



# Initiation of sexual activity and protected sex in adolescents

*Início da atividade sexual e sexo protegido em adolescentes*

*Comienzo de la actividad sexual y sexo protegido en adolescentes*

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## ABSTRACT

**Objective:** Identify the prevalence of sexual activity initiation in adolescents and the practice of safe sex among them. **Method:** A cross-sectional study carried out with 499 adolescents in Porto Alegre, Minas Gerais, from February to April 2017, using a self-administered and semi-structured questionnaire, covering sexual initiation and practices, knowledge about contraceptive methods, prevention of sexually transmitted infections and participation in educational activities on the theme. The data were analyzed using descriptive statistics and the statistical differences were assessed using Pearson's  $\chi^2$  test. **Results:** The prevalence of sexual activity was 47.3%, with a mean age of 14.1 years old at first sexual intercourse, and a tendency for early sexual initiation in the male gender. One third of the first sexual intercourses were unprotected (33.9%). Female participants had greater knowledge about contraceptive methods and disease prevention, lower adherence to condom use and greater use of oral and emergency contraceptives. **Conclusion and implications for the practice:** The study showed an early initiation of sexual life among adolescents, and one third of unprotected sexual intercourses. There is a need for health and education actions that guarantee the acquisition of knowledge and access to contraceptive methods.

**Keywords:** Adolescent; Sexual education; Safe sex; Sexual behavior.

## RESUMO

**Objetivos:** Identificar a prevalência do início da atividade sexual em adolescentes e a prática de sexo seguro entre os mesmos. **Método:** Estudo transversal realizado com 499 adolescentes, em Pouso Alegre, Minas Gerais, de fevereiro a abril de 2017, por meio de um questionário autoaplicado e semiestruturado, contemplando iniciação, práticas sexuais, conhecimento sobre contracepção, prevenção de infecções sexualmente transmissíveis e participação em atividades educativas sobre o tema. Os dados foram analisados por estatística descritiva, as diferenças estatísticas avaliadas pelo teste  $\chi^2$  de Pearson. **Resultados:** A prevalência da atividade sexual foi 47,3%, com idade média da sexarca de 14,1 anos, e tendência de iniciação sexual precoce no sexo masculino. Um terço das primeiras relações sexuais foram desprotegidas (33,9%). As participantes do sexo feminino apresentavam maior conhecimento a respeito de contracepção e prevenção de doenças, menor adesão ao uso de preservativos e maior utilização de contraceptivos orais e de emergência. **Conclusão e implicações para a prática:** O estudo mostrou início precoce de vida sexual entre adolescentes, e um terço das relações sexuais sem proteção. Há necessidade de ações de saúde e educação que garantam a aquisição de conhecimento e acesso a métodos contraceptivos.

**Palavras-chave:** Adolescente; Educação Sexual; Sexo seguro; Comportamento sexual.

## RESUMEN

**Objetivos:** Identificar la prevalencia de la actividad sexual en adolescentes y la práctica de sexo seguro entre ellos. **Método:** Estudio transversal realizado con 499 adolescentes, de febrero a abril de 2017, por medio de un cuestionario autoadministrado y semiestructurado, que abarca la iniciación sexual y las prácticas, conocimiento sobre métodos anticonceptivos, prevención de infecciones de transmisión sexual y participación en actividades educativas sobre el tema. Los datos se analizaron mediante estadística descriptiva y las diferencias estadísticas se evaluaron mediante la prueba  $\chi^2$  de Pearson. **Resultados:** La prevalencia de la actividad sexual fue del 47,3%, con una edad promedio de la primera relación sexual de 14,1 años y una tendencia a la iniciación sexual temprana entre los participantes masculinos. Un tercio de las primeras relaciones sexuales fueron desprotegidas (33,9%). Las mujeres participantes tenían mayor conocimiento sobre los métodos anticonceptivos y prevención de enfermedades, menos adherencia al uso del condón y mayor uso de anticonceptivos orales y de emergencia. **Conclusión e implicaciones para la práctica:** El estudio mostró un inicio temprano de la vida sexual entre un grupo de adolescentes y un tercio de las relaciones sexuales sin protección. Se advierte la necesidad de llevar a cabo acciones en materia de salud y educación que garanticen la adquisición de conocimiento y el acceso a métodos anticonceptivos.

