Doi: 10.4025/psicolestud.v21i1.28124

RISK FACTORS FOR MOTHERHOOD AMONG ADOLESCENTS LIVING WITH HIV[1]

Gabriela Vescovi
Federal University of Health Sciences of Porto Alegre, Brazil
Luciana Castoldi
Sanitary Dermatology Outpatient Clinic, Secretariat of Health of the State of Rio Grande do Sul, Brazil
Marco Daniel Pereira
Faculty of Psychology and Educational Sciences. University of Coimbra, Portugal
Daniela Centenaro Levandowski[2]
Federal University of Health Sciences of Porto Alegre, Brazil

ABSTRACT. The present study aimed to identify risk factors for the experience of pregnancy and motherhood among young mothers living with HIV. A qualitative multiple case study was conducted with three young primiparous mothers HIV+ (17 to 19 years), whose babies were between 4 and 6 months old. Participants were recruited from specialized care services in Porto Alegre/RS, Brazil. Data were collected using social support and adherence to treatment questionnaires and a semi-structured interview. Seropositivity during pregnancy, low adherence to antiretroviral treatment and non-adherence to this treatment by their partners, as well as the difficulties related to the health services were identified as risk factors for a less positive experience of pregnancy and motherhood. These findings indicate the need of an active search of pregnant or adolescent mothers living with HIV, as well as of including the partner in their health care. This will be important to minimize the impact of the risk factors and to facilitate the transition to motherhood.
Keywords: Adolescence; HIV; motherhood.

FATORES DE RISCO PARA A MATERNIDADE ENTRE ADOLESCENTES VIVENDO COM HIV

RESUMO. O presente estudo buscou identificar os fatores de risco para a vivência da gestação e maternidade em jovens vivendo com HIV. Realizou-se um estudo qualitativo de casos múltiplos com três jovens HIV+ (17 a 19 anos), primíparas, com bebês de 4 a 6 meses, recrutadas em serviços especializados de Porto Alegre, Brasil. Os dados foram coletados por meio de entrevista semi-estruturada e questionários de apoio social e adesão ao tratamento. Identificaram-se como fatores de risco para maiores dificuldades na vivência da gestação/maternidade: descoberta da soropositividade durante a gestação, baixa adesão à terapia antirretroviral e não realização desse tratamento pelo parceiro, além de dificuldades enfrentadas nos serviços de saúde. Os achados indicam a necessidade de busca ativa de adolescentes gestantes/mães que vivem com HIV e de inclusão do companheiro no seu acompanhamento de saúde, a fim de minimizar o impacto desses fatores de risco e facilitar a transição para a maternidade.
Palavras-chave: Adolescência; HIV; maternidade.

FACTORES DE RIESGO PARA LA MATERNIDAD ENTRE ADOLESCENTES QUE VIVEN CON EL VIH

RESUMEN. El objetivo de esta investigación fue identificar los factores de riesgo para la experiencia del embarazo y maternidad en jóvenes que viven con el VIH. Se realizó un estudio cualitativo de casos múltiples con

[1] *Support and funding*: National Counsel of Technological and Scientific Development (CNPq); Research Support Foundation of the State of Rio Grande do Sul (FAPERGS).

[2] *E-mail*: danielal@ufcspa.edu.br

tres jóvenes VIH+ (17-19 años), primíparas, con bebés de 4 a 6 meses, reclutadas en servicios especializados de Porto Alegre, Brasil. Se recogió los datos por intermedio de entrevistas semiestructuradas y cuestionarios de apoyo social y de adhesión al tratamiento. Se identificaron como factores de riesgo para más dificultades en la experiencia del embarazo/maternidad: descubrimiento de la seropositividad durante el embarazo, la baja adhesión al tratamiento antirretroviral y no adhesión del compañero a este tratamiento, además de dificultades afrontadas en los servicios de salud. Los resultados indican la necesidad de una búsqueda activa de adolescentes embarazadas y madres que viven con el VIH y de inclusión del compañero en su vigilancia de salud, para disminuir el impacto de estos factores de riesgo y facilitar la transición hacia la maternidad.

Palabras-clave: Adolescencia; VIH; maternidad.

Introduction

Teenage pregnancy/motherhood has been considered a public health problem in many countries (e.g., Chandra-Mouli, Camacho, & Michaud, 2013), mostly due to its biopsychosocial impact. This impact has resulted in higher levels of emotional stress (Kingston, Heaman, Fell, & Chalmers, 2012), difficulties in the romantic relationship and higher probability of breaking (Røsand, Slinning, Røysamb, & Tambs, 2014), early school dropout (Almeida & Aquino, 2011) and lower academic achievement and investment in the career (Araújo-Pedrosa, Pires, Carvalho, Canavarro, & Dattilio, 2011). In this perspective, pregnancy before the adulthood has been frequently considered as a risk factor for young people and their families, predisposing them to a situation of vulnerability.

The biopsychosocial impact can be worsened when the pregnancy is accompanied by a medical condition, such as HIV infection. According to the information of the Epidemiological Bulletin HIV/STI of the Ministry of Health (Ministério da Saúde, 2014), in Brazil, since 2000 until June 2014, among the 84,558 notifications of pregnant women infected with HIV, about 16% refer to teenagers, aged between 10 and 19 years. However, even before this reality, studies on the experience of HIV among pregnant women and teenage mothers are scarce, being evident, whether in Brazil or internationally, a prevalence of studies with adult women (e.g., Faria & Piccinini, 2010; Kennedy et al., 2014; Sanders, 2008). Specifically about the pregnant teenagers, a study of Paiva and Galvão (2006), conducted with a young woman of 16 years old, identified absence in the use of condom, difficulties to adhere to the antiretroviral treatment (ART) and non-recognition of the HIV as a health problem. Although bringing relevant findings, by pointing out some risk factors to the health of this young woman, considering her HIV status, the scope of the study has not embraced the analysis of the psychosocial risk factors related to the experiences with pregnancy and motherhood in the context of the HIV.

