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Nursing Care for Mother-to-Child Transmission of HIV

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Abstract

Objective: To evaluate, through the literature, the relevance of neonatal care, through professional training in qualified and humanized care, with a view to reducing child mortality.

Method: An integrative review of the international scientific literature was carried out, in order to answer the following question: "How does neonatal care, through professional training, have the most qualified and humanized assistance in order to reduce infant mortality?" Eight articles were analyzed, which gave rise to three categories: Assistance aimed at HIV + pregnant women; Alternative breastfeeding and The role of Nursing in the prevention of mother-to-child transmission in the puerperal gravid cycle.

Conclusion: Structural actions of promotion and prevention are important measures of health education in the reduction of infant mortality, with nursing having a important role in guaranteeing them.

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Keywords

HIV; Breastfeeding; Nursing.

Introduction

HIV transmission has now become a serious public health problem, since its transmission does not occur exclusively in the context of sexual relations, but also through occupational accidents, especially in hospital settings, and provides vertical transmission between mother and child. [1-2]

Transmission from mother to child is the main way of acquiring the virus among children. In the case of infants, early identification of infected pregnant women is necessary to enable prevention in a

timely manner. Transmission can occur in the uterus (through the placenta or amniotic fluid), in childbirth (through contact with blood or secretions) or in the postpartum (through lactation). [3]

For prevention purposes, mothers with the virus should initiate antiretroviral treatment early, opt for cesarean delivery and use special formulas for infant feeding. One of the priorities of the National STD and AIDS Program is to reduce vertical HIV transmission. This includes prenatal consultations to promote the health of women and the fetus, followed by the health professional from the first consultation to the postpartum, providing maternal and neonatal security. [1-4]

The diagnosis of HIV infection at the beginning of gestation allows the best results regarding the control of maternal infection and, consequently, the best prophylaxis results of the vertical transmission of this virus. For this reason, HIV testing is offered to all pregnant women regardless of their HIV risk status as soon as they start their prenatal care. The HIV test, however, should always be voluntary and confidential. [5]

The professional must present an ethical conduct in the follow-up of the pregnant and puerperal woman, offering necessary services related to the indications of breastfeeding for newborns of mothers with HIV. [1-2]

In contrast, HIV positive postpartum women are not indicated to breastfeed, in the possibility of infecting the newborn. Faced with contraindication, the infant is fed with infant formula. [6]

Reduction in the vertical transmission of HIV and in the diagnosis of diseases that may compromise pregnancy, the health of the woman and the neonate, and their influence in making early diagnosis and appropriate treatment feasible, assuring breastfeeding by highlighting and justifying the contribution to the development and growth of the child.

The study aimed to evaluate through the literature the relevance of neonatal care, through profes-

sional training in qualified and humanized care, with a view to reducing infant mortality.

Methods

This is an integrative review of national and international scientific literature on vertical HIV transmission related to professional qualification. The chosen method allows to gather and synthesize results from multiple published studies on thematic delimitation in a systematic and orderly manner, contributing to the deepening of the research theme, becoming an important tool for evidence-based practice.

The review was operationalized through five steps: 1. identification of the theme and selection of the research question; 2. establishment of inclusion and exclusion criteria; 3. identification of preselected and selected studies; 4. categorization of selected studies; 5. analysis and interpretation of results and presentation of the review. [7]

It was defined as the guiding question of this study: how does neonatal care, through professional training, have reflexes in the most qualified and humanized care, aiming at reducing infant mortality? The question was elaborated through the PICO strategy (P: Patient, I: Intervention, C: Comparison and O: Outcomes).

For the elaboration of the research, we searched the LILACS and MEDLINE databases for the period from 2010 to 2014 using a combination of controlled descriptors, HIV [and] lactation; HIV [and] care; Care [and] breastfeeding and HIV [and] breastfeeding [and] care.

The pre-defined inclusion criteria were: primary studies; Available electronically and in full; Published in the period from 2010 to 2015. As exclusion criteria, articles were defined: repeated articles, opinion; Articles of reflection and editorials.