**Palabras clave:** Adolescente; Educación sexual; Sexo seguro; Comportamiento sexual.

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## INTRODUCTION

Among the challenges that Brazil faces to achieve the goals agreed upon in the 2030 Agenda for Sustainable Development, is the elaboration of policies and the implementation of actions aimed at adolescents and young people. Universal access to sexual and reproductive health services is expected to be guaranteed, including family planning, information and education.<sup>1</sup>

There is a commitment from the State and organizations to promote sexual and reproductive health in Brazilian adolescents, although insufficient.<sup>2</sup> The vulnerabilities established by the social context and the inequalities resulting from the historical processes of exclusion and discrimination show the need for focal actions for this population, in guaranteeing the rights and opportunities for Brazilian adolescents.<sup>3</sup> It is noteworthy that the initiation of sexual life, before the age of 15, is associated with involvement in risky sexual behaviors in adolescence and adulthood. Early sexual experience is associated with sexually transmitted infections (STI), more sexual partners, inconsistent use of contraceptives, unwanted pregnancies and sex with risky partners.<sup>4</sup> The prevalence of early sexual activity in Brazil, according to a national study, was 27.5% in 2015.<sup>5</sup>

Other conditions that lead adolescents to early sexual activity must also be considered, such as transactional sexual practices, which are structured by gender inequality and occur in a variety of contexts; in addition to situations of exploitation, violence and sexual coercion.<sup>6</sup>

Addressing the early onset of sexual activity in Brazil, a country with social, gender and economic inequalities, demands care and a multidisciplinary approach. Above any discussion, respect for the adolescents is required, with the learning of autonomy and care for themselves and the others.<sup>7</sup> A number of studies show the importance of socioeconomic, political and cultural factors in the incidence of STIs and unwanted pregnancies. Most corroborate the need to implement public policies to encourage sex education, including talking about sex, having prevention resources and qualified information.<sup>8</sup>

The lack of information on how to take care of health, what the rights are, and how to obtain access to supplies and services contributes to the adolescents staying away from a healthy life.<sup>3</sup> Conversely, we believe that appropriate knowledge about the changes during puberty, sexuality, STI transmission/prevention routes, are essential for maintaining health and well-being, as well as preventing unplanned pregnancies and STIs. With this study, we sought to find out if adolescents from elementary and high school in a public institution have incorporated qualified information about the initiation of sexual activity, pregnancy and sexually transmitted infections; and if they use that knowledge for their protection.

The present study aims to identify the prevalence of sexual initiation in adolescents and the practice of safe sex among them.

## METHOD

A cross-sectional, descriptive, and quantitative study carried out in a public school in the municipality of Pouso Alegre, Minas

Gerais, from February to April 2017. The municipality of Pouso Alegre is located in the South of the state of Minas Gerais, with an estimated population of 148,862 inhabitants. Considering the age group of 10 to 19 years old, the municipality has 10,944 male and 10,667 female adolescents. The municipality has 47 elementary schools, in addition to 21 high schools.

The school, setting of the study, has nearly 1,250 students, operating in the morning, afternoon and evening periods. In total, 700 students aged 12 to 17, enrolled from eighth grade of elementary school to third year of high school, were invited to participate in the research, of which 499 comprised the study sample. The adolescents were included in the research by the signing of the Free and Informed Consent Form (FICF) by the guardians and the Assent Form (AF) by the participants themselves. The inclusion criteria were the following: being enrolled and attending school, from eighth grade of elementary school to third year of high school. Students under the age of 10 and over 19 years old or who had dropped out of school until the time of the study were excluded. The study was approved by the Research Ethics Committee, with Certificate of Presentation for Ethical Appreciation (*Certificado de Apresentação de Apreciação Ética*, CAAE) protocol number 62175616.3.0000.5393.

As for the enrollment of the participants, all students who met the inclusion criteria were invited to participate in the research, by announcing it in the classroom. At the end of the recruitment stage, 700 students expressed an interest in participating in the research and took the FICF for their guardians to sign. Of these, 499 returned with the signed FICF and were able to sign the AF and participate in the research.

Data were obtained through the use of a self-applied, semi-structured and anonymous questionnaire, with sociodemographic questions, reports of sexual initiation, sexual practices, knowledge about contraceptive methods and prevention of sexually transmitted infections and participation in educational activities on the theme. During the process of recruiting the participants, the ethical aspects of the research and the possibility of withdrawal were emphasized, without any harm to the participant.

