DUBTS ABOUT SEXUALLY TRANSMITTED INFECTIONS IN ADOLESCENTS: INTEGRATIVE LITERATURE REVIEW

Felipe Paulino da Silva 1, Luís Pereira-de-Morais 2, Wellington da Silva Mota 3, Glauberto da Silva Quirino 4

ABSTRACT

Objective: Identify the main doubts about sexually transmitted infections in adolescents. Method: Integrative literature review conducted from January to March 2020, in the MEDLINE, LILACS, BDENF, CINAHL, IBECS databases and in the SciELO virtual library, using the Health Sciences Descriptors: Teenagers, Sexually Transmitted Infections and Knowledge. Results: 3455 publications were identified, 16 of which were included for analysis, considering the inclusion and exclusion criteria. It was identified that most adolescents had knowledge concerning some Sexually Transmitted Infections, especially HIV, but superficial, obtained from conversations with friends, without theoretical basis. Their doubts were related to the mode of transmission, prevention, identification of signs and symptoms, and the risks of infection. Conclusion: The evidence pointed out in the integrative review presents subsidies for the development of educational materials for education and promotion of sexual health, as well as can subsidize knowledge to work with adolescents. Descriptors: Teenagers; Sexually Transmitted Infections; Knowledge.
adolescentes possuíam conhecimentos concernentes a algumas Infecções Sexualmente Transmissíveis, sobretudo HIV, mas superficiais, obtidos em conversas com amigos, sem embasamento teórico. Suas dúvidas eram relativas ao modo de transmissão, à prevenção, à identificação dos sinais e sintomas e aos riscos de contágio. **Conclusão:** 
As evidências apontadas na revisão integrativa apresentam subsídios para a elaboração de materiais educativos destinados à educação e promoção da saúde sexual, como também, poderá subsidiar conhecimentos a se trabalhar com os adolescentes. 

**Descritores:** Adolescentes; Infecções Sexualmente Transmissíveis; Conhecimento.

**RESUMEN**

**Objetivo:** Identificar las principales dudas sobre las infecciones de transmisión sexual en los adolescentes. **Método:** Revisión bibliográfica integrativa realizada entre enero y marzo de 2020, en las bases de datos MEDLINE, LILACS, BDENF, CINAHL, IBECs y biblioteca virtual SciELO, utilizando los descriptores de Ciencias de la Salud: Adolescentes, Infecciones de Transmisión Sexual y Conocimiento. **Resultados:** Se identificaron 3455 publicaciones, de las cuales se incluyeron 16 para el análisis, teniendo en cuenta los criterios de inclusión y exclusión. Se identificó que una gran parte de los adolescentes tiene conocimientos relacionados con algunas infecciones de transmisión sexual, sobre todo el VIH, pero de forma superficial, obtenidos en conversaciones con amigos, sin que haya un análisis teórico. Sus dudas estaban relacionadas con el modo de transmisión, la prevención, la identificación de signos y síntomas y los riesgos de contagio. **Conclusión:** Las evidencias presentadas en la revisión integradora son fundamentales para la elaboración de materiales didácticos destinados a la educación y promoción de la salud sexual, así como también pueden ayudar a mejorar los conocimientos para trabajar con los adolescentes. 

**Descriptores:** Adolescentes; Infecciones de Transmisión Sexual; Conocimiento.

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Adolescence can be understood as a complex and dynamic phase in the life of human beings. It is characterized by a period in which several changes occur, affecting mental, emotional, and physical development, as well as personal performance in society.¹

It is in this phase of life that the body changes and the recognition of social roles by the adolescents will require a psychic re-elaboration work. It is a unique moment in the individual’s life, in which these changes generate a series of metamorphoses in their affective, sexual, and social lives.²

In Brazil, one of the legal advances that guide adolescent health care was the approval of the Statute of the Child and Adolescent (ECA) in 1990, which regulates article 227 of the 1988 Federal Constitution. In it, adolescence is described as the period of life between 12 and 18 years of age. The World Health Organization (WHO), in turn, describes adolescence as the second decade of life, between ages 10 and 19.³

From a sociocultural perspective, talking about sexuality with this public is situated in the sphere of interdictions and, therefore, its approach is often avoided. It is generally seen as a sensitive and delicate subject, which is a social taboo, reproducing silences, insecurities and embarrassment, surrounded by myths, values, beliefs and stereotypes, and restricted to superficial dialogues between parents and children.⁴

