

CHEMOPOPILAXIA, CLINICAL FOLLOW-UP AND IMMUNIZATIONS OF CHILDREN EXPOSED TO HIV: ASSESSMENT OF FAMILY CAPACITY

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ABSTRACT

Aim: evaluate whether family and child characteristics interfere with the family capacity to care for children exposed to HIV in the dimensions of chemoprophylaxis, clinical follow-up and immunizations. **Methods:** A cross-sectional study with 86 participants interviewed in a specialized HIV service in the interior of Rio Grande do Sul using the Scale to assess the capacity to care for children exposed to HIV. **Results:** The high capacity (91.9%) for chemoprophylaxis with AZT was significant when: 3 to 5 people lived with the same income ($p = 0.10$), the child had no siblings exposed to HIV ($p = 0.033$) and did not miss consultations ($p = 0.10$). For antibiotic chemoprophylaxis (87.2%): the child had nine or more visits/year ($p = 0.010$) and did not present a health problem ($p = 0.008$). For the clinical follow-up and immunizations (98.8%): the relative had a formal work contract ($p = 0.044$) and considered it easy to keep follow up ($p = 0.000$); the child did not present a health problem ($p = 0.000$) and did have another type of follow up ($p = 0.001$). **Conclusion:** The family characteristics (≤ 5 persons/income and not having another children with HIV), family-caregiver (formal work contract and perception of being easy to keep treatment) and the child (not having another health problem/ need to follow up and attendance at consultations) positively interfere with the family's capacity to care.

Keywords: Infant Health. Child Care. HIV. Infectious Disease Transmission. Vertical. Caregivers.

INTRODUCTION

Vertical transmission of human immunodeficiency virus (HIV) can occur during gestation, delivery or after birth by breastfeeding. Among the recommendations for prophylaxis of vertical transmission are: antiretroviral chemoprophylaxis and antibiotic therapy, specific immunizations until the definition of the serological condition of the child, as well as periodic clinical follow-up in a specialized health service^(1,2). In Brazil, there is contraindication to breastfeeding for HIV-infected women, and the use of infant formula⁽³⁾ is indicated.

According to the recommendations, antiretroviral chemoprophylaxis is performed with zidovudine (AZT) oral solution, with the first dose preferably still in the delivery room, administered every 12 hours until the end of the fourth week of life. Nevirapine was added to the

regimen up to the first 48 hours of life for children of mothers who had low adherence to antiretroviral therapy, viral load greater than 1,000 copies/ml documented, another sexually transmitted infection, and for parturient with a reagent test result in the moment of childbirth^(1,2). The antibiotic therapy is carried out with Sulfamethoxazole (SMX) + Trimethoprim (TMP), in the dosage of two daily doses, three times a week, every other day, aiming at the prevention of *Pneumocystis jirovecii* pneumonia, from 28 days of the child's life until that it has two undetectable viral loads^(1,2). This chemoprophylaxis is necessary because of the higher susceptibility to infections in members of these families⁽³⁾.

Immunizations should follow the vaccine schedule of children living with HIV, until their serological condition is defined^(3,4-5). The recommended follow-up in the Specialized Care Service (SAE) should include the specificities of

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exposure to HIV and be performed monthly in the first semester and at least bi-monthly until serological confirmation. In addition, routine childcare should be carried out with Primary Health Care (PHC)^(3,6-7).

Especially in the first years of life, the children are fragile, vulnerable and dependent on protection and care, requiring a caregiver to meet their needs. This demand is assumed by a member of the family nucleus, mostly the mother. When the child is exposed to HIV, the family caregiver must develop skills to care for the child due to the particular demands of infectious diseases, such as antiretroviral chemoprophylaxis and antibiotic therapy, specific immunizations and periodic clinical follow-up in specialized health services⁽⁸⁻¹⁰⁾.

The child becomes even more vulnerable when one or more family members are diagnosed HIV positive. Care is influenced when the family is under the impact of the discovery of the infection, afraid of stigma and worried about the possibility of transmitting the virus to the child⁽¹¹⁾. Often, the support network of those who have HIV is restricted, which implies a reservation in the sharing of child care with other relatives^(8,11-12).

Offering adequate support and guidance by health professionals to the family member can facilitate the care provided to the child at home, since he/she does it daily⁽¹³⁾. Therefore, identifying how this care is accomplished and how much the family members feel capable of providing them, allows the identification of the fragilities and potentialities, for the guidelines and interventions according to the needs observed, to promote growth and development child care.

