

# ENVIRONMENTAL THEORY APPLIED TO THE HOME ENVIRONMENT OF CHILDREN EXPOSED TO HIV AT BIRTH: A DESCRIPTIVE RESEARCH

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## Abstract

This exploratory and descriptive study with a qualitative approach was based on the theoretical framework of Florence Nightingale's Environmental Theory, in combination with the photovoice resource. Participants will be 10 HIV-positive mothers and caregivers to children exposed to the virus at birth and up to five years old, living in the urban region of Fortaleza, Ceará, Brazil. Data collection will include the following phases: I) Obtaining of participants; II) Photographic recording of the home and peridomiliary environment; III) Completion of socio-demographic, economic, housing and family health characterization forms; IV) Delivery of disposable cameras for participants to register risky housing situations; V) Home visit to discuss the registered photographs and offer environmental education orientations. For data analysis, the methodological steps of the photovoice method will be followed: previous analysis of photographic records; review; comparison and theorization. The goal is to arouse reflections with a view to improving care delivery to children exposed to HIV and their families, based on the life reality and the expanded health concept, which includes questions related to the socio-environmental context.

**Descriptors:** Housing, Child, HIV-1, Photograph, Community health nursing.

## PROBLEM SITUATION AND ITS SIGNIFICANCE

Pauperization constitutes one of the main facets of the AIDS epidemic, which entails the possibility of unhealthy housing conditions for victims of the disease. This condition implies precarious access to water, sanitation and hygiene practices. These situations can contribute to vulnerability, especially among children exposed to the virus at birth, to health problems like diarrhea, respiratory or opportunistic infections, allergies, verminosis, dermatological and eye affections<sup>1</sup>. According to Florence Nightingale, the health conditions of a house depend on the following elements: clean air, clean water, efficient sewage network, cleaning and illumination<sup>2</sup>. This reality indicates the need for nurses to deliver holistic care to children and their families, considering not only biological, prophylaxis and disease treatment aspects, but mainly the social and environmental context mothers and children are inserted in<sup>3</sup>. Research with this focus can arouse reflections to improve care delivery to children exposed to HIV and their family, based on the life reality and expanded health concept, which includes issues related to the socio-environmental context.

## OBJECTIVES

**General** – Get to know the home environment of children exposed to HIV at birth from an Environmental Theory perspective. **Specific** – To identify risk and vulnerability situations for the health of children exposed to the virus at birth associated with their homes' environmental conditions: To investigate, through photography, HIV-positive mothers' perception on the influence of housing conditions on the health of children exposed to the virus at birth; To propose nursing interventions aimed at the adaptation of domestic housing conditions.

## **HYPOTHESIS**

The home environment of children exposed to HIV at birth presents risk situations for the development of health problems.

## **GUIDING QUESTIONS**

How is the home and peridomiciliary environment of children exposed to HIV at birth and up to five years of age characterized? Does the home environment contain risk factors for the development of health problems in children exposed to HIV at birth (E.g.: Diarrhea, verminosis, respiratory infections)? How do mothers who take care of children exposed at birth perceive the influence of environmental factors on the children's health?

## **METHODOLOGY**

This exploratory and descriptive study with a qualitative approach was based on the theoretical framework of Florence Nightingale's Environmental Theory, in combination with the photovoice resource, in which participants take pictures of a given phenomenon. Then, these pictures are discussed through an interview. Participants will be ten HIV-positive mothers who take care of at least one child exposed to the virus at birth and live in Fortaleza, Ceará, Brazil. Participants will be obtained at a referral outpatient service that monitors children exposed to the virus at birth. After consent is obtained, a home visit will be scheduled to register the participants' home and peridomiciliary environment and complete the form with socio-demographic, economic, housing and family health characteristics, with a view to capturing vulnerabilities that can imply risks for the health of the child under discussion. Each mother will receive a disposable 28-shot camera and is expected to register situations in the home and peridomiciliary environment which, according to them, entail risks for their children's health. Next, another home visit will be made to clarify the meaning of the photographs the mothers took and offer orientations for environmental education. For data analysis, the methodological steps of the photovoice will be followed<sup>4</sup>, which are: previous analysis of the

photographs; review; comparison between photographs the researcher and participants took; theorization based on the mentioned theoretical framework. Approval for the study was obtained from the Institutional Review Board at Universidade Federal do Ceará, protocol 136/10. The ethical principles of resolution 196/96 will be complied with.

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