The following dichotomous variables were evaluated: sexual initiation, use of contraceptive methods in the first sexual intercourse, importance of condom use in sexual intercourse. Other variables: age at first sexual intercourse, methods used at first sexual intercourse, familiarity with contraceptive methods and indication of oral contraceptive.

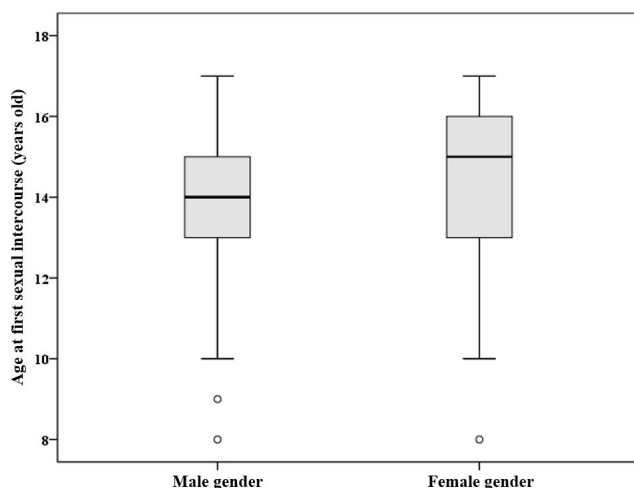
Data analysis was preceded by the elaboration and feeding of a database. The database was built with three spreadsheets in the Excel 2008 application. Two worksheets were designed to store the variables of interest, one for the first entry and the other for the second entry. The third spreadsheet contained the data dictionary for coding and decoding the variables. In order to guarantee the quality and reliability of the typing process, two typists were trained and the data were validated via double typing. This was done to enable the comparison of the data, by checking the two typed files. The inconsistencies between the two entries were corrected by consulting the data collection instruments.

The contributing data for this study were submitted to descriptive and comparative analysis, using the SPSS (Statistical Package for the Social Sciences) for Windows statistical program, v.17.0. For descriptive statistical analysis of reproductive data, the continuous variables were analyzed in the form of measures of central tendency and dispersion, using the Student's T test for independent samples. The categorical variables were analyzed in the form of absolute and relative frequencies, using the Chi-square test; the forms of analysis were also based on the relationship between the age of the participants and the age at the onset of sexual life, which were described using simple descriptive statistics through mean, standard deviation and counts.

## RESULTS

The mean age of the 499 participants was 16.3 years old ( $SD \pm 1.7$ ), ranging from 12 to 17 years old. It is noteworthy that 160 (32%) participants were under 14 years old. Of the total participants, 286 (57.3%) were female and 213 (42.7%) were male. Most of the female participants reported menarche ( $N=284$ ; 99.3%). Menarche age ranged from eight to 16 years old, with a mean of 11.9 years old ( $SD \pm 1.2$ ).

The prevalence of sexual initiation among the 499 participants was 47.9%. The proportion of sexually active adolescents was equally distributed between females (50.6%;  $N=121$ ) and males (49.4%;  $N=118$ ). The age at first sexual intercourse, in both genders, ranged from 8 to 17 years old (mean of 14.1 years old,  $SD \pm 1.7$ ). Half of the sample had their first sexual intercourse at an age  $\leq 14$  years old (55.2%;  $N=132$ ). There was a tendency for early sexual initiation in males, compared to females ( $p=0.008$ ). Among the male participants, the mean age of first sexual intercourse was 13.8 years old ( $\pm 1.8$ ), median of 14, while in females the mean age was 14.5 years old ( $\pm 1.6$ ), median of 15. Figure 1 shows the age of the participants at their first sexual intercourse, by gender.



**Figure 1.** Box plot of the age of the participants at their first sexual intercourse, by gender. Pouso Alegre, 2017.

Of the 239 participants who have already had sex, 156 (65.3%) reported having used protection in their first sexual relation and 83 (34.7%) had their first sexual relation unprotected. Among the latter, there was a higher proportion of male adolescents (39.8%), compared to female (29.7%). However, this result was not statistically significant ( $p=0.10$ ;  $OR=0.64$ ;  $CI=0.37-1.64$ ).

