

Knowledge of adolescents regarding sexually transmitted infections and pregnancy

Conhecimento de adolescentes relacionados às doenças sexualmente transmissíveis e gravidez
Conocimiento de adolescentes acerca de enfermedades de transmisión sexual y embarazo

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ABSTRACT

Objective: To investigate the knowledge of adolescents related to sexually transmitted infections (STIs), AIDS, and pregnancy, and understand the role of school in sex education. **Method:** A qualitative descriptive study, developed through a semi-structured interview and a form for participant characterization, with 22 high school students from a public school aged 16 to 19 years. Data were submitted to content analysis. **Results:** After analysis, four thematic categories were developed: sexuality and sex education; understanding of risk behaviors; knowledge of STI/AIDS; and knowledge of and practices for prevention. **Final considerations:** This study showed the need for preventive educational actions for adolescents, because the lack of information contributes to their vulnerability. The adolescents recognize the importance of sex education; therefore it is important to implement strategies to promote and protect health in the school environment to encourage and strengthen self-care in health. **Descriptors:** Adolescent; Pregnancy in adolescence; Sexually transmitted diseases; Sex education; Knowledge.

RESUMO

Objetivo: investigar o conhecimento de adolescentes relacionado às Infecções Sexualmente Transmissíveis (IST), AIDS e gravidez, além de conhecer a compreensão sobre o papel da escola na educação sexual. **Método:** estudo qualitativo, descritivo, desenvolvido por meio de entrevista semiestruturada e formulário para caracterização dos participantes, com 22 adolescentes entre 16 e 19 anos de idade, estudantes do Ensino Médio em uma escola pública. Os dados foram submetidos à análise de conteúdo. **Resultados:** da análise emergiram quatro categorias temáticas: Sexualidade e educação sexual; Compreensão de comportamentos de risco; Conhecimento de IST/AIDS; Conhecimento e práticas de prevenção. **Considerações finais:** revelou-se a necessidade de ações educativas de prevenção para os adolescentes, pois a falta de informações contribui para a sua vulnerabilidade. Os adolescentes reconhecem a importância da educação sexual; conseqüentemente, é importante a implementação de estratégias de promoção e de proteção à saúde no ambiente escolar para contribuir e fortalecer o autocuidado na saúde. **Descritores:** Adolescente; Gravidez na Adolescência; Doenças Sexualmente Transmissíveis; Educação Sexual; Conhecimento.

RESUMEN

Objetivo: Investigar el conocimiento de adolescentes acerca de Enfermedades de Transmisión Sexual (ETS), SIDA y embarazo, además de conocer la comprensión del papel de la escuela en la educación sexual. **Método:** estudio cualitativo, descriptivo, desarrollado mediante entrevista semiestructurada y formulario de caracterización de participantes, con 22 adolescentes de 16 a 19 años, estudiantes de Enseñanza Media en escuela pública. Datos sometidos a análisis de contenido. **Resultados:** Del análisis surgieron cuatro categorías temáticas: Sexualidad y educación sexual; Comprensión de comportamientos de riesgo;

Conocimiento de ETS/SIDA; Conocimiento y prácticas de prevención. **Consideraciones finales:** Se reveló necesidad de acciones educativas de prevención para los adolescentes; la falta de información contribuye a su vulnerabilidad. Los adolescentes reconocen la importancia de la educación sexual; consecuentemente, es importante la implementación de estrategias de promoción y protección de la salud en el ámbito escolar, para contribuir al fortalecimiento del autocuidado de la salud.

Descripciones: Adolescente; Embarazo en Adolescencia; Enfermedades de Transmisión Sexual; Educación Sexual; Conocimiento.

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INTRODUCTION

Characterized by marked anatomical, physiological, psychological, and social changes, adolescence is a period of transition between childhood and adulthood. In this period, corporality assumes an important aspect, because these changes are fast, deep, and noticeable, with positive or negative impacts that may last for a lifetime⁽¹⁾.