Thus, the objective was to evaluate whether family and child characteristics interfere with the family capacity to care for children exposed to HIV, in the dimensions of chemoprophylaxis, clinical follow-up and immunizations.

METHODOLOGY

Cross-sectional study, developed from December 2015 to September 2017, in the municipality of Santa Maria, Rio Grande do Sul, Brazil. The municipality was chosen considering the classification of the 100 Brazilian

municipalities with the highest HIV index, which includes indicators such as detection rate, mortality rate and first CD4 count, to compose the ranking with municipalities offering epidemiological and operational parameters⁽¹⁴⁾.

Participants were the relatives of vertically exposed HIV children, aged from zero to 18 months of age and being followed up at the health service. As inclusion criteria: be recognized as the main caregiver of the child and to follow the daily routine of the child. And as exclusion criteria: institutionalized children (because they do not have a family caregiver), loss of outpatient follow-up (more than one year without access to the service) and/or no telephone contact (after 10 attempts on different days and shifts).

Participants were accessed on the days of the child's consultation at the pediatric infectious clinic of the Santa Maria University Hospital, considered a specialized service for the care of people living with HIV. For those without a consultation agenda in the service, during the period, a telephone contact was provided by the health service, through which the research and subsequent data collection was presented.

To access the family members, a list with the notifications of children born exposed to HIV was used between June 2014 and August 2017. Eight children who were institutionalized and 30 children no longer showing for follow-up and/or non-contact telephone follow-up. There were 15 relatives who refused to participate and two gave up during data collection, so the population surveyed were 86 family members of children vertically exposed to HIV.

Data collection was carried out by a team (three master and six scientific initiation students) properly trained by the project coordinator, who supervised the execution, with weekly meetings to discuss the difficulties.

An instrument was used to characterize the relative who cares for the child and another with the characterization of the child. The variables for the relative were: gender (male or female), age (17 to 26 years, 27 to 36, 37 to 46), marital status (living with partner, divorced, single, widower), schooling (urban, rural, peri-urban), employment status (unemployed, employee with a formal contract, employee without a formal contract), monthly family income considering

the minimum salary in the amount of R \$ 879.00 (no income, <1 salary, one to two, > 2), number of people living with the income ($\leq$ two people, three to five, > five), relationship with the child (mother, father, adoptive parents), having another child under their care (yes or no) and number of children (one child, two to four children, more than five children). And the clinical variables were: to have HIV (yes or no), infection route (unknown, sexual, ignored), diagnosis time (<1 year, 1 to 5, 6 to 10, > 11), treatment for HIV (yes or no), some health problem (yes or no), ingesting alcohol (yes or no) and using drugs (yes or no).

For the exposed child the variables were: to have siblings exposed to HIV (none, one to two, $\geq$ three siblings), attendance at the specialized health service (at birth, less than one month, between one and two months, other) number of consultations in the last year (one to four, five to eight, nine or more, none), missed a consultation (no, Yes up to two), keep the child's follow up (difficult, more or less, easy), know which primary-level health service is closest to your home (yes, no), take the child in this service (yes, no), situations to take the child to the primary health service (consultations, vaccines, development, whenever necessary), have a health problem (yes, no), do some other health monitoring (yes, no).

The Validated Childcare Capacity Rating Scale (HIV - EACCC), validated (15), was also applied, consisting of 52 items and five dimensions. In this study, the dimensions I (ability to administer AZT syrup in children up to 28 days of age), IV (capacity to administer prophylaxis with Sulfamethoxazole and Trimethoprim - SMX and TMP in children older than 28 days) and V (ability to ensure adherence to clinical follow-up and vaccination in children up to one year). In the Likert scale, the participant can indicate only one alternative, varying between 01 (never) and 05 (always), the higher the sum obtained by the answers, the greater the capacity to care, being classified as low (dimension I and IV from 4 to 9, and dimension V from 5 to 9 points) (dimension I and IV from 10 to 15 and dimension V from 10 to 19 points) and high (size I and IV from 16 to 20, dimension V of 20 to 25 points).