With this, the study of the development of sexuality in adolescence has gained more and more space in the literary universe, such scenario occurred mainly due to the vulnerabilities inherent to its exercise practiced by this group. Data from the WHO show that most adolescents start their sexual lives earlier and earlier, between the ages of 12 and 17. Related to this, it should be noted that young people who are experiencing this phase early, consequently, are exposed to a greater vulnerability to Sexually Transmitted Infections (STIs), and this occurs mainly due to lack of access to information and discussion on topics related to sexual health, as well as the lack of dialogue with their own families on the subject.⁵

Discussing the subject with the young public is essential for the prevention of STIs, since the adolescents’ insufficient knowledge about sexuality can lead to the
possibility of exposure to STIs, generating repercussions in their lives, since it is during this phase that elevated male and female hormones stimulate the desire for sexual intercourse.6–7

From this angle, knowing how to identify signs and symptoms of some infections is essential for the immediate treatment of the disease. Thus, the knowledge of adolescents is essential for them to be aware of the risks they are exposed to if they do not use preventive methods properly, the possibility of STIs remaining asymptomatic and their signs and symptoms such as urethral and/or vaginal discharge, genital ulcers, inguinal lymphadenopathy, and abdominal pain.6–8

There is an undeniable need to work on and develop studies and instruments that seek to investigate and provide knowledge about STIs to adolescents in schools. Moreover, instigating the knowledge of this public in the school environment is favorable, taking into account that it is an environment where various information and experiences on the most varied subjects that surround this age group circulate and are usually shared, especially when it comes to issues related to sexuality and sexual health.7

In this sense, it is important to highlight that the promotion of sexual education is the most important tool for the prevention of problems related to young people's sexual and reproductive health. It is established as a continuous and permanent process that ensures learning and socialization where it covers, in a recommended manner, the transmission of information and the development of attitudes and skills related to human sexuality, thus promoting healthy attitudes and behaviors within this theme.9

Despite this, even today one can list obstacles that are present in addressing this issue with adolescents, such as the difficulty that some professionals still face in dealing with controversial issues such as those related to sexuality, with little dissemination of information leading to a deficit in the adoption of healthy lifestyle practices; the lack of recognition of health professionals as responsible for the education of young people as citizens, often limiting themselves to care according to their area of technical competence.10

Furthermore, it is important to highlight the role of nurses, as they are direct collaborators and active in raising awareness and clarifying questions that may arise
about STIs, whether in care or in teaching environments, ensuring educational practices. It is important to emphasize that in primary care there is rapid testing for some STIs, and nurses can provide assistance in the educational field, in performing rapid tests and helping in the treatment of STIs.\textsuperscript{11-12}

In this sense, the search for evidence in national and international literature can determine the doubts associated with STIs in adolescents, which contributes to the development of educational and clinical actions for the real or potential health problems of the target audience.\textsuperscript{13}

Thus, the guiding question of this research was: What are the main doubts of adolescents about sexually transmitted infections?

\textbf{OBJECTIVE}

Identify the main doubts about sexually transmitted infections in adolescents.

\textbf{METHOD}

An integrative literature review was conducted to summarize the evidence and reveal the current knowledge on the subject.\textsuperscript{14}

The following stages were adopted as methodological reference: identification of the guiding question; establishment of inclusion and exclusion criteria; categorization (extraction, organization, and summarization of information); evaluation of included studies; interpretation of results; presentation of the review.\textsuperscript{15}

In the first step, we sought to define the topic to be investigated, to analyze the largest possible number of publications related to the main doubts about sexually transmitted infections in adolescents. Thus, the construction of the research question involved the Population, Variables and Outcomes (PVO) strategy, which allows organizing the elements in a structural way (Chart 1). In the first stage, the following research question was formulated: What is the knowledge of adolescents about sexually transmitted infections?
The operationalization of the search began with the definition of inclusion criteria: studies on adolescents' knowledge about sexually transmitted infections; full text available in Portuguese, English or Spanish. Support guides, manuals/booklets, articles structured as editorials, review articles, experience reports, theses, dissertations, and studies that did not answer the study question were excluded. No time frame was established for the inclusion of the articles, in order to cover the largest quantity of publications.

In a paired manner, the articles were identified by a bibliographic search carried out from January to March 2020, through the journals portal of the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES), in the Medical Literature Analysis and Retrieval System Online (MEDLINE®) databases via PubMed, Latin American and Caribbean Literature on Health Sciences (LILACS), Nursing Database (BDENF), Cumulative Index to Nursing and Allied Health Literature (CINAHL) via EBSCO Information Services, Índice Bibliográfico Español en Ciencias de la Salud (IBECS) and in the virtual library Scientific Electronic Library Online (SciELO), using the advanced search method. The choice of these databases is justified by their scope and by their impact on scientific productions in health.