The experience of sexuality in this period becomes more evident and it usually appears through unprotected sexual practices, due to the lack of information and communication between family members, and because of some myths or taboos, or a fear of assuming one's own sexuality. Thus, the search for and curiosity about new experiences and lack of guidance on the changes the adolescents are going through make them vulnerable to risky situations, including sexually transmitted infections (STIs), which can include acquired immunodeficiency syndrome (AIDS)⁽²⁾.

Adolescence, as defined by the World Health Organization⁽³⁾, is the period between 10 and 19 years of age. In Brazil, the health regulations and policies of the Ministry of Health define it as between 10 and 24 years of age⁽⁴⁾. The Statute of the Child and Adolescent (ECA—*Estatuto da Criança e do Adolescente*) defines adolescence as the period between 12 and 18 years of age and, in exceptional cases, when provided by law, the statute may consider it until 21 years of age⁽⁵⁾.

An age under 25 years is one of the important predictors for a less consistent use of condoms. Unprotected and precocious sexual activity among adolescents is an important risk factor for the exposure to STIs and unplanned pregnancy⁽⁶⁾.

In Brazil, the population knows that using condoms is important to prevent sexually transmitted infections. Young people present higher proportions of condom use; however, this is still far from satisfactory levels. A study⁽⁷⁾ shows that condom use depends on beliefs and values, and even on the myth of compromising sexual performance.

It is necessary to dedicate attention to the sexuality of adolescents to help reduce problems related to their personal and social lives. In this context, school has an important role in sex education, because it is a proper environment to learn not only about the human body's anatomy and physiology, but also about the methods to prevent early pregnancy and STIs⁽⁸⁾.

Considering that school complements the education given by the family, it has a huge responsibility in student training. In the school period, body development occurs due to the hormones driving the sexuality of adolescents. The school is in charge of the guidance that should be provided through discussions on the subject, thereby establishing a commitment

on the part of teachers.

Based on the importance of school as a mediator between the family and the adolescent, this study's aim was to investigate the knowledge of adolescents related to sexually transmitted infections (STIs), AIDS, and pregnancy, and to have an understanding of the school's role in sex education.

This study is of importance in the current health scenario, especially considering that early, and often undesirable, pregnancy and STIs are important factors that may adversely affect the sexual and reproductive health of adolescents, as they compromise the natural growth process as well as physical and emotional development, and may lead to other consequences, such as school dropout. Therefore, it is necessary to dedicate attention to the sexuality of adolescents to help reduce problems related to their personal and social lives. This has an impact on society as a whole, as it affects mortality rates among adolescents, low schooling level, unemployment, and child abandonment, among other factors.

METHOD

Ethical aspects

This study was conducted according to the guidelines of CNS Resolution 466/12 and approved by the Ethics Committee of the Hospital Universitário da Universidade Federal do Maranhão (CEP-HUUFMA). All parents/guardians responsible for the minors signed an informed consent form (ICF), and the minors signed a consent form after their parents/guardians agreed to their participation.

Study design

This is a qualitative descriptive study whose results were analyzed according to Bardin's content analysis technique⁽⁹⁾.

Methodological procedures

The first contact with the participants was through an individual approach during school class intervals, when one of the researchers explained the objectives of the study and invited the students to participate in the study. For the students who accepted, the researcher contacted their parents/guardians to request their authorization for the student's participation. After the parents/guardians signed the ICF and the minors signed a consent form, an interview was scheduled, which took place at the school in a reserved room granted by the school administration. The researchers asked the adolescents to authorize the use of a tape recorder during the interview to allow a faithful recording of the testimonies, full transcription, and subsequent analysis.

Study setting and sample

This study was conducted at the Colégio Universitário da Universidade Federal do Maranhão, located in the Cidade Universitária Dom Delgado, in the municipality of São Luís, in the State of Maranhão. The school has, on average, 400 students in high school, in morning and afternoon classes.