Data insertion was performed in the Epi-

info® program, version 7.2, with double independent typing to guarantee the accuracy of the data. After correcting for errors and inconsistencies, they were exported to the statistical program R for analysis. The variables were described by absolute and relative frequencies. Independent variables were those belonging to the socio-demographic and clinical characterization of the family and the child. As a dependent variable the scores obtained by dimension of the HIV-EACCC. The association of the characterization variables with the scale dimensions was performed using the Pearson Chi-square test and Fisher's exact test. The level of significance was 5% ($p \leq 0.05$).

The present study was approved by the research ethics committee of the Federal University of Santa Maria (CAAE 50609615.1.0000.5346) and had a free and informed consent form for the participants.

RESULTS

Participants were women (97.7%), mothers (95.3%), 27-36 years old (52.3%), with partners (72.1%), completed high school education (52.3%), were unemployed (62.8%) and had a family income of between one and two minimum wages (40.7%), and (55.8%) had other occupations, other than the home. The majority lived in the municipality of Santa Maria (74.7%) in an urban area (83.7%) and had between 2 and 4 children (59.3%), dispensing care to other children (67.4%). Regarding the clinical characterization, there was a prevalence of HIV-infected women (95.3%) by sexual intercourse (55.8%), with a diagnosis time between 01 and 05 years (38.4%) in treatment (88.4 %). Most did not use any type of drugs (96.5%) or alcoholic beverages (65.1%) and had no health problems (87.2%).

Regarding the characterization of the children, 61.6% did not have siblings exposed to HIV, 33.7% had the first attendance at birth, 98.8% of these visits were in the specialized service, 53.5% had 1 to 4 appointments in the last year, 79.1% never missed appointments, 61.6% considered it easy to keep the child's follow-up, 94.2% knew how to refer to the primary health service closest to their home. Only 64.0% of the children were taken to

primary health care, 5.8% for consultations, 12.8% for vaccines and 45.3% as needed, 79.1% of the children did not have any health problem and 53.5% did not have another type of follow-up on health.

The evaluation of the capacity of family members to prepare and administer antiretroviral prophylaxis using AZT syrup was considered by 91.9% (n = 79) as high, and indicated that for 97.6% (n = 81) the preparation was always performed according to medical advice. The frequency of chemoprophylaxis was always given according to guidelines for 95% (n = 78). When questioned about not offering chemoprophylaxis to the child at some time, 73.8% (n = 63) responded that it never occurred. However, 26.2% (n = 19) reported that at least once, they stopped offering the drug to the child. Regarding the duration of medication administration, 81.4% (n = 70) reported knowing the recommended duration of prophylaxis. Three participants did not answer these questions due to the hospitalization of the child, which made it impossible to perform such care.

The capacity of family members to prepare and administer SMX + TMP chemoprophylaxis was considered high for 87.2% (n = 75). The drug was always prepared according to guidelines by 96.5% (n = 83). Regarding the frequency and recommended interval of offer of the medicine to the child, 93% (n = 80) considered that they always did it. The absence of administration of the drug, due to forgetfulness, never occurred to 73.3% (n = 63). However, regarding the administration of drugs

that were not prescribed, only 39.5% (n = 34) reported that they had never performed it.

For the clinical follow-up and immunizations of the children exposed to HIV, the family assessment indicated 98.8% (n = 85) of high capacity. Attendance to clinical follow-up was reported by 96.5% (n = 83). All (n = 86) reported that they always took the child to the examinations on the scheduled day. When questioned about their own efforts to maintain clinical follow-up, all (n = 86) reported that they did their best to get the child to the clinic for check-ups or exams. At the time of the child's illness, 91.9% (n = 79) reported that they sought health care, even without prior scheduling. About immunizations, 93% (n = 80) reported that they always took their children on the scheduled vaccination day.

The evaluation of the family capacity for chemoprophylaxis, immunizations and clinical follow-up of children exposed to HIV, presented a statistically significant relation when related to some socio-demographic and clinical factors of the child's primary caregiver. The high capacity to prepare and administer chemoprophylaxis with AZT showed a significant relationship with the number of people living with the same family income, with families with 03 to 05 members having a greater capacity to administer the drug (p = 0.010). The child did not have siblings exposed to HIV (p = 0.033) and did not miss follow-up visits (p = 0.010) were significantly associated with high capacity (Table 1).