Therefore, in the context of the pregnancy in the presence of the HIV, a recent review of the Brazilian literature showed that this experience can be specially difficult for women, being permeated by greatest difficulties of adaptation and emergence of concerns about the ART and, essentially, on the transmission of the HIV to the baby (Levandowski et al., 2014). However, the literature has also showed positive results, indicating the pregnancy as a source of pride for the teenage mothers (Cerqueira-Santos, Paludo, Dei Schirò, & Koller, 2010) and the motherhood as a motivating force, a demonstration of life and “normality” for the HIV positive women. This helps both in the assimilation of the diagnosis and adherence to the ART for mother and baby (Sandelowski & Barroso, 2003).

Thus, although there is evidence that the teenage motherhood can act as a protective context (Barr, Simons, Simons, Gibbons, & Gerrard, 2013), as also evidenced between teenage mothers who lived with the HIV (Vescovi, Pereira, & Levandowski, 2014), the concomitant experience of teenage pregnancy/motherhood and HIV infection is a situation emotionally complex. This may affect the ART and its adherence, as well as the experience of motherhood and the relationship with the baby. Thus, this may be considered as a risk situation. In this sense, it is important to identify the risk factors to which these teenagers are exposed. The knowledge of these factors, defined as the conditions or variables associated with a higher probability to occur negative or undesirable results, such as physical, psychological, behavioral and social problems (Koller, Morais, & Cerqueira-Santos, 2009), is essential to help the different health professionals and specialized services in offering an assistance of quality to these mothers and their babies. Thus, because of the scarcity of investigations about the theme, the objective of this study consisted of identifying risk factors for the experience of pregnancy and

motherhood among young mothers who live with HIV, assisted by specialized services in the city of Porto Alegre/RS, Brazil.

Method

Participants and Procedures

Three teenage mothers (from 17 to 19 years old), who received a HIV diagnosis during pregnancy or delivery. They all were primiparae and their children had between four and six months of life at the beginning of the study. The young women identified themselves as single, but they maintained a romantic relationship, in two cases, with the baby's biological father. None of the participants was employed or attended school. Table 1 presents the socio-demographic data of the participants. In order to preserve the confidentiality, fictitious names were used.

Table 1. Socio-demographic and Health Data of the Participants.

Characteristics	Ana	Maria	Lia
Age (years)	19	17	18
Baby's age (months)	4	6	4
Schooling (years)	8	9	6
Last occupation	Saleswoman and window dresser	Administrative assistant	Call girl
Marital status	Single (with boyfriend)	Single (with boyfriend)	Single (with partner)
Socioeconomic level[a]	Medium-low	Low	Low
Support received	Money, clothes, food and medicines	Food	Money, clothes, food and medicines
Gestational age at the diagnosis of HIV (months)	2	7	9
Transmission mode	Unsafe sex	Unsafe sex	Unknown
Interruption of TARV after the childbirth[b]	No	Yes	No
Housing with the biological father of the baby	Yes	Yes	Unknown biological father
Age of the baby's father (years)	22	17	49 (current partner)

Source: Data from the research, Note: ART=antiretroviral treatment. a Socio-economic level obtained through the integration of the following information: education, neighborhood of residence, current occupation, last occupation and forms of financial support received. Besides, the locations where the participants were recruited (public health services) are, in themselves, an indicator of their socioeconomic level, considering the Brazilian reality. [b] Interruption occurred due to the personal decision of the adolescent.

The participants integrated a more comprehensive study, approved by the Committee on Ethics in Research of the UFCSPA (protocol 10-617) and other institutions of health involved. The contact with the participants was made in health services specialized in HIV/aids in Porto Alegre/RS, while awaiting for the medical consultation. They all were informed on the objectives and procedures of the study and signed an Informed Consent Form. The legal guardian of the adolescent of 17 years also gave authorization to her participation. Twenty young mothers were contacted from February to October 2011. Of these, eight refused to participate in the study and nine were not found to continue with the data collection, due to change of residence and/or telephone number, abandonment of treatment or change of health institution.

At first, the participants filled the demographic and health data sheet and self-response questionnaires on social support and adherence to treatment. After the application of these instruments, permission for a new telephone contact was asked. In a new meeting, scheduled within seven days, an interview about motherhood in adolescence under situation of HIV was conducted. The data collection

was divided into two meetings to avoid overloading the young women and compromise their participation. The meetings lasted about 20 and 40 minutes, respectively. The participants and their companions received financial support for the expenses of transportation.

Instruments

Socio-demographic and Health Data Sheet: elaborated for the present study, sought information about age, schooling, occupation, marital status and socioeconomic level, data relative to the HIV infection (gestational age at the moment of the diagnosis, transmission mode and use of antiretroviral) and data about the baby's father.