The study sample comprised 22 students in total, defined by the criterion of saturation; when, during the data collection process, the repetition of answers is observed in the creation of sense cores that comprise the definition of categories.

Data collection and organization

Data collection was conducted from October to November 2015, through a semi-structured individual interview with 22 high school students aged 16 to 19 years. An identification form was used with questions related to sex, age, religion, family leadership, and monthly family income, and a semi-structured interview. The interview consisted of the following questions: What do you understand by sexuality? In your opinion, what are the risk behaviors for STIs and pregnancy? What does STI/AIDS mean to you? What is your knowledge of pregnancy and STI prevention? What is your behavior regarding STI and pregnancy prevention? What is the role of schools in sex education, in your opinion?

To maintain participant anonymity, the participants were identified with the initial letter S (for "student"), followed by the number corresponding to the order of the interviews: S1... S22.

Data analysis

The analysis was conducted observing these stages: pre-analysis; categorization stage/material exploration; results analysis; and interpretation. These steps started with a repeated and attentive reading of the transcripts of interviews, according to the study objectives.

Data were organized in thematic categories and subcategories, based on the main ideas contained in the statements of interviewees, and analyzed according to Bardin's content analysis technique⁽⁹⁾. The contents were grouped according to the topics that emerged from the interviewees' speech and were organized into four categories: 1) sexuality and sex education, with two subcategories (sexuality as an option, act, and behavior, and the importance of school in sex education); 2) understanding of risk behaviors; 3) knowledge of STI/AIDS; and 4) knowledge of STD/AIDS and pregnancy prevention practices.

RESULTS

The study participants were 22 adolescents, high school students, aged 16 to 19 years. Most participants were female and the most frequent age was 17 years. When asked about their religion, most were Catholics, followed by Evangelicals, and some said that they had no religion. In the family characterization, the father was referred to as the head of the family. Regarding the monthly family income, most answered between one and three minimum wages.

This study enabled the definition of possible adolescent manifestations, highlighted as the following categories: sexuality and

sex education; understanding of risk behaviors; knowledge of STI/AIDS; and knowledge of STD/AIDS and pregnancy prevention practices.

Meaning of sexuality and sex education of students

In this category, two subcategories were defined that accrued to the testimonies.

Sexuality as an option, act, and behavior

Regarding the concept of sexuality, some adolescents reported that it can be expressed in the form of gender and sexual choice, that is, it can be shown through their sexual behaviors and caresses, and through general behaviors related to their masculinity or femininity, though not necessarily in a sexual context.

I guess sexuality is how boys and girls express themselves—how can I say?—both erotically and behaviorally near other people. (S02)

I guess it's an act in which man-woman, woman-woman, man-man seek pleasure or want to form a family. (S05)

For me, sexuality is everything that will involve me in relation to sex, my masculinity, my choice of what I want to be, all these things. (S11)

Sexuality, I understand it's the act of having a sexual relation. (S16)

I guess, for me, it's something very broad, because it's not only in the sexual act itself, it involves something bigger, I think that... Well, I don't know, I can't explain that, but it's not only that moment, do you understand? It starts before, at the moment of winning the person. (S19)

The importance of school in sex education

Regarding the role of school in the sex education of adolescents, they understood it has great importance, but they also mention the co-responsibility of parents and the importance of family participation, sometimes emphasizing fragility, due to the challenge for some parents to talk about this subject. They also gave suggestions for how to implement sex education effectively:

I guess it is essential [school participation] because sometimes the parents, the family, they don't have the courage to talk about this subject, which is delicate. (S06)

I guess they should give lectures [...] on this subject to make students better informed, because usually [...] when they are in the third year of high school, the girls get pregnant and I think it is lack of information, and it's the role of the school, not only of the family, but of the school too. I guess they could give lectures, invite people from outside to talk to us. (S15)

I guess both of them, family and school, are responsible, because we spend some time with the family, but we spend much time also at school [...] in fact, we spend more time at school. Then I guess they have a bigger role. (S17)