The use of DeCS terms occurred in function of the chosen bases, whose intent was to carefully meet the objective and design chosen for the construction of this study.

To systematize the searches, the pre-defined terms that comprised the PVO strategy were cross-referenced, with the aid of the Boolean operator "AND" to associate the descriptors, which were: teenagers AND knowledge; teenagers AND sexually transmitted infections; teenagers AND sexually transmitted infections AND knowledge; sexually transmitted infections AND knowledge (Chart 2).
<table>
<thead>
<tr>
<th>Search Sources</th>
<th>MEDLINE</th>
<th>LILACS</th>
<th>SciELO</th>
<th>CINAHL</th>
<th>BDENF</th>
<th>IBECS</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teenagers AND Sexually transmitted infections</td>
<td>3</td>
<td>793</td>
<td>30</td>
<td>11</td>
<td>129</td>
<td>42</td>
<td>1008</td>
</tr>
<tr>
<td>Teenagers AND Knowledge</td>
<td>48</td>
<td>1324</td>
<td>196</td>
<td>115</td>
<td>184</td>
<td>84</td>
<td>1951</td>
</tr>
<tr>
<td>Sexually Transmitted Infections AND Knowledge</td>
<td>6</td>
<td>218</td>
<td>18</td>
<td>22</td>
<td>42</td>
<td>28</td>
<td>334</td>
</tr>
<tr>
<td>Teenagers AND Sexually transmitted infections AND Knowledge</td>
<td>1</td>
<td>109</td>
<td>2</td>
<td>5</td>
<td>25</td>
<td>14</td>
<td>156</td>
</tr>
<tr>
<td>Totals</td>
<td>58</td>
<td>2444</td>
<td>246</td>
<td>153</td>
<td>380</td>
<td>174</td>
<td>3455</td>
</tr>
</tbody>
</table>

Chart 2 - Number of findings by cross-references and databases.

Subsequently, two researchers, in a blinded manner, performed the first stage of refinement, which was carried out through subject analysis, which included reading the title, abstract, and analysis according to inclusion and exclusion criteria of the 3455 studies. In this process, the duplicate articles between databases and those repeated among the selected ones were identified, and the definitive selection of the references eligible for reading in full was made. Of these, those that explicitly did not meet the scope of this research were excluded, resulting in 149 studies. The second stage of the refinement contemplated the reading of the articles in their entirety, carried out after the agreement of the two researchers, resulting in a total of 43 articles, which composed the final sample for the application of the inclusion and exclusion criteria. To facilitate the understanding of the article search and selection process, we used the flowchart of the Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA)16 (Figure 1).

To ensure the quality of these steps and to avoid selection bias, we adopted as a procedural strategy the double-checking of all studies by reviewers, who acted independently. The evaluation for inclusion or exclusion of studies had as parameters the previously established criteria and the guiding question.
To extract evidence, a sample characterization was performed with the help of a table prepared by the authors, extracting the variables: author/year/country; journal/database; objective/theoretical reference; design/sample/outcome; and level of evidence. Thus, the final sample was composed of 16 articles.

The primary studies were classified according to the level of evidence, according to the Oxford Center for Evidence-based Medicine classification, which establishes: 1A - systematic review of randomized controlled trials; 1B - randomized controlled trial with narrow confidence interval; 1C - all-or-nothing therapeutic outcomes; 2A - systematic review of cohort studies; 2B - cohort study (including lower-quality randomized clinical trial); 2C - observation of therapeutic outcomes or ecological studies; 3A - systematic review of case-control studies; 3B - case-control study; 4 - case report (including lower-quality cohort or case-control); 5 - expert opinion.17

After coding procedures, the information was organized by similarities and divergences, and was reduced and compiled electronically in a Microsoft Office Excel® version 2013 spreadsheet and validated by double typing to eliminate possible errors and ensure reliability. The results were interpreted by means of knowledge synthesis and the review was presented by means of tables and critical analysis of the primary studies.

RESULTS

In the present integrative review, 16 articles were analyzed. The process of identification, selection, eligibility and inclusion can be visualized in figure 1.
The results are presented below, containing the authors, year, journals, objective, design, and level of evidence (Table 3).