Social Support Survey (Medical Outcome Study - MOS-SSS; Sherbourne & Stewart, 1991): contains 20 items that evaluate the perception of the availability of social support, organized in five dimensions: positive social interaction, emotional support, informational support, affective support and financial support. Each item is formulated in a scale of five points, varying from 1 (never) to 5 (always). All scores are transformed into a scale 0-100 point, with higher scores indicating higher support. Following the instructions of Pesce, Assis, Santos and Oliveira (2004), the scores transformed were categorized into thirds: low support (0-33), intermediary (34-66), and high support (67-100). This instrument has already shown its construct validity (Griep, Chor, Faerstein, Werneck, & Lopes, 2005) and test-retest reliability (Griep, Chor, Faerstein, & Lopes, 2003) in the Brazilian context.

Cuestionário de Adherencia Terapéutica para Mujeres con VIH/SIDA - CAT VIH/SIDA: developed by Arrivillaga (2010), it was used to evaluate the adherence to treatment, from translation-retranslation of the Spanish version carried out by the research team. It is composed of 21 items that evaluate three dimensions of the adherence: practices, meanings (motivations, beliefs and affections), and obstacles and living conditions. Each item is responded in a scale of four points, varying from 1 (never) to 4 (ever). The scores vary from 21 to 84, and *low* and *high* level of adherence were stablished as 21 to 61 points and 62 to 84 points, respectively. High adherence was defined as adherence to at least 64% of the requirements of the treatment (corresponding to the score 62 or higher in the questionnaire).

Interview on Motherhood in Adolescence under HIV Infection: derived from an interview on the health treatment and the experience of motherhood in the context of HIV (Carvalho & Piccinini, 2004), and from an interview on the pregnancy and motherhood in adolescence (Piccinini et al., 2008). It was aimed to access expectations and experiences of young women regarding motherhood, perception of the relationship with the baby, partner and family, as well as questions relating to the diagnosis and treatment of the HIV and impact of this condition on daily activities, pregnancy and motherhood. The interview was audiorecorded for further transcription.

Design and Data Analysis

This qualitative study presents a multiple case study design (Yin, 2015), of cross-sectional character. According to Yin, the case study has to be based on multiple sources of evidence. In this study, qualitative (semi-structured interview) and quantitative (self-report questionnaires) measures were used. Both MOS-SSS and CAT VIH/SIDA were analyzed according to the instructions of the author and constituted themselves as an additional source of information to support the data from the interview, contributing to triangulate the findings.

The interviews, after *verbatim* transcription, were analyzed in order to identify the risk factors. A researcher carried out a comprehensive analysis of the material, identifying possible risk factors, and placing them in tables with illustrative excerpts of speeches. A second researcher then analyzed this material, in order to verify the relevance and adequacy of the allocation performed. Doubts in this process were settled by consensus. Subsequently, a report of each case was prepared, in which all information was integrated within a same structure of presentation. Then, the findings were discussed using an overview strategy of cross cases (Yin, 2015), which allows the identification of similarities and particularities between the cases.

Results

Case 1 – Ana

Experience of pregnancy. Although not planning the pregnancy, *"it was not a shock"* to Ana realize herself pregnant, once she and her boyfriend wanted to have a child. She started the prenatal care with two months, in a private clinic, because she had health plan, and informed the beginning of the ART during the fifth month. As for the delivery, she said that the team prepared her, remaining calm. She evaluated positively the pre and perinatal assistance. After the birth, she continued to do the medical follow-ups without the need to take medication. However, her main concern was the possibility to infect the child.

On receiving the HIV test result, she said to be calm, once her partner already knew himself HIV positive and, for this reason, she already imagined this result: "*What is the use of desperation, if what is done, is done! The solution is to take care of us and let God's will be done!*". Ana did not revealed her diagnosis to her family, only to the family of her partner, claiming that she was not confident and apt to reassure them.

She affirmed that being mother softened her concerns about the infection: "*It would be more difficult* [to discover the HIV without being pregnant]. *Much more, because we entertain ourselves with him* [the child], *we think mainly of him for everything, so we take care of ourselves*". She pointed out as changes of life resulting from the diagnosis, the constant need to use of condom and the healthcare, especially the personal and the baby's ART. In this respect, she said to worry about the effects of the medication on her physical form.

In the service where she was located, Ana performed medical follow-up with the infectious disease physician and participated in a group of HIV+ pregnant women, coordinated by a psychologist, and pointed out the importance of this activity: *"You think that this will never happen to you, but I realize that this was not happening only to me"*. She said to receive support of the partner to perform the ART, although he did not perform his own treatment.

Experience of motherhood. At the fourth baby's month, Ana believed that the child was developing adequately, due to the positive feedback from the professionals who were monitoring her. She pointed out the impossibility to breastfeed as a concern, both by denouncing her state of health and by the belief that this would affect the growth of the baby. She denied any prejudice in the bonding with the baby for deciding not to breastfeed, although she revealed have had difficulties to adapt the child to the artificial milk, and adopt the practice of cross breastfeeding, which consist of allowing that other women breastfeed the baby (Ministério da Saúde, 2000). It must be stressed that in the CAT-VIH/SIDA Ana presented a low adherence.

In relation to the childcare, Ana thought that her concerns were similar to those of any other mother. She revealed to play regularly with her child, avoiding to be separated from him. She regarded herself as a good mother, assuming all the tasks of care. Even though, she said to receive family support especially from the partner and his family. She considered that the coming of a child changed her life for the better.