Some adolescents interviewed in this study showed dissatisfaction with the characteristics of the sex education classes, mentioning the frequency, language used, and strategies adopted by schools, as follows:

The school usually presents expectations, warning, talking [...] about what sexuality may generate, but projects addressing that are hardly seen at schools. The teacher hardly spends time talking to you about what it can be, about the risks. (S13)

In general, the lectures are usually not very specific, particularly in terms of how they talk about it or how they transmit the information. Because if you're going to give a lecture to adolescents, you have to use a language for everyone to understand [...] It seems that they are afraid to use words known by all adolescents. (S22)

Understanding of risk behaviors

Some adolescents showed a lack of knowledge of the meaning and types of risk behaviors. This expression caused some strangeness among some adolescents, as indicated in the following statements:

In fact, I've never heard of it. (S02)

Honestly, about that, I don't have a well-formed opinion. (S04)

However, other adolescents identified risk behaviors as undesirable and destructive, and linked them with acts that bring harm, including in the sexual dimension, such as having a high number of sexual partners or unknown partners, having sexual intercourse without condoms or other contraception methods.

I think risk behavior is something undesirable in relation to sexuality, such as pregnancy or a disease, not being well informed of these things. (S06)

I guess it is any type of behavior that one person has that may harm his or her own life, cause diseases, anything that can harm his or her life. (S10)

Having sex without using a condom, not preventing. These things, having sex with anyone or someone you don't know, may cause a disease. For pregnancy, it means not preventing, not using a condom or taking a contraceptive pill, these things. (S17)

One of the interviewed adolescents attributed the risk behaviors frequently adopted by adolescents in their sexual life to so-called "magical thinking," in which the adolescent thinks he or she is protected from everything.

Because "Ah, it won't happen with me." People think that they will never have an STD or get pregnant, then they kind of don't care, don't take it seriously. (S15)

We, adolescents, are sometimes very irresponsible; we think it will never happen to us, only to other people. (E20)

Knowledge of STI/AIDS

When questioned about what they knew about STI/AIDS, some adolescents mentioned the meaning of the abbreviations, types of transmission, and even mechanisms of action for HIV. They also mentioned the fact that, although AIDS involves many risks, today it is a treatable disease, and they highlighted the importance of early diagnosis.

STDs, as the name says, are sexually transmitted diseases [...]. These are diseases acquired with the sexual act. Acquired immune deficiency syndrome, which in this case means the virus, will settle mainly in the defense cells of our body and when another agent invades our body, such as a flu, it can ruin the person because he or she won't have enough defenses to fight the flu, for example. (S01)

It is a disease that can also be acquired through a blood transfusion and sexual intercourse. (S14)

Sexually transmitted diseases are transmitted without the use of condoms. (S21)

Knowledge of STD/AIDS and pregnancy prevention practices

The pregnancy and STI prevention method that is most widely known and most frequently and spontaneously mentioned by most adolescents was the condom and, specifically for pregnancy, oral contraceptives. In addition, for pregnancy prevention, they mentioned vasectomy, diaphragms, injectable contraceptives, the morning-after pill, IUDs, and the rhythm method. For STIs, they also mentioned non-sharing of syringes, combined with blood transfusion care.

There are several ways to prevent, such as condoms [...] contraceptives for pregnancy. For STDs also condoms and [...] parental guidance, family guidance in particular, and practicing good sense. (S01)

We have many ways to prevent pregnancy, right? There are many contraceptives and contraceptive methods, but for STIs, mostly using a condom because it is necessary to have a kind of barrier between the genitals. (S08)

Condoms, contraceptive methods like the morning-after pill, IUD, and other more invasive methods, right? (S11)

Yes, I try to protect myself, too. Yes, there's the morning-after pill and there's another one to take every month, right? I only know these two. (S05)

Yes, using a condom, right? Using contraception; yes, that's it. (S15)

Many adolescents say that they still do not have an active sex life; among them, some said they did not intend to start it at the moment, but showed openness to knowing the partner better when the right time comes, using a condom or contraceptive, and they mentioned the importance of knowledge of STIs and the types of transmission.