Table 1. Correlations between the capacity to guarantee chemoprophylaxis with AZT to the child exposed to HIV with sociodemographic and clinical factors of the family member. Santa Maria, RS, 2017 (n = 83)

Variables	Low/Moderate n (%)	High n (%)	P
No. of people living with income			
Up to 2 people	01 (50)	01 (50)	0.01
3 and 5 people	02 (3.5)	55 (96.5)	0
More than 5 people	01 (4.2)	23 (95.8)	
Does the child have siblings exposed to HIV?			
None	01 (1.9)	51 (98.1)	0.03
1 to 2	01 (4.8)	20 (95.2)	3
3 or more	02 (22.2)	07 (77.8)	
Has the child missed any follow-up visits?			
Yes	03 (20.0)	12 (80.0)	0.01
No	01 (1.5)	66 (98.5)	0

Source: Own authorship, prepared for this study.

For antibiotic chemoprophylaxis (SMX-TMP) the high family capacity was significantly associated with the highest number of visits (≥ 9)

scheduled for the child (p = 0.010), and those with no health problems (p = 0.008) (Table 2).

The high family capacity to guarantee clinical follow-up and immunizations showed a statistically significant relation with the fact that this family member was employed with a formal contract ($p = 0.044$). In addition to finding it

easy to keep the health monitoring of the child ($p = 0.000$). And the child exposed to HIV did not present a health problem ($p = 0.000$) and did not have any other type of clinical follow-up besides the infectology ($p = 0.001$) (Table 3).

Table 2. Correlations between the capacity to guarantee antibiotic chemoprophylaxis to the child exposed to HIV with sociodemographic and clinical factors of the family member. Santa Maria, RS, 2017 ($n = 86$)

Variables	Low/moderate n (%)	High n (%)	P
No. of appointments scheduled in the last year			
1 to 4	02 (4.5)	42 (95.5)	0.01
5 to 8	06 (24)	19 (76)	0
9 or more	-	10 (100)	
Does the child have any health problems?			
Yes	05 (29.4)	12 (70.6)	0.00
No	03 (4.6)	62 (95.4)	8

Source: Own authorship, prepared for this study.

Table 3 - Correlations between the capacity to guarantee the immunizations and clinical follow-up of the child exposed to HIV with sociodemographic and clinical factors of the family member. Santa Maria, RS, 2017 ($n = 86$)

Variables	Low/moderate n (%)	High n (%)	P
Employment			
Yes, with a formal contract	-	19 (22.1)	
Yes, without a formal contract	01 (1.2)	11 (12.8)	0.04
No	-	55 (100)	4
Keep clinical follow-up of the child *			
Hard	-	14 (16.5)	
More or less	-	18 (21.2)	0.00
Easy	-	53 (62.3)	0
Does the child have any health problems?*			
Yes	-	17 (20)	0.00
No	-	68 (80)	0
Does the child do other health monitoring? **			
Yes	-	34 (42.5)	0.00
No	-	46 (57.5)	1

Source: Own authorship, prepared for this study. * 85 caregivers answered this question. ** 80 caregivers answered this question.

DISCUSSION

The high capacity for administration of chemoprophylaxis found in the present study converges with a study carried out in Fortaleza, northeastern Brazil, with HIV-infected mothers with children exposed to the virus, which identified high capacity to administer AZT (72.7%) and for administration of chemoprophylaxis with antibiotics (76.5%)⁽⁹⁾.

However, the high capacity to guarantee the immunizations of children exposed to HIV pointed out by the present study differs from the results found in the same study carried out in Fortaleza. The authors indicated that immunizations in the first months of the child's life followed the national calendar, but as the

age of these children progressed, incompleteness in number of doses or delay was identified⁽⁹⁾. Another study developed with mothers of HIV-exposed children, also in Fortaleza, pointed out that caregivers justify non-adherence to the vaccination schedule due to lack of knowledge about the need for special vaccines for exposed children. Also, they pointed out the difficulty of access to health services, the lack of supply of vaccines in health services and the barriers to coping with prejudice⁽¹⁶⁾.

Regarding the clinical follow-up of children exposed to HIV, the relatives also presented high capacity. This result converges with those obtained in Fortaleza, in which all mothers had high capacity to keep follow-up⁽⁹⁾; three years

previously only 23% guaranteed adequate clinical follow-up of children⁽¹¹⁾. We infer that the quality of the health service provided to the population has an influence on the family capacity to guarantee clinical follow-up, due to the considerable improvement in attendance over the years. Ensuring the follow-up of children exposed to pediatric infectious outpatient clinics is fundamental for the adequate outcome of the case of exposure, in addition to providing greater effectiveness in the prophylaxis of HIV transmission after the birth of the child, integrating the indicators of family capacity in the delivery of care for with these children^(6,7).