The young woman reported that the partner felt jealousy of the child after the birth, since she spent attention with the baby *"24 hours a day"*. Despite this, she considered as very good her romantic relationship. The relationship with the parents changed for the better with the motherhood, because Ana understood that the previous difficulties were due to her immaturity. Although, in the evaluation of social support (MOS-SSS), in general, an intermediate level of support was predominant, standing out the affective and material support and low levels of emotional and informational support. The main source of support mentioned by Ana was her mother, followed by the mother of the partner and by the partner himself.

Case 2 – Maria

Experience of pregnancy. Maria reported that she has not planned the pregnancy, which occurred due the non-use of contraceptive methods. She realized herself pregnant at the fourth month, having

initiated the prenatal follow-up at six months. She performed the follow-up in a less frequent way, due to the difficulties to schedule appointments as a function of the frequent changes of address, motivated by the work opportunities for the partner. It was necessary to have cesarean delivery, which displeased her due to the aesthetic questions: "*I started to cry, 'God, now, they are going to ruin my belly!'* [laughs]*"*. Even so, she evaluated as positive the pre and perinatal assistance.

The discovery of the infection and a severe anemia occurred simultaneously, in a routine examination. Subsequently, her concerns related to the HIV were increased, mainly by the possibility of the daughter in presenting complications: "*I was panicking, thinking that she could be born with problems because of this*". In fact, Maria demonstrated intense concerns and guilt by the late initiation of the treatment: "*She was born from me and I only did the treatment at eight months!*". Since the diagnosis, during the pregnancy, Maria received medical follow-up and evaluated it as positive.

Maria revealed her diagnosis to her family that, according to her, emphasized the negative features of the HIV infection, which resulted in some conflicts between her mother and the baby's father and between Maria and the partner's family. Her partner refused to accomplish the ART and she herself seemed to deny the infection, not recognizing its impact in her life: "*Sometimes I even forgot that I have* [the HIV]".

Experience of motherhood. At six months, Maria considered appropriate the development of her daughter, receiving positive feedback from the health professionals. She did not show concerns with the non-breastfeeding, believing that this was the best choice: "*I thought it was better not to breastfeed her on the breast than trying to do and this could do harm to her*". She adopted, at times, the cross breastfeeding, but she did not approve it: "*I do not like the idea of my neighbor breastfeeding her* [laughs]... *I know that she* [neighbor] *does not have aids, but who knows if my daughter will not contract other disease!"*.

The difficulties to enter and to continue herself with the health follow-ups during pregnancy persisted after the birth. In fact, the data of the CAT-VIH/SIDA indicated a low adherence. The young woman considered that her health condition did not difficult the practice of motherhood. She claimed often to play with the daughter, showing difficulty in leaving her with others: "*I think that nobody will never take care as a mother*". She considered herself as a good mother, because she fully assumed the caregiving tasks of the baby. Maria mentioned maturity and happiness in the face of motherhood and reported to receive family support (mother, brother and grandfather of the partner) for the ART and baby's care.

She also mentioned to receive support from the partner before his imprisonment, which occurred at five months of pregnancy. From this, Maria reported difficulties in the marital relationship. The distancing of the partner, source of support and income, also resulted in the interruption of her ART, although she had an indication to continue the use of medication. On the other hand, she informed improvement in the family relationship after the birth of her daughter, especially with regard to more care of her mother: "*She* [the mother] s*aid 'Now you have a daughter to raise!', then, she is always watching at all times, always observing what I am doing* [laughs]". In the MOS-SSS, prevailed high level of social support, with emphasis on the material, affective, informational support and positive social interaction. Maria obtained intermediate score only in the emotional support dimension. As for the sources of support, she cited her mother, partner, less frequently, her own daughter, and the partner's grandmother.

Case 3 – Lia

Experience of pregnancy. Lia mentioned that she did not want pregnancy, which led her to deny it severely during the entire period and not to perform the prenatal care: *"Even with the abdomen expanding and stopped to menstruate, I think that for not wanting to be pregnant, I pretended not to believe"*. Thus, she discovered the HIV during childbirth, which generated anxiety and guilt by the possibility of baby's infection: "*I was concerned, because I do not know if I remained the four hours that I had to be receiving the serum* [antiretroviral medication]". The fact that she did not accomplish the prenatal also resulted in the lack of preparation for the childbirth. The young woman reported lack of welcome in the health services, accessed only at the beginning of the labor: "*My mother took me to the*

health center… and there, they insulted me, because I did not have the prenatal… [Later, in the hospital] *She* [physician] *asked for my papers and I said that I did not have, so they insulted me. It is normal"*. Besides, she reported inadequacy in the form of communication of the diagnosis by a health professional, which affected negatively her experience of childbirth:

"*The physician came with ignorance… 'Madam, did you know that your daughter has HIV?'… So I said 'I am adult, I have the right to speak!'. Then my mother began to feel sick and they had to assist her in the hospital, so I had to do the labor alone… If my mother was next to me, it would be better."*

With the exception of this fact, she considered the assistance received in the hospital as good. Lia informed that she made use of psychoactive substances during the first trimester of pregnancy, having interrupted the use without the help of a professional, by influence of partner, baby and stability of life reached: "*He asked for me to stop. Then, in order not to lose everything I had gotten, new clothes, new home, and because I knew that she was an innocent child who did not have anything to do with it, I stopped, even today*". She did not know the fatherhood of her child, who was assumed by the current partner, important source of support for her.