Subsequently, the studies were evaluated as to the language, methodology used, objectives, results and their applicability in practice, methodological rigor of the studies, and measured interventions. The

type of study and the level of evidence were also evaluated considering seven levels: 1 - systematic reviews or meta-analysis of relevant clinical trials; 2 - evidence of at least one well-delineated randomized controlled trial; 3 - well-delineated clinical trials without randomization; 4 - well-delineated cohort and case-control studies; 5 - systematic review of descriptive and qualitative studies; 6 - evidence derived from a single descriptive or qualitative study; 7 - opinion of authorities or expert committees including interpretations of information not based on research. [8]

Results and Discussion

In the initial search, 172 articles were detected in the three databases. After the inclusion criteria, 54 productions were obtained, which were initially submitted to an initial relevance test, applied to titles and abstracts. After this step resulted in 8 articles, which were described in a synoptic table regarding the title, year, database, objectives, level of evidence and final outcome. **(Table 1)**.

After the analysis, we proceeded with the identification and analysis of the textual domains and interpretation of meanings, naming them with their respective meanings in categories.

Table 1. Articles found according to year, database, objectives, level of evidence and final outcome.

Order	Database	Year	Aim	Evidence level	Main Outcome
A1	LILACS	2014	To know the experience of the caregiver/mother regarding the care for the child exposed to the human immunodeficiency virus by vertical transmission, in the postnatal trajectory.[9]	IV. Qualitative research	The presence of human immunodeficiency virus and the threat of this infection in the child are capable of generating apprehension and many other feelings like fear, guilt and anxiety in the caregiver. Health professionals need to work together with the mother to cope with the demands and sufferings.
A2.	LILACS	2008	Analyze the coverage of HIV counseling and testing, and identify factors associated with its achievement in prenatal care.[10]	IV. Cross- sectional study	The non-association between the test and the variables studied suggests that their request is indistinct, as recommended by the Ministry of Health. However, the low frequency of counseling and the delay in receiving the results of the tests are indicative of problems in the Prenatal care.
А3	LILACS	2008	To identify the experiences of HIV-positive pregnant women and women with chemoprophylaxis to prevent vertical transmission. [11]	VI. Qualitative study	It was verified that these women faced situations of conflicts and negative feelings towards the life and the importance of the emotional accompaniment by trained multiprofessional team, attentive to the subjective demands.
A5	MEDLINE	2010	Understanding the socio- behavioral factors and the Unified Health System (SUS), which, in the view of women identified as HIV + by rapid test at delivery, hindered or prevented adherence to prenatal care.[12]	VI. Qualitative study	The results were grouped into two blocks: those that hindered prenatal adherence: non-acceptance of gestation, lack of family support, previous knowledge of seropositivity, adverse social context, negative care experiences and practices and conceptions of discredit in relation to Prenatal care, and those who favored adherence: family support, health care appreciation discourse, desire for tubal ligation, reception by the health team, and positive experiences of care.
A6	LILACS	2014	To analyze the experience of family members in the care of the mother child with HIV to reduce the risk of VT, with an emphasis on the beginning of this trajectory. [13]	VI. Qualitative study	Child care started during pregnancy, when one imagines the possibility of HIV. Some caregivers had previous experience of caring for the exposed child. Understanding this onset of care will make it possible to better support caregivers along the path of confirmation of the child's diagnosis.

Order	Database	Year	Aim	Evidence level	Main Outcome
A7	LILACS	2012	To analyze the view that the nursing team has about the care of the HIV positive pregnant woman and the implementation of the actions to prevent the vertical transmission of HIV in the joint accommodation. [14]	IV. Qualitative study	The nursing team does not have a proper approach to seropositive puerperal. The implementation of the actions developed in the joint housing for the prevention of vertical transmission of HIV was not recognized by the subjects of the study and there is a need for better qualification of the nursing team that provides assistance in the joint housing with regard to the care to the puerpera with HIV, In particular on actions to prevent vertical transmission of HIV.
A8 [15]	LILACS	2015	To know the nursing team's perception about pregnancy in the context of HIV infection. [15]	VI. Qualitative study	Gestation in the context of HIV/AIDS infection is perceived as irresponsible, disinformation, with concern about the risks of vertical transmission. The divergent discourses of the nursing team point to the lack of understanding of pregnancy in terms of the needs and desires of people living with HIV, which may favor inadequate reception and nursing assistance limited to technical conduct and procedure for the reduction of transmission of HIV.