In relation to the use of contraceptives in the underlying sexual relations, the methods most used by both male and female participants were as follows: male condom ( $N=183$ ; 76.6%), oral contraceptive ( $N=62$ ; 25.9%), emergency contraception ( $N=56$ ; 23.4%), withdrawal ( $N=17$ ; 7.1%) and calendar ( $N=17$ ; 7.1%). There was low adherence to the use of female condoms ( $N=13$ ; 5.4%). In the additional analysis of the data, significant differences were observed regarding the use of contraceptive methods in relation to gender. The female participants mentioned more use of oral contraceptives ( $p=0.05$ ) and emergency contraception ( $p=0.01$ ), and less adherence to the use of male condoms ( $p=0.05$ ) when compared to the answers given by the male participants. Likewise, male participants had less knowledge about sexually transmitted infections (STIs) and safe sex. The behavior of the participants for safe sex is shown in Table 1.

Returning to the analysis of the total number of study participants ( $N=499$ ), there was a higher proportion of male adolescents who believed that oral contraceptives prevent STIs ( $p=0.04$ ), and that the use of barrier condoms in all sexual intercourse is unnecessary ( $p<0.01$ ). Despite the majority of the participants (90.1%) approving activities and projects regarding sexuality in the school environment, only 48.4% of participants reported having participated in sex education workshops at school, with the greatest dialog about sexuality with friends (74.5%), to the detriment of parents/guardians (41.9%).

## DISCUSSION

The present study showed a 47.9% prevalence of sexual initiation, a close prevalence between female and male participants, as well as inconsistent practice of safe sex. This result indicates early sexual onset and presence of vulnerability, in the studied group, regarding sexual and reproductive health and the need for knowledge and access to methods that prevent unplanned pregnancy and STI prevention to be present in everyday life of this group of adolescents.

These findings are consistent with other Brazilian studies on the prevalence of early sexual activity, ranging from 46.6% to 49.2%.<sup>9,10</sup> They are higher than the results of a study carried out using the National School Health Survey (*Pesquisa Nacional de Saúde do Escolar*, PeNSE) indicators that found prevalence value of 30.5% in 2009 and of 27.5% in 2012.<sup>5,11,12</sup> They are even higher than the prevalence values for sexual initiation in the United States, of 16% in children under 15 years old<sup>13</sup> and of 17% in a regional American study with adolescents.<sup>4</sup>

**Table 1.** Contraceptive methods used by the participants in subsequent sexual relations. Pouso Alegre, 2017.

Methods	Male		Female		Total		p-value	Odds Ratio
	n	%	n	%	n	%		
Male condom	99	83.8	84	69.4	183	77.5	0.05	2.49 (1.30 – 4.76)
Female condom	1	0.8	12	10	13	5.5	0.02	0.07 (0.01 – 0.61)
Oral contraceptive	14	12.1	48	40	62	26.3	<0.01	0.20 (0.10 – 0.40)
Emergency pill	16	13.8	40	33.3	56	23.7	<0.01	0.32 (0.16 – 0.61)
Spermicidal ointment	1	0.9	2	1.7	3	1.3	0.58	0.51 (0.04 – 5.73)
Calendar	3	2.6	8	6.7	11	4.7	0.13	0.37 (0.96 – 1.43)
Withdrawal method	7	6	10	8.3	17	7.2	0.49	0.70 (0.25 – 1.92)
IUD	-		1	0.8	1	0.4	0.32	1.00 (0.99 – 1.02)

The age of the adolescents at their first sexual intercourse was similar to other Brazilian studies, ranging from 13 to 15 years old.<sup>9-11</sup> International studies also show ages under 15 at first intercourse.<sup>14,15</sup> The discrepant values of sexual initiation detected in the present study, 8 and 9 years old, demonstrate conditions of greater vulnerability among adolescents, which must be better investigated in this population.

The early sexual initiation identified, being more prevalent among male participants, possibly reflects issues of gender, family values and social attitudes.<sup>9</sup> The trend of early sexual initiation in males, regardless of location and socio-cultural context, was detected in different cases,<sup>3,5,9,15</sup> with the observation of a greater number of sexual partners among male adolescents.<sup>5,13-15</sup> Early sexual initiation is considered to have a negative impact on the physical, mental and psychosocial development of the adolescents,<sup>11</sup> and represents a risky behavior, due to the possibility of having relations with a greater number of sexual partners during life and greater chances of exposure to STIs.<sup>16</sup>