The primary caregiver of the child exposed to HIV is often the mother herself, who, in addition to daily care for the developing child, needs to contemplate care related to the prophylaxis of vertical HIV transmission through chemoprophylaxis⁽⁸⁾. The present study evidenced the relationship between the high capacity to administer the AZT drug, with the presence of 3 to 5 people, living with the same income, at home. In this sense, a study carried out with caregivers of children born from HIV-infected mothers, who were being followed up at a specialized service in the Northeast of Brazil, indicated the presence of other family members participating in the medical care of the child as a reinforcer of the social support of the caregiver⁽¹¹⁾.

The attendance of the child at the follow-up visits was significantly related to the high capacity to administer chemoprophylaxis with AZT. And the highest number of visits performed in the last year was significantly associated with high capacity to administer antibiotic chemoprophylaxis (SMX-TMP). These results corroborate that found in Fortaleza, where mothers who missed the consultations did not perform chemoprophylaxis in the appropriate period, and some did not even administer the medicines to the children⁽¹⁷⁾. The child not having a health problem was also associated with high capacity to administer chemoprophylaxis, which indicates less possibility of other morbidities. Since the presence of children's health problems is evidenced as a trigger of maternal overload, making it difficult to dedicate to the

care provided to the child⁽¹¹⁾.

It is highlighted that family members' adherence to chemoprophylaxis is facilitated when there is adequate dialogue, guidance and information on the part of health professionals⁽¹⁸⁾. Considering that the lack of knowledge about HIV infection and the chances of reducing the vertical transmission of the virus, low or moderate capacity for chemoprophylaxis were evidenced by the responses of those caregivers. Knowledge about the disease strengthens compliance with prevention measures, as evidenced by a study carried out in Pelotas, which points out that pregnant women's knowledge about the subject was a protective factor for the reduction of vertical HIV transmission⁽¹⁹⁾.

The correlation between the primary care worker's employed with a formal contract with the high capacity for clinical follow-up and immunizations may be related to the need to organize between work routines and child health care⁽²⁰⁾. Still, being employed with a formal contract allows inferring the possibility of this family member having better financial conditions, besides having labor rights that facilitate the maintenance of follow-up in health services. Previous research has shown that financial difficulties are the main reasons for caregivers not to access health services^(9,15). This result is a new finding in research conducted with people living with HIV, indicating that their presence in the labor market has the potential to improve their living conditions and health.

Studies indicate good health conditions for children exposed to HIV, who are often not affected by comorbidities⁽⁸⁾. The child not presenting health problem was shown to be correlated with high family capacity in keeping clinical follow-up and immunizations. These results may indicate that health monitoring in only one specialty, in this case infectology, has the potential to facilitate child care. Considering the maintenance of clinical follow-up and immunizations of the child as an easy task, presented a correlation with high family capacity. The literature indicates that the possibility of preventing the transmission of the virus to the child overcomes the difficulties found in the care and reinforces the motivation

to adhere to the guidelines that are made possible by the clinical follow-up⁽¹⁹⁾. In addition, the empathy relationship between family members and health service providers is a protective factor for adherence to the child's health care guidelines.

As limitations of the study, it is worth mentioning that it is carried out in only one municipality in the state of Rio Grande do Sul, which does not allow to state that, despite the high levels of HIV in the state, relatives have high capacity to care for children exposed to the virus, both in the extent of chemoprophylaxis and clinical follow-up to prevent vertical transmission as well as immunizations. In addition, the evaluation of care using a self-referenced instrument does not allow to accurately identify the application of these practices in the daily care of the child.

FINAL CONSIDERATIONS

We conclude that family characteristics (≤ 5 persons/income and no other children with HIV), family-caregiver (employment with a formal contract and perception of ease of treatment) and the child (not having other health care problem/demand of attendance at consultations) positively interfere with the family's capacity to care. Although the social and historical issues of prejudice and stigma in

the context of HIV remain, we highlight the result that shows the insertion of family members in the labor market associated with high family capacity to take care of the health of children exposed to HIV. Follow-up consultations were fundamental to strengthen family capacity in relation to compliance with Brazilian recommendations for prophylaxis of vertical transmission.