Experience of motherhood. At the baby's fourth month, Lia understood that her child was developing properly due to her physical increase and the absence of severe health problems. She did not report concerns regarding the non-breastfeeding, because she considered that the infection did not affect the relationship with the baby, although she recognized the impact of this in her life, as well as the need to use the condom constantly. However, she used denial to deal with the diagnosis: "*To me, I do not have any illness. It is normal to me; it seems as if I have no illness*". Despite this, her responses in the CAT-VIH/SIDA indicated high adherence to ART, although, when the study was performed, she informed not to have indication of use of antiretroviral medication.

The young woman affirmed to play regularly with the baby, considering herself as a good mother: "*I think that, as first time mother, I am doing very well!*". She assumed most of the tasks of care, dividing them with the partner, with whom she reported to stablish a good relationship. However, she presented difficulties to appropriate of her maternal role: "*I take care of everything, but sometimes … it seems that it has not sunk in at all yet. I do not believe that I am mother yet!*". In any case, motherhood revealed to be an important event, with positive consequences in her life: "*I became quiet, I stopped to use drugs and I became a more responsible person, I became more adult …*".

In her view, the family relationship had improved after pregnancy*: "After my mother saw that I was pregnant … she phoned me all the time, she wanted to come to my house all the time, she asked me to come to her house all the time … This was what I always wanted!"*. She counted on the family support, both for the baby's care and for the ART. In fact, Lia presented a high level of social support, evaluated by the MOS-SSS. The dimension less scored was "emotional support". She perceived her mother as the person who provided to her the greatest support. Her own child, partner and sister were also mentioned.

Discussion

This study aimed to identify risk factors for the experience of pregnancy and motherhood among young women living with HIV, seeking to indicate similarities and differences between them regarding this aspect. From the overview of the cross cases, stand out the similarities and differences between the risk factors identified for each participant. The risk factor identified for at least two participants were considered similar and, as different, those identified only for one young woman.

In this study, the existence of HIV during the pregnancy can be highlighted as a risk factor for the participants, because it generated the need for specialized medical follow-up. The infection of their partners (Ana and Maria) created an additional risk, because, even though the couple was seroconcordant, the current guidelines reinforce the importance to use condom in the sexual relationships, in this case, mostly to avoid re-infections and increase of viral load for both. However, the contamination by the partners and the pregnancy itself indicate the non-systematic use of condom. Still,

according to the Ministry of Health (Ministério da Saúde, 2000), the partners must also be evaluated and treated in the prenatal, which did not occur. Thus, the non-accomplishment of ART by the partners is other risk factor identified in this study.

The participants referred not to have planned the pregnancy, although they did not use contraceptive methods. The non-use of these methods acted as a risk factor, increasing the probability of occurrence of an unplanned pregnancy. Likewise, not wanting the pregnancy seemed act as risk factor for Lia, who came to deny it at childbirth, not having accomplished the prenatal care and having used psychoactive substances. After birth, she also mentioned difficulties to appropriate the maternal role. The undesirable pregnancy thus seemed to be a risk factor for the infection of the baby and difficulties in the experience of motherhood. Conversely, Ana, who affirmed to have desired the pregnancy (even not planning it), indicated positive feelings in relation to pregnancy and the baby and took important decisions about the healthcare, such as the early initiation of the prenatal.

In relation to this follow-up, the Ministry of Health (Ministério da Saúde, 2006) points that it must include at least six consultations and initiate within 120 days of the conception. The improper or incomplete accomplishment of the prenatal consist of a risk factor for the maternal-infant health, especially for pregnant teenagers (Levandowski, Silva, & Wendland, 2010). Although Ana has initiated the assistance in accordance with these recommendations (at two months of pregnancy), Maria initiated at six months and Lia did not accomplish it, which is presented as a risk factor for them and their babies.

Extending the analysis for the public health policies, even knowing that Brazil is a model country in the fight against the HIV/aids, by offering treatment of quality and free (Ministério da Saúde, 2014), which in fact occurred for the three young women since the moment of the diagnosis, limitations in the structure of the specialized services can still be found. This were evidenced by the fact that Lia did not receive her diagnosis during pregnancy, in contrast to Ana and Maria.

The discovery of HIV during the pregnancy showed to be for Maria a risk factor, among other reasons, by the intense concern with the possibility to infect the baby and any complications resulting from it. This occurred due to the late discovery of the HIV and the late initiation of the ART (at eight months), which can increase the chances of contamination for the baby and therefore generated a feeling of guilt in the face of the possibility of negative outcomes. In addition, Ana presented low adherence rate to the ART after the birth of the child, which is in accordance with studies that indicated decrease in the rates of adherence to this treatment among adult women after childbirth (Gonçalves & Piccinini, 2007). Similarly to Maria, for Lia the diagnosis at the moment of the childbirth, combined with the denial of the pregnancy and to the absence of prenatal assistance, also acted as risk factor. The reduced time to administrate of the antiretroviral medications in the pre-labor increased the chance of infection for the baby, which also resulted in feelings of guilt, therefore causing emotional overload. However, Lia presented high adherence to ART after the childbirth and an intense wish to follow the recommendations of the health team, perhaps as a form of “compensating” the lack of care in the pregnancy.

The adherence to treatment is also related to the quality of assistance received by the user (Ministério da Saúde, 2000). Although the positive perception of Ana and Maria regarding the health service could be considered a protective factor inasmuch as it would increase the probability of adherence to the ART, the scores obtained indicated low adherence. In this sense, it would be relevant to understand what the participants mean by service of quality and the criteria they take into account in the evaluation of services and professionals. At the same time, it cannot be ignored that this study was carried out in dependencies of health institutions. Although the young women were informed that this was about an independent activity, the researchers could have been considered as members of the team, which may have influenced their responses in a more positive direction.