Regarding the practice of safe sex, it was found that approximately one third of the first sexual relationships were unprotected (33.9%). The female participants showed greater knowledge about contraceptive methods and STI prevention, although they reported less adherence to condom use and greater use of oral contraceptives and emergency contraception. The proportion of adolescents who had their first unprotected sexual intercourse in the present study was similar to other cases (29.3-40.7%).<sup>9,10</sup> Although there was no difference regarding adherence to condom use in relation to gender, it is reported that male adolescents present less condom use in their first sexual intercourse.<sup>10,11</sup> Although the adolescents have greater access to information and knowledge regarding the use of barrier condoms for the prevention of STIs and pregnancy, a significant portion do not use condoms in all sexual relations.<sup>14</sup> Brazilian studies have shown that 21.4%-33.8% of the adolescents had their last sexual intercourse unprotected.<sup>5,9,11</sup>

The awareness of the adolescents about the importance of practicing safe sex, since their first sexual intercourse, is extremely important in the formation of concepts, values, establishment of

behaviors and health habits that will last throughout their lives. Sexual and reproductive rights are fundamental human rights and include the rights to privacy, intimacy and autonomy. It involves the implementation of public policies that ensure their exercise; and, specifically for adolescents, State regulation to guarantee these rights, among which are: access to sexual and reproductive information and education, and to available, safe and adequate sexual and reproductive health services.<sup>17</sup> The sexual and reproductive rights of children and adolescents are recognized in the international and national scene. In Brazil, the Child and Adolescent Statute ensures comprehensive care for adolescents in the health services of the Unified Health System, guaranteeing access to actions and services for the promotion, protection and recovery of health.<sup>18</sup>

In the present study, it was observed that the female participants had greater knowledge in relation to the provision of contraceptive methods, and about the importance of using the barrier method for the prevention of STIs in relation to the male participants, although in the practice, the female adolescents used oral contraceptives and emergency contraception, with greater frequency and less use of condoms. Usually, among sexually active female adolescents, the use of barrier methods is less frequent in relation to males.<sup>14,16</sup> The emphasis on preventing pregnancy with contraceptive use, to the detriment of using condoms due to the non-acceptance of the partner, or the lack of concern about contracting STIs due to being in a stable relationship, represent situations of greater vulnerability, which express the gender inequality between men and women.<sup>8</sup> The greatest concern with pregnancy can be due to the fact that it is considered an immediate consequence, in relation to other late risks.<sup>10</sup>

## CONCLUSIONS AND IMPLICATIONS FOR THE PRACTICE

Conducting this research enabled knowing the reality of the adolescents living in Pouso Alegre/MG, regarding the information and knowledge they possess about the understanding and experience of their sexuality.

The study showed that 47% of the participants had an early sexual initiation, with a mean age of 13.8 years old ( $\pm 1.8$ ) in males, compared to females (14.5 years old,  $\pm 1.6$ ), and that approximately one third of the first sexual relations were unprotected. The female participants had greater knowledge about the provision of contraceptive methods, and the conception that condom use was the only one for the prevention of STIs, although in the practice, the girls presented greater use of oral contraceptives and emergency contraception, and less adherence to condom use.

The recruitment of the participants was a limitation of the study. The students reported that the FICFs were forgotten in the midst of the school material. In other cases, lack of time to meet with parents to deliver the FICF was also mentioned as a barrier to approval for participation in the research.

As implications for the health practice, there is a need for health and education actions that guarantee the acquisition of knowledge and access to contraceptive methods, asserting the right of adolescents to live sexuality safely.