So, I still don't have an active sex life, but when I do, I intend to take care with my partner, know better, use prevention, too. (S02)

I don't know, I don't think like that, I don't think about doing it [...] there are people, right, who say "Oh, it's bullshit," but I don't think like that. Sometimes we talk about it, but I don't think about it, not at the moment. (S03)

I honestly don't need a lot because I'm a virgin [...] but it's important to be careful about some diseases. Like AIDS, you don't get only through sexual intercourse, right? There are other ways [...] by using syringes, these things. So we have to be careful, learn about these diseases to see what we can and can't get through sex. (S08)

In this case, I'm a virgin, but I think that what one should do is to prevent, use a condom for all cases, and take a contraceptive pill. (S17)

DISCUSSION

Based on the interviews with the adolescents, knowledge and perceptions of sexuality are understood in the sense of gender and sexual choice, thus shown through sexual behavior and attitudes with each other.

Sexuality can be understood as the desire for contact, warmth, affection, or love, and sexuality is a phenomenon of human existence, present in the life of adolescents. In the family, the dialog about sexuality and sex is still a taboo in general. Adolescents acquire this information mostly from friends, magazines, movies, television, and the Internet, and less often from teachers and health professionals. Parents in many cases transfer the responsibility of sex education to schools. In this context, the school and the government should be in contact to provide education that addresses this theme in all its dimensions. Parents should not delegate to others their task of talking to their children about sex; also important is knowing the most appropriate way to address this subject⁽¹⁰⁾.

According to the results of this study, the adolescents recognize that the family and the school should share the responsibility of informing them. Having the father as a source of information about sexuality, STI/AIDS prevention, and contraception, and being comfortable talking about sex with the mother are positively associated with the consistent use of contraceptives⁽¹¹⁾.

The teacher is the first choice among adolescents as a source of STI information, confirming the importance of teachers in the natural role of sexual educator in the school environment⁽¹²⁾.

Regarding the harm caused by the lack of information, STIs are still a serious public health problem, especially in adolescence, and it may leave curable or incurable issues, such as infertility, ectopic pregnancy, genital cancer, chronic liver disease, among others. Then, preventive actions based on the understanding of how young people perceive and lead their sexual lives should be developed, because the lack of this understanding has led to prevention strategies that either use a metaphorical language, making it difficult to understand or, in other cases, vulgarize the theme, instigating different types of prejudice⁽¹³⁾.

A study⁽¹¹⁾ conducted to describe sources of information on sexuality and contraception used by adolescents showed that more than 85% of adolescents had some information about how to avoid having children and STIs before becoming

pregnant. About 55% said they had someone to talk to about this subject. In the preference scale, friends came first with 36.3%, followed by the mother with 25.5%, and the partner with 16.6%. Adolescents generally know that condoms prevent illness and pregnancy, but they find them difficult to use.

Adolescents do not know their own bodies and were unable to recognize the symptoms of STIs and the transmission methods of AIDS. They believed that an apparently healthy person cannot be infected, which raises the chances of acquiring an STI⁽¹⁴⁾. Or they simply did not believe in the existence of the risks of pregnancy and diseases during the first sexual intercourse, considering themselves indestructible and fully protected in their magical thinking⁽⁶⁾. This thought was displayed in this study when adolescents did not take the risk seriously because they believed an unwanted pregnancy would never happen to them.

The most familiar type of STI among young people is AIDS, often referred to as HIV. They presented insufficient characterization of the disease and its causative agent, and they showed a lack of knowledge about these infections, which is a point of concern, because studies show adolescence is the period with the highest incidence of the disease⁽¹⁵⁾.

Another study⁽¹⁵⁾ conducted with young people showed that 50% of the students knew about the male condom, and 56% said they had not started their sex life. Regarding the knowledge of STIs, 90% only knew AIDS, and condoms were mentioned as the prevention method.