With regard to the prenatal, one of the aspects related to the quality of this service is the preparation for the birth (Ministério da Saúde, 2006). Maria and Lia revealed lack of this preparation, showing aesthetic concerns and lack of knowledge on the labor signs. The reports indicated a deficient prenatal care in terms of clarifications, welcome and respect to the confidentiality of the diagnosis, which may have intensified negative feelings and anxieties related to the experience of childbirth, being characterized as a risk factor. However, it is worth mentioning that, in the case of Lia, the non-accomplishment of the prenatal was caused by the lack of search for help and, thus, it cannot be

considered solely as a fail in the health service. In any event, this case raises a questioning about the scope of health policies and the functioning of the health system itself regarding the access and location of potential users. Although Brazilian investigations have detected high coverage of prenatal (Coutinho et al., 2010), a retrospective study with teenage mothers indicated that those under worst conditions of life and presenting risk behaviors in the pregnancy were those who most remained on the sidelines of this service (Gama, Szwarcwald, Sabroza, Branco, & Leal, 2004), demonstrating the need of active search for this clientele. On the other hand, Maria and Lia reported as difficulties encountered in the health services, the long distance from the residence, the few timetables available for consultations, the inadequate form to communicate the diagnosis and the lack of welcome. All these aspects are characterized as risk factors, due to their impacts on the healthcare.

Regarding the non-breastfeeding, Ana mentioned intense concern for this fact denunciating her serological status, reality also found in other studies (e.g., Gonçalves & Piccinini, 2007). Facing this scenario, these women can be at risk of offering their milk to the baby as a way to avoid the family and social suspicion in relation to the infection. The non-communication of the diagnosis to the family by Ana, resulting in the lack of support facing the non-breastfeeding, showed to be an additional risk factor for the mother-baby dyad. In contrast, Lia showed to be indifferent to the impossibility to breastfeed, associating it with the undesirable pregnancy. In this sense, in spite of the indifference of Lia leading her to avoid the breastfeeding (which is protective for the baby), this feeling can denounce a difficulty of binding with the baby, which would be a risk for both. More specifically, Ana reported difficulties of adaptation of the baby to the artificial milk in the first month (colic). This experience may have increased the suffering by the prohibition of the breastfeeding, constituting as a risk factor for mother and child (by increasing the feeling of guilt and the probability of offering the breast). Besides, it was observed in Ana and Maria the practice of cross breastfeeding that, according to the Ministry of Health (Ministério da Saúde, 2000), is not recommended, by allowing the contamination with other illnesses.

As for the marital relationship, it is observed that the pregnancy and puerperium exert great impact in the partner, who may feel rejected and marginalized facing the maternal-baby relationship (Maldonado, 2005). Ana, who reported her partner was jealousy in relation to the baby, observed this situation. This can be considered a risk factor, because the partner constitutes a source of support to Ana. The marital difficulties could, therefore, lead to a distancing between the couple, which would reduce even more the support network for the young woman. On the other hand, Maria revealed difficulties in the relationship with the partner due to the imprisonment, reported in the literature as a stressing life event (Pesce et al., 2004), which constitutes as risk by the absence of emotional and financial support. In her case, this was evidenced, for instance, by the need of interruption of the ART.

Finally, some life events also stood out as risk factors for the experience of pregnancy and motherhood of the young women. Maria reported life events that are considered risk factors by the literature, such as frequent changes of residence during pregnancy, for reasons of a government work program of which her partner participated. Despite the income resulted from this job to be a protective factor for the young woman, this aspect may also be classified as a risk for having hampered her adherence to the prenatal assistance and reduced her support network. In the same way, the occurrence of several family conflicts during the pregnancy seemed to increase her stress level, impairing the management of the HIV. In its turn, Lia revealed the use of illicit drugs during pregnancy, with the absence of health monitoring to suspend the use and keep the abstinence. It is known that such maternal behavior has important effects on baby's health. An analysis carried out by Behnke et al. (2013) indicated not only immediate impact of this use on the health of the fetus (e.g., presence of congenital anomalies, prematurity), but also in a long-term on the child development, such as losses in the cognitive function, language and physical growth. Thus, this behavior can be considered a risk factor.

Based on the above considerations, it is noticed that several factors discussed in this study were not specific events, but they occurred over time in the life of the participants. In this way, its allocation in "pregnancy" or "motherhood" had purely organizing nature for the presentation of the results. In this same perspective, the accomplishment of a posteriori analysis of the pregnancy period and at the moment in which occurred the motherhood can be considered a limitation of the study, because it was not adopted a global procedural approach for the analysis of the risk factors. Although retrospective pregnancy data had been obtained, regarding motherhood, it was not possible until the moment of the

study, in many aspects, to obtain a clear idea of the outcome, which would allow a better classification of them as risk factors. In addition, some aspects could be described as a risk or protection, depending on the experience of each participant. In these situations, it was opted for a classification, taking into account the material of the interview as a whole. This difficulty, sometimes found, reinforces the need of a procedural and contextualized approach for the identification and understanding of risk factors.

