

## **HIV in pediatrics - Early diagnosis and infectious management**

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### **ABSTRACT**

**Introduction:** Human immunodeficiency virus (HIV) infection in pediatrics represents a significant challenge to global health, as children can acquire the virus vertically during pregnancy, childbirth, or breastfeeding. Children's vulnerability to HIV is accentuated by the risks associated with mother-child bonding. This study is based on a literature review, highlighting research that addresses the challenges and treatment strategies of the disease. **Objective:** The main objective of this study is to examine the approach to HIV in children, exploring research that discusses therapeutic strategies, early diagnosis, and multidisciplinary approaches. **Methods:** A literature review was conducted in the MEDLINE database, using the PubMed search platform. English descriptors were used to cover global studies in the final search, excluding results prior to the last three years. **Results and Discussion:** Epidemiological data, diagnostic methods, pediatric antiretroviral treatments, and psychosocial aspects related to HIV in children were analyzed. The studies analyzed reveal the importance of early diagnosis, through serological tests and polymerase chain reaction (PCR), and the prompt initiation of antiretroviral therapy (ART). In addition, the need for multidisciplinary approaches to address disorders resulting from ART and the psychosocial complexities associated with childhood HIV infection was identified. **Conclusion:** The findings of the present study highlight the importance of early diagnosis, as well as the existence of challenges regarding the diagnosis and infectious management of the disease. Programs to prevent mother-to-child transmission should be expanded, and a combined effort that includes strategies to prevent maternal disease, early identification of infected women, and expansion of prophylactic and drug measures can lead to significant reductions in mother-to-child transmissions, as well as safer treatment for HIV-infected infants and children.

**Keywords:** HIV, Multidisciplinary approach, Pediatric treatment, Antiretroviral therapy, Early diagnosis.