However, another study⁽¹²⁾ showed that a high percentage of adolescents did not know any transmission method of STI, showing that, despite the dissemination by social information vehicles, such information has not effectively reached the population. The percentages of adolescents who did not know the signs and symptoms were even higher regarding the lack of knowledge of transmission methods. In this study, the adolescents mentioned condoms and other contraceptives, as well as family guidance as prevention methods.

The use of preventive and contraceptive methods is not directly related to the knowledge of adolescents, but it may be related to other factors that may influence their sexual behavior, such as their thoughts and attitudes as determined by their perceptions, values, beliefs, and feelings, which condition the proper and regular use of condoms⁽¹⁵⁾.

Regarding hormonal methods, a study⁽¹⁶⁾ showed that the contraceptive pill was the most frequent method among the adolescents, with 53.19%, and 14% of the sample combining the pill and condoms, demonstrating that the contraceptive pill is one of the methods of greater concentration of information.

In an investigatory study⁽¹⁵⁾ that evaluated the knowledge of adolescents about STI contamination/transmission, AIDS was the most common type recognized by the adolescents, and the sexual act without a condom was the most popularly perceived type of transmission, followed by the use of sharp objects, such as scissors, shavers, and shared syringes, and other incorrect information, such as kissing people with mouth sores and the shared use of contaminated objects such as spoons and towels. This indicated mistaken and superficial knowledge among young people, because the actual methods of transmission were not properly identified, although it was

the most common pathology, also due to frequent advertising campaigns of the government.

A study⁽⁶⁾ indicated that some information about possible HIV infection was incorrect; 19.0% believed that not using public toilets is one way to prevent AIDS, and 6.2% believed that this disease could be transmitted by insect bites. The study suggested the adoption of educational practices in schools involving different curricular disciplines.

Another study⁽¹⁷⁾ showed that the knowledge of STIs is not an unknown theme to adolescents. Most of them associate the proper prevention method with the use of condoms, and the use of contraceptives is not directly related to knowledge, as its effective use involves historical and cultural aspects, which can create obstacles to changes in behavior to ensure a safe sexual experience.

The fear of an early pregnancy was present in all groups of adolescents participating in another study⁽¹⁶⁾; the adolescents in this study also showed fear of unplanned pregnancy.

The male condom is the most popular method against STIs and pregnancy among young people, but despite the increased frequency of condom use among young people, consistent use is not frequent, especially in casual and non-scheduled relations, thus characterizing a risk behavior. Only one-third of the adolescents or fewer always use condoms, which is the main concern about an unplanned pregnancy^(13,18-19).

In one study⁽¹⁵⁾ on sexuality, contraceptive methods, and sexually transmitted diseases conducted with students from public schools, 36.2% reported the use of condoms, mainly male, because most women did not know or had no access to the female condom, and 3.7% took contraceptive pills. In this study, the most frequent methods were condoms and oral contraceptives.

Another study⁽²⁰⁾ showed that the use of condoms is related to financial and cultural issues and access to this product, and that low schooling level and poverty increase the vulnerability of adolescents. Those with lower social ability to put future projects into practice and achieve social satisfaction are more susceptible to early initiation of sex, leaving them more exposed to illness and unwanted pregnancy. Early sexual initiation becomes a public health problem because it involves inconsistent use of condoms, especially in the first sexual intercourse, so that delaying sexual initiation can be considered a protective factor⁽¹⁵⁾. This behavior of postponing sexual initiation as a prevention method was perceived in several testimonies in this study.

Study limitations

This study was limited to addressing high school students; some of them had difficulty expressing themselves on the subject. Another limitation is the fact that the school is located in a privileged area, because it is a university college. Finally, as it is a non-probability intentional sample, the results apply only to the studied population.