In this sense, we recommend that professionals develop educational actions for the family autonomy process, in order to prevent failures in daily care. Through appropriate guidance and qualified listening, health education serves the purpose of strengthening the knowledge and skills of family members regarding the specificities of care of children exposed to HIV.

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QUIMIOPROFILAXIA, ACOMPANHAMENTO CLÍNICO E IMUNIZAÇÕES DE CRIANÇAS EXPOSTAS AO HIV: AVALIAÇÃO DA CAPACIDADE FAMILIAR

RESUMO

Objetivo: avaliar se características da família e da criança interferem na capacidade familiar para cuidar de crianças expostas ao HIV, nas dimensões de quimioprofilaxia, acompanhamento clínico e imunizações. **Método:** Estudo transversal foi realizado com 86 participantes, entrevistados em serviço especializado para HIV, no interior do Rio Grande do Sul, utilizando a Escala de avaliação da capacidade para cuidar de crianças expostas ao HIV. **Resultados:** A alta capacidade (91,9%) para a quimioprofilaxia com AZT foi significativa quando: 3 a 5 pessoas vivem com a mesma renda ($p = 0,10$), a criança não tinha irmãos expostos ao HIV ($p = 0,033$) e não faltaram as consultas ($p = 0,10$). Para quimioprofilaxia com antibiótico (87,2%): a criança realizou nove ou mais consultas/ano ($p = 0,010$) e não apresentou problema de saúde ($p = 0,008$). Para o acompanhamento clínico e imunizações (98,8%): o familiar possuía carteira assinada ($p = 0,044$) e considerou fácil manter acompanhamento ($p = 0,000$); a criança não apresentou problema de saúde ($p = 0,000$) e não fazia outro acompanhamento ($p = 0,001$). **Conclusão:** Características da família (≤ 5 pessoas/renda e não ter outras crianças com HIV), do familiar-cuidador (carteira assinada e percepção de facilidade de manter o tratamento) e da criança (não ter outro problema/demanda de acompanhamento de saúde e assiduidade nas consultas) interferem positivamente na capacidade familiar de cuidar.

Palavras-chave: Saúde do Lactente. Cuidado da Criança. HIV. Transmissão Vertical de Doença Infecciosa. Cuidadores.

QUIMIOPROFILAXIS, ACOMPAÑAMIENTO CLÍNICO E INMUNIZACIONES DE NIÑOS EXPUESTOS AL VIH: EVALUACIÓN DE LA CAPACIDAD FAMILIAR

RESUMEN

Objetivo: Avaliar se características da família e do filho interferem na capacidade familiar para cuidar dos filhos expostos ao VIH, nas dimensões de quimioprofilaxia, acompanhamento clínico e imunizações. **Método:** Estudo transversal, com 86 participantes, entrevistados em serviço especializado para VIH, no interior de Rio Grande do Sul-Brasil, utilizando a Escala de avaliação da capacidade para cuidar de filhos expostos ao VIH. **Resultados:** A alta capacidade (91,9%) para a quimioprofilaxia com AZT foi significativa quando: 3 a 5 pessoas vivem com a mesma renda ($p = 0,10$), o filho não tinha irmãos expostos ao VIH ($p = 0,033$) e não faltaram às consultas ($p = 0,10$). Para quimioprofilaxia com antibiótico (87,2%): o filho realizou nove ou mais consultas/ano ($p = 0,010$) e não apresentou problema de saúde ($p = 0,008$). Para o acompanhamento clínico e imunizações (98,8%): o familiar possuía contrato formal ($p = 0,044$) e considerou fácil manter o acompanhamento ($p = 0,000$); o filho não apresentou problema de saúde ($p = 0,000$) e não havia outro acompanhamento ($p = 0,001$). **Conclusão:** As características da família (≤ 5 pessoas/renda e não ter outros filhos com VIH), do familiar-cuidador (contrato formal e percepção de facilidade de manter o tratamento) e do filho (não ter outro problema/demanda de acompanhamento de saúde e assiduidade nas consultas) interferem positivamente na capacidade familiar de cuidar.

Palavras chave: Saúde do Lactante. Cuidado ao Filho. Infecção por VIH. Transmissão Vertical de Doença Infecciosa. Cuidadores.

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