It is worth mentioning that the moment in which the data collection was performed (from four to six months of childbirth) did not constitute itself a period of such an intensive and disorganizing experiences for the mothers as it is often the puerperium, aspect that could influence the responses of the young women. However, it cannot be ignored that the young women who accepted to participate, in contrast to those who denied or gave up participating, may present distinct characteristics. Finally, it deserves highlighting the age of the participants (from 17 to 19 years of age), which may have influenced their experiences and perceptions, if compared to younger teenagers. Thus, it is necessary to have precaution in the transposition of these findings for young mothers of other contexts and ages.

In general, the data point to the importance of new investigations together with this clientele, seeking to deepen questions such as its insertion in the health services, the perception on the pre and post HIV testing advice, the family relationship and the experience of the maternal role. Longitudinal studies could expand the understanding of the risk factors, by clarifying the outcomes in the medium and long-term of the aspects investigated herein. In the same way, future investigations on the risk factors are necessary with young mothers and fathers of different ages, as well as with focus on the protective factors.

In any case, this study provided the clarification of some questions that permeate the experience of pregnancy and motherhood between teenagers who live with the HIV to overcome the shortage of data in the Brazilian and in the international scientific literature. The findings indicate the need of the active search for young women in situation of social vulnerability, as well as inclusion of the partner in the prenatal care and ART, and insertion of significant adults as target of the protection policies of young women. They also point to the need of interventions targeting the mother-baby relationship, with a view to the vulnerable condition that many of them are found. Such interventions would help to decrease the impact of the risk factors to which pregnant teenagers/teenage mothers with this health condition are exposed.

References

Almeida, M. C. C., & Aquino, E. M. L. (2011). Adolescent pregnancy and completion of basic education: a study of young people in three state capital cities in Brazil. *Cadernos de Saúde Pública, 27*(12), 2386-2400.

Araújo-Pedrosa, A., Pires, R., Carvalho, P., Canavarro, M. C., & Dattilio, F. M. (2011). Ecological contexts in adolescent pregnancy: the role of individual, sociodemographic, familial and relational variables in understanding risk of occurrence and adjustment patterns. *Contemporary Family Therapy, 33*(2), 107-127.

Arrivillaga, M. (2010). Dimensiones de adherencia terapéutica en mujeres colombianas con VIH/SIDA: una perspectiva social. *Revista Latinoamericana de Psicología, 42*(2), 225-236.

Barr, A. B., Simons, R. L., Simons, L. G., Gibbons, F. X., & Gerrard, M. (2013). Teen motherhood and pregnancy prototypes: the role of social context in changing young african american mothers' risk images and contraceptive expectations. *Journal of Youth and Adolescence, 42*(12), 1884-1897.

Behnke, M., Smith, V. C., Committee on Substance Abuse, & Committee on Fetus and Newborn (2013). Prenatal substance abuse: short- and long-term effects on the exposed fetus. *Pediatrics, 131*(3), e1009-e1024.

Carvalho, F. T., & Piccinini, C. A. (2006). Maternidade em situação de infecção pelo HIV: um estudo sobre os sentimentos de gestantes. *Interação em Psicologia*, *10*(2), 345-355.

Cerqueira-Santos, E., Paludo, S. S., Dei Schirò, E. D., & Koller, S. H. (2010). Gravidez na adolescência: análise contextual de risco e proteção. *Psicologia em Estudo*, *15*(1), 73-85.

Chandra-Mouli, V., Camacho, A. V., & Michaud, P. A. (2013). WHO Guidelines on preventing early pregnancy and poor reproductive outcomes among adolescents in developing countries. *Journal of Adolescent Health, 52*(5), 517-522.

Coutinho, T., Monteiro, M. F., Sayd, J. D., Teixeira, M. T., Coutinho, C. M., & Coutinho, L. M. (2010). Monitoramento do processo de assistência pré-natal entre as usuárias do Sistema Único de Saúde em

município do Sudeste brasileiro. *Revista Brasileira de Ginecologia e Obstetrícia, 32*(11), 563-569.

Faria, E. R. & Piccinini, C. A. (2010). Maternidade no contexto do HIV/AIDS: gestação e terceiro mês de vida do bebê. *Estudos de Psicologia, 27*(2), 147-159.

Gama, S. G. N., Szwarcwald, C. L., Sabroza, A. R., Branco, V. C., & Leal, M. C. (2004). Fatores associados à assistência pré-natal precária em uma amostra de puérperas adolescentes em maternidades do município do Rio de Janeiro, 1999-2000. *Cadernos de Saúde Pública*, *20*(Supl. 1), S101-S111.

Gonçalves, T. R., & Piccinini, C. A. (2007). Aspectos psicológicos da gestação e da maternidade no contexto da infecção pelo HIV/aids. *Psicologia USP, 18*(3), 113-142.

Griep, R. H., Chor, D., Faerstein, E., & Lopes, C. (2003). Apoio social: confiabilidade teste-reteste de escala no Estudo Pró-Saúde. *Cadernos de Saúde Pública, 19*(2), 625-634.

Griep, R. H., Chor, D., Faerstein, E., Werneck, G. L., & Lopes, C. (2005). Validade de constructo de escala de apoio social do Medical Outcomes Study adaptada para o português no Estudo Pró-Saúde. *Cadernos de Saúde Pública, 21*(3), 703-714.

Kennedy, V. L., Serghides, L., Raboud, J. M., Su, D., Blitz, S., Hart, T. A., et al. (2014). The importance of motherhood in HIV-positive women of reproductive age in Ontario, Canada. *AIDS Care, 26*(6), 777-784.