Contributions to nursing and public health or policies

This study contributes to nursing as it discusses the role of nurses in providing sexual guidance to adolescents at school and the importance of actions performed by nurses as educators. Although the sexual orientation of adolescents is already sufficiently addressed today, it is not an easy subject to be addressed in the school environment as it involves the school, the educators, the family, and the adolescents. Therefore, nursing inserted in this context plays an important role when performing educational practices for the prevention of STIs, AIDS, and unwanted pregnancy, among other needs of adolescents.

FINAL CONSIDERATIONS

The results showed that sexuality is understood in different ways; however, sexuality was frequently understood as a sexual behavior and as one way to feel pleasure.

The knowledge of STIs and pregnancy prevention was mainly related to the use of condoms, oral contraceptives, and postponement of sexual initiation. Regarding AIDS, the interviewees showed a lack of knowledge about the transmission methods. The risk behavior was associated with the number of partners and other behaviors that could cause health risks.

The adolescents recognized that school participation is important, emphasizing that lectures are essential for guidance which, combined with the family, can significantly contribute to protection against unwanted pregnancy. However, sex without condoms, lack of knowledge about risks, lack of information, and lack of prevention programs in most Brazilian schools favor an increased number of adolescents with HIV and unwanted pregnancies. The results of this study show the need for preventive educational actions for adolescents and the school commitment, considering their important role in education.

The school is a favorable environment for the promotion of adolescent health, because it can guide the decision making and conduct of adolescents. How, debates on sexuality and pregnancy in adolescence are required, in joint actions with the participation of parents, educators, and health professionals, seeking full attention to adolescent health, because the lack of information on sexuality contributes to adolescent vulnerability. For this reason, strategies should be developed that favor the integration of teachers participating in educational actions, understanding of sexuality, and promotion and prevention of this vulnerable population.

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REFERENCES

1. Moura JRA, Figueiredo IGA, Santos TNC, Sousa EC, Vieira TF, Lima SEA. Conversas de adolescentes sobre drogas e sexualidade: um relato de experiência. *Revinter* [Internet]. 2015[cited 2016 Mar 10];8(2):117-30. Available from: <http://revistarevinter.com.br/index.php/toxicologia/article/view/204>

