the child, assuming positive attitudes towards the future of their children, putting themselves in the background, partially diverting the focus from the infection and its implications (FARIA, 2010).

CONCLUSION

Future studies in this area could investigate the extent to which the impact of HIV infection affects the emotional health of mothers, in relation to the presence of symptoms of depression and other psychological conditions. Longitudinal studies could shed light on how the experience of motherhood and concerns about the child are affected by the pregnancy, childbirth, and the encounter with the baby when the mother is HIV-positive. The follow-up of these mothers until the eventual diagnosis of the child would provide data that would be positive for their own treatment, which tends to remain in the background and is often interrupted after the birth of the child.

It is suggested that mothers who receive the diagnosis later in pregnancy or during childbirth should be followed up in terms of psychosocial interventions and for research purposes. Such studies would identify the flaws in the performance of prenatal care and in the HIV virus detection system. Issues involving paternity, the couple's relationship with the extended family, reproductive decisions in the context of HIV infection, deserve further research, expanding the understanding of the impact of this situation on family relationships. Include the development of preventive and support strategies for women with HIV, with emphasis on the physical and mental health of mothers and their children, as well as the reduction of their condition of social vulnerability.

Due to the importance of pregnancy, childbirth and the first months of the baby's life for the experience of motherhood, it is evident that HIV/AIDS infection can have important psychological impacts on the woman with HIV during this period. Added to this is the presence of factors that denote social vulnerability, often found among HIV-positive mothers, such as depression, low family income, and little social support.

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