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## REFERENCES

1. Buss P. Agenda 2030: onde estamos hoje? Rev Radis [Internet]. 2017; [citado 2020 jul 13];177:22-6. Disponível em: <https://saudeamanha.fiocruz.br/agenda-2030-onde-estamos-hoje/>
2. Chandra-Mouli V, Svanemyr J, Amin A, Fogstad H, Say L, Girard F et al. Twenty years after International Conference on Population and Development: where are we with adolescent sexual and reproductive health and rights? J Adolesc Health. 2015;56(1, Suppl):S1-6. <http://dx.doi.org/10.1016/j.jadohealth.2014.09.015>. PMID:25528975.
3. Ministério da Saúde (BR), Secretaria de Atenção à Saúde, Departamento de Ações Programáticas e Estratégicas. Proteger e cuidar da saúde de adolescentes na atenção básica. Brasília: Ministério da Saúde; 2017.
4. Magnusson BM, Crandall A, Evans K. Early sexual debut and risky sex in young adults: the role of low self-control. BMC Public Health. 2019;19(1):1483. <http://dx.doi.org/10.1186/s12889-019-7734-9>. PMID:31703650.
5. Felisbino-Mendes MS, Paula TF, Machado IE, Oliveira-Campos M, Malta DC. Análise dos indicadores de saúde sexual e reprodutiva de adolescentes brasileiros, 2009, 2012 e 2015. Rev Bras Epidemiol. 2018;21(Suppl 1):e180013. <http://dx.doi.org/10.1590/1980-549720180013.supl.1>.
6. Ranganathan M, Kilburn K, Stoner MCD, Hughes JP, MacPhail C, Gomez-Olive FX et al. The mediating role of partner selection in the association between transactional sex and hiv incidence among young women. J Acquir Immune Defic Syndr. 2020;83(2):103-10. <http://dx.doi.org/10.1097/QAI.0000000000002225>. PMID:31714368.
7. Cabral CD, Brandão ER. Gravidez na adolescência, iniciação sexual e gênero: perspectivas em disputa. Cad Saude Publica. 2020;36(8):e00029420. <http://dx.doi.org/10.1590/0102-311x00029420>. PMID:32756762.
8. United Nations Educational, Scientific and Cultural Organization. International technical guidance on sexuality education: an evidence-informed approach. Paris: United Nations Educational, Scientific and Cultural Organization; 2018.
9. Chaves AC, Bezerra EO, Pereira ML, Wolfgang W. Conhecimentos e atitudes de adolescentes de uma escola pública sobre a transmissão sexual do HIV. Rev Bras Enferm. 2014;67(1):48-53. <http://dx.doi.org/10.5935/0034-7167.20140006>. PMID:24676068.
10. Silva ASN, Silva BLCN, Silva Jr AF, Silva MCF, Guerreiro JF, Sousa ASCA. Início da vida sexual em adolescentes escolares: um estudo transversal sobre comportamento sexual de risco em Abaetetuba, Estado do Pará, Brasil. Rev Pan-Amaz Saude. 2015;6(3):27-34. <http://dx.doi.org/10.5123/S2176-62232015000300004>.
11. Oliveira-Campos M, Nunes ML, Madeira FC, Santos MG, Bregmann SR, Malta DC et al. Comportamento sexual em adolescentes brasileiros: Pesquisa Nacional de Saúde do Escolar (PeNSE 2012). Rev Bras Epidemiol. 2014;17(Suppl 1):116-30. <http://dx.doi.org/10.1590/1809-4503201400050010>. PMID:25054258.
12. Gonçalves H, Machado EC, Soares ALG, Camargo-Figuera FA, Seerig LM, Mesenburg MA et al. Início da vida sexual entre adolescentes (10 a 14 anos) e comportamentos em saúde. Rev Bras Epidemiol. 2015;18(1):25. <http://dx.doi.org/10.1590/1980-5497201500010003>.
13. Martinez GM, Abma JC. Sexual activity, contraceptive use, and childbearing teenagers aged 15-19 in the United States. NCHS Data Brief. 2015;209:1-8. PMID:26199985.
14. Turi E, Merga BT, Fekadu G, Abajobir AA. Why too soon? Early initiation of sexual intercourse among adolescent females in Ethiopia: evidence from 2016 Ethiopian Demographic and Health Survey. Int J Womens Health. 2020;12:269-75. <http://dx.doi.org/10.2147/IJWH.S244621>. PMID:32308501.
15. Jee Y, Lee G. Prevalence of sexual experience among Korean adolescent: age-period-cohort analysis. Epidemiol Health. 2020;42:e2020008. <http://dx.doi.org/10.4178/epih.e2020008>. PMID:32124584.

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16. Koerich C, Santos FC, Meirelles BHS, Erdmann AL. Gestão do cuidado de enfermagem ao adolescente que vive com HIV/AIDS. *Esc Anna Nery*. 2015;19(1):115-23.
17. Heredia HL, Artmann E. Sexual and reproductive rights of adolescents: discourses of users and health professionals. In: Fornari L, Freitas F, Oliveira ESF, Oliveira C, Costa AP, editors. *Qualitative research in health: advances and challenges*. Aveiro: Ludomedia; 2020. p. 691-706. (vol. 3).
18. Jimenez L, Assis DAD, Neves RG. Sexual and reproductive rights of children and adolescents: challenges for health policies. *Saúde Debate*. 2015;39(107):755-64.