Category 1. Assistance for pregnant women HIV

Research shows that vertical transmission is among the main causes of child morbidity and mortality in regions with low economic and social indexes. Serious failures in maternal and child care, especially those aimed at preventing transmission, should be observed. Among them, we highlight the late diagnosis of HIV infection in pregnant women of advanced gestational age, which made it difficult to establish preventive measures.

Category 2. Alternative breastfeeding

In the second category, related to the alternative feeding method, it was evidenced that the nutritional advantages of breast milk are well known, contributing to the child's full growth and development. However, an HIV positive mother should not breastfeed her child in the face of the possibility of infecting them. It is up to the health team to guide the mother regarding feeding methods for newborn nutrition.

Category 3. The role of Nursing in the prevention of mother-to-child transmission in the puerperal pregnancy cycle

It was noticed that the nursing assistance to the infant aims to ensure essential care for life in a

qualified and humanized way in the promotion of health and the protection of injuries. In order to enable appropriate treatment, it is important the professional's ethical conduct towards the newborn and their real needs, identifying priorities.

In the healthcare context of the HIV + pregnant woman, a multidisciplinarity of actions aimed at the maintenance of the health in the puerperal pregnancy cycle is necessary, which can be guaranteed through pre and post-test counseling and pre- and post-conception counseling; Prenatal consultation, involving clinical, laboratory and medication follow-up. These less complex activities can be performed even in the laboratory, or at home. [9-11]

For this, it is necessary to improve the attendance of seropositive pregnant women in the consultations, since this population has presented a lower frequency in prenatal consultations in relation to pregnant women without this type of infection, besides there is a high index of pregnant women who do not attend. [10, 13-15]

It is known that there are great difficulties in accessing health services, especially antiretroviral drugs, laboratory tests and rapid testing during the prenatal period. Thus, the capture of these women is the first and main challenge of nurses in primary care.

In secondary and tertiary care, care and management of the prepartum, delivery and puerperium periods, such as maternal antiretroviral treatment and suspension and inhibition of lactation, in addition to other newborn care, are basically developed in the same environment which may facilitate their implementation. [16-18]

The puerperal period for the HIV-positive pregnant woman is marked by the feeling of impotence due to not being able to breastfeed her child, being configured in an avid moment by actions of health education, mainly by Nursing. [12-16]

The main ways of combating such HIV transmission through breastfeeding are by taking important prevention measures, such as encouraging actions aimed at the early detection of HIV-infected pregnant women and their empowerment as early as possible for the initiation of available interventions, ne should see an improvement in maternal and child care. [11, 15]

The alternative feeding can take place in the availability of the bank of safe milk and also by the infant milk formula, emphasizing the Pre-nan and Aptamil pre in the substitution of the natural milk. In summary, an artificial feeding should include follow-up by the health professional directed to the HIV-positive mother and her baby, in an attempt to minimize the impact of non-breastfeeding, in order to reduce the morbidity and mortality caused by malnutrition, a condition in which the neonate becomes more vulnerable to pathological infections. [14, 16]

Conclusion

Child deaths are early and mostly preventable deaths, which represent a serious and undesirable public health problem. Infant mortality is due to a combination of biological, social and cultural factors linked to health system failures that are ineffective in interventions related to their reduction.

This reduction depends both on structural changes related to the living conditions of the popu-

lation, as well as on direct actions defined by the public power. Promotion and prevention actions are health education actions most frequently performed by nursing, which plays an important role in reducing infant mortality.

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