Kingston, D., Heaman, M., Fell, D., & Chalmers, B. (2012). Comparison of adolescent, young adult, and adult women's maternity experiences and practices. *Pediatrics, 129*(5), e1228-e1237.

Koller, S. H., Morais, N. A., & Cerqueira-Santos, E. (2009). Adolescentes e jovens brasileiros: levantando fatores de risco e proteção. In R. M. C. Libório, & S. H. Koller (Orgs.), *Adolescência e juventude: Risco e proteção na realidade brasileira* (pp. 17-56). São Paulo: Casa do Psicólogo.

Levandowski, D. C., Pereira, M., Dores, S. D., Ritt, G. C., Schuck, L. M., & Sanches, I. R. (2014). Experiência da gravidez em situação de seropositividade para VIH: revisão da literatura Brasileira. *Análise Psicológica, 32*(3), 259-277.

Levandowski, D. C., Silva, M. L., & Wendland, J. (2010). Experiências de gestantes adolescentes gaúchas com o acompanhamento pré-natal. *Psicologia: Teoria e Prática*, *12*(3), 3-21.

Maldonado, M. T. P. (2005). *Psicologia da gravidez, parto e puerpério* (17a ed.). São Paulo: Saraiva.

Ministério da Saúde (2000). *Assistência pré-natal: manual técnico.* Brasília/DF: Ministério da Saúde. Recuperado em 07 julho, de 2015, de http://bvsms.saude.gov.br/bvs/publicacoes/cd04_11.pdf

Ministério da Saúde. (2006). *Pré-natal e puerpério: atenção qualificada e humanizada.* Manual Técnico. Série A - Normas e Manuais Técnicos. Brasília/DF: Ministério da Saúde. Recuperado em 07 julho, de 2015, de http://portal.saude.gov.br/portal/arquivos/pdf/manual_puerperio_2006.pdf

Ministério da Saúde (2014). *Boletim Epidemiológico AIDS/DST, III*(1). Brasília/DF: Ministério da Saúde. Recuperado em 07 julho, 2015, de http://www.aids.gov.br/sites/default/files/anexos/publicacao/2014/56677/boletim_2014_1_pdf_60254.pdf

Paiva, S. S. & Galvão, M. T. (2006). Gravidez em adolescente com infecção pelo HIV/aids. *Revista de Enfermagem da UERJ*, *14*(4), 586-591.

Pesce, R. P., Assis, S. G., Santos, N., & Oliveira, R. V. (2004). Risco e proteção: em busca de um equilíbrio promotor de resiliência. *Psicologia: Teoria e Pesquisa*, *20*(2), 135-143.

Piccinini, C. A., Lopes, R. C. S., Marin, A. H., Carvalho, F. T., Henn, C. G., Dias, A. C. G., et al. (2008). *Aspectos biopsicossociais da gravidez adolescente: estudo longitudinal da gestação ao segundo ano de vida da criança.* Projeto de pesquisa não publicado, Universidade Federal do Rio Grande do Sul, Porto Alegre..

Røsand, G. B., Slinning, K., Røysamb, E., & Tambs, K. (2014). Relationship dissatisfaction and other risk factors for future relationship dissolution: a population-based study of 18,523 couples. *Social Psychiatry and Psychiatric Epidemiology, 49*(1), 109-119.

Sandelowski, M., & Barroso, J. (2003). Motherhood in the context of maternal HIV infection. *Research in Nursing & Health, 26*(6), 470-482.

Sanders, L. B. (2008). Women's voices: the lived experience of pregnancy and motherhood after diagnosis with HIV. *Journal of the Association of Nurses in AIDS Care*, *19*(1), 47-57.

Sherbourne, C. D., & Stewart, A. L. (1991). The MOS social support survey. *Social Science & Medicine, 32*(6)*,* 705-714.

Vescovi, G., Pereira, M., & Levandowski, D. C. (2014). Protective factors in the experience of pregnancy and motherhood among Brazilian adolescents living with HIV: a case-series report. *Journal of the Association of Nurses in AIDS Care, 25*(6), 541-554.

Yin, R. K. (2015). *Estudo de caso: planejamento e métodos.* (Herrera, C. M., Trad.). (5ª.ed). Porto Alegre: Bookman. (Original publicado em 1994).

Received: Jun. 10, 2015
Approved: Mar. 16, 2016

Gabriela Vescovi: Psychologist. Master Student at the Federal University of Health Sciences of Porto Alegre (UFCSPA). Specialist in Family and Community Health – Conceição Hospital Group, Porto Alegre, Brazil.

Luciana Castoldi: Psychologist. Master and PhD in Developmental Psychology at Federal University of Rio Grande do Sul (UFRGS). Psychologist at Sanitary Dermatology Outpatient Clinic, Secretariat of Health of the State of Rio Grande do Sul, Porto Alegre, RS.

Marco Daniel Pereira: Psychologist. PhD in Health Psychology and Post-Doctoral Fellow at Faculty of Psychology and Educational Sciences. University of Coimbra, Portugal.

Daniela Centenaro Levandowski: Psychologist at Pontifical Catholic University of Rio Grande do Sul (PUCRS). Master and PhD in Developmental Psychology at Federal University of Rio Grande do Sul (UFRGS). Post-Doctoral Fellow in Psychology at Pontifical Catholic University of Rio Grande do Sul (PUCRS). Professor of the Department of Psychology and of the Psychology and Health Post-Graduate Program and Health Sciences Post-Graduate Program of Federal University of Health Sciences of Porto Alegre (UFCSPA).