2. Carleto AP, Faria CS, Martins CBG, Souza SPS, Matos KF. Conhecimentos e práticas dos adolescentes da capital de Mato Grosso quanto às DST/AIDS. *DST J Bras Doenças Sex Transm* [Internet]. 2010 [cited 2015 Dec 10];22(4):206-11. Available from: <http://www.dst.uff.br/revista22-4-2010/7%20-%20Conhecimentos%20e%20praticas%20de%20adolescentes%20de%20Mato%20Grosso.pdf>
3. Organização Mundial de Saúde. *La Salud de lós Jóvens: um reto y uma esperanza*. Geneva: WHO; 1995.
4. Brasil. Ministério da Saúde. *Cartão do Adolescente (documento preliminar): Área Técnica de Saúde do Adolescente e do Jovem*. Brasília (DF): Ministério da Saúde; 2004.
5. Brasil. Lei nº 8.069, de 13 de Julho de 1990. Dispõe sobre o Estatuto da Criança e do Adolescente e dá outras providências. Brasília (DF): Ministério da Justiça; 1990.
6. Portela NLC, Albuquerque LPA. Adolescence: sources of information about contraceptive methods. *Rev Enferm UFPI* [Internet]. 2014 [cited 2016 Dec 22];3(1):93-9. Available from: <http://ojs.ufpi.br/index.php/reufpi/article/view/1362/pdf>
7. Chaves ACP, Bezerra EO, Pereira MLD, Wagner W. Conhecimentos e atitudes de adolescentes de uma escola pública sobre a transmissão sexual do HIV. *Rev Bras Enferm* [Internet]. 2014 [cited 2016 Dec 16];67(1):48-53. Available from: <http://www.scielo.br/pdf/reben/v67n1/0034-7167-reben-67-01-0048.pdf>
8. Carneiro RF, Silva NC, Alves TA, Albuquerque DO, Brito DC, Oliveira LL. Educação sexual na adolescência: uma abordagem no contexto escolar. *Sanare* [Internet]. 2015 jan-jun [cited 2016 mar 10];14(1):104-8. Available from: <https://sanare.emnuvens.com.br/sanare/article/view/617>
9. Bardin L. *Análise de conteúdo*. São Paulo: Edições 70; 2011.
10. Freitas KR, Dias SMZ. Percepções de adolescentes sobre sua sexualidade. *Texto Contexto Enferm* [Internet]. 2010 [cited 2016 Mar 15];19(2):351-7. Available from: <http://www.scielo.br/pdf/tce/v19n2/17.pdf>
11. Moura LNB, Gomes KRO, Rodrigues MTP, Oliveira DC. Informação sobre contracepção e sexualidade entre adolescentes que vivenciaram uma gravidez. *Acta Paul Enferm* [Internet]. 2011 [cited 2010 Mar 16];24(3):320-6. Available from: http://http://www.scielo.br/pdf/ape/v24n3/en_03.pdf
12. Brêtas JRS, Ohara CVS, Jardim DP, Muroya RL. Conhecimentos de adolescentes sobre doenças sexualmente transmissíveis: subsídios para prevenção. *Acta Paul Enferm* [Internet]. 2009 [cited 2016 Mar 15];22(6):786-92. Available from: <http://www.scielo.br/pdf/ape/v22n6/a10v22n6.pdf>
13. Cunha M, Silva MA. O comportamento dos adolescentes frente ao risco de contaminação com HIV/AIDS. *Estudos* [Internet]. 2013 [cited 2016 Mar 17];40(4):395-418. Available from: <http://seer.ucg.br/index.php/estudos/article/view/3049/1850>
14. Dias FLA, Silva KL, Vieira NFC, Pinheiro PNC, Maia CC. Riscos e vulnerabilidades relacionados à sexualidade na adolescência. *Rev Enferm UERJ* [Internet]. 2010 [cited 2016 Mar 18];18(3):456-61. Available from: <http://www.facenf.uerj.br/v18n3/v18n3a21.pdf>
15. Oliveira KNS, Bezerra MAR, Rocha RC, Santos LR, Saraiva PVS. Educação sexual na adolescência e juventude: abordando as implicações da sexualidade no contexto escolar. *Sanare* [Internet]. 2013 [cited 2016 Mar 15];12(2):7-13. Available from: <https://sanare.emnuvens.com.br/sanare/article/download/376/268>
16. Rodrigues MF, Jardim DP. Conhecimento e uso da contracepção de emergência na adolescência: contribuições para a enfermagem. *Cogitare Enferm* [Internet]. 2012 [cited 2016 Dec 22];17(4):724-9. Available from: <http://revistas.ufpr.br/cogitare/article/view/30381/19657>
17. Jardim FA, Campos TS, Mata RN, Firmes MPR. Doenças sexualmente transmissíveis: a percepção dos adolescentes de uma escola pública. *Cogitare Enferm* [Internet]. 2013 [cited 2016 Dec 22];18(4):663-8. Available from: <http://revistas.ufpr.br/cogitare/article/view/46365/27853>
18. Malta EC, Martins MR, Almeida MF. Avaliação do conhecimento dos adolescentes sobre infecções sexualmente transmissíveis. *Rev Enferm UFPE*, 2013;7(esp):7042-7
19. Silva DL, Moura MES. AIDS - Knowledge developed by teens in the prevention of disease. *Rev Enferm UFPI* [Internet]. 2013 [cited 2016 Dec 22];2(3):40-1. Available from: <http://ojs.ufpi.br/index.php/reufpi/article/view/1109/pdf>
20. Silva AF, Guimarães GL. The brazilian teenagers and the reasons why they don't use condom to prevent HIV/Aids. *REV Enferm UFPI* [Internet]. 2015 [cited 2016 Dec 22];4(1):106-10. Available from: <http://ojs.ufpi.br/index.php/reufpi/article/view/3311/pdf>