<table>
<thead>
<tr>
<th>Authors</th>
<th>Year</th>
<th>Journal</th>
<th>Objective</th>
<th>Design</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cordeiro et al.</td>
<td>2017</td>
<td>Journal of Nursing on line</td>
<td>To evaluate the knowledge and practices of school adolescents in relation to STDs/AIDS</td>
<td>Cross-sectional study with a quantitative approach</td>
<td>5</td>
</tr>
<tr>
<td>Dias et al.</td>
<td>2017</td>
<td>Baiana de Saúde Pública</td>
<td>To investigate the knowledge of adolescents from a public school</td>
<td>Descriptive, exploratory research of a quantitative nature</td>
<td>5</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Year</td>
<td>Journal</td>
<td>Objective</td>
<td>Study Design</td>
<td>Page</td>
</tr>
<tr>
<td>-------------------</td>
<td>------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>-----------------------</td>
<td>------</td>
</tr>
<tr>
<td>Friedrich et al.</td>
<td>2016</td>
<td>Brazilian Journal of Sexually Transmitted Diseases</td>
<td>To evaluate the level of knowledge of adolescents about human papillomavirus and promote the dissemination of information about prevention, transmission, and infection</td>
<td>Cross-sectional, multicenter study</td>
<td>5</td>
</tr>
<tr>
<td>Silva et al.</td>
<td>2016</td>
<td>Research Journal Care is Fundamental Online</td>
<td>To evaluate the knowledge of adolescents, students of a public school in the city of Natal/RN, about transmission, prevention, and risk behaviors in relation to STD/HIV/AIDS</td>
<td>Exploratory-descriptive study with a quantitative approach</td>
<td>5</td>
</tr>
<tr>
<td>Angelim et al.</td>
<td>2015</td>
<td>Nursing Journal of the Federal University of Santa Maria</td>
<td>To verify adolescent students' knowledge about HIV/AIDS</td>
<td>This is an exploratory-descriptive research with a quantitative approach</td>
<td>5</td>
</tr>
<tr>
<td>Corzo et al.</td>
<td>2015</td>
<td>Argentine Archives of Pediatrics</td>
<td>To determine the level of knowledge about the mechanisms of HIV transmission</td>
<td>Cross-sectional study</td>
<td>5</td>
</tr>
</tbody>
</table>
and known prevention strategies of students in the last four levels of Colombian high school (called grades 8, 9, 10 and 11) in schools located in poor areas of Bucaramanga.

Carvalho et al. 8 2015 Acta Paulista of Nursing To estimate the prevalence of signs and symptoms of sexually transmitted diseases and to verify the knowledge for these infections in adolescents and youth in an urban settlement Cross-sectional study 5

Sierra et al. 20 2012 Colombia Journal of Rehabilitation To determine the knowledge about HIV - AIDS and STDs in a group of undergraduates Descriptive study 5

Ramiro et al. 9 2011 Portuguese Journal of Public Health To develop attitudes and skills in young people, allowing them to feel informed and safe in their choices Not informed 5

Pinto; Pinheiro 2010 Journal of To describe the risk and Ethnographic study 5
<table>
<thead>
<tr>
<th>Authors</th>
<th>Year</th>
<th>Journal</th>
<th>Objective</th>
<th>Methodology</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brêtas et al.</td>
<td>2009</td>
<td>Acta Paulista of Nursing</td>
<td>To identify the level of knowledge of adolescents about the forms of transmission and prevention of STIs</td>
<td>Descriptive study</td>
<td>5</td>
</tr>
<tr>
<td>Rodriguez et al.</td>
<td>2007</td>
<td>Médica Electrónica</td>
<td>To investigate the knowledge of young people about sexually transmitted infections</td>
<td>Observational descriptive cross-sectional study</td>
<td>5</td>
</tr>
<tr>
<td>Romero et al.</td>
<td>2007</td>
<td>Brazilian Medical Association</td>
<td>To evaluate the knowledge about sexuality, contraceptive methods and sexually transmitted diseases (STDs) among rural and urban female adolescents from a public school</td>
<td>Cross-sectional study</td>
<td>5</td>
</tr>
<tr>
<td>Almeida et al.</td>
<td>2007</td>
<td>Nursing school of USP journal</td>
<td>To identify and compare the knowledge, attitudes and preventive behaviors on Acquired Immunodeficiency Syndrome (AIDS) of adolescents attending high school</td>
<td>Descriptive study</td>
<td>5</td>
</tr>
<tr>
<td>Authors</td>
<td>Year</td>
<td>Journal</td>
<td>Objective</td>
<td>Methodological Design</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
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<td>--------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>-----------------------</td>
<td></td>
</tr>
<tr>
<td>Gaspar et al.</td>
<td>2006</td>
<td><em>Psychology, Health &amp; Diseases</em></td>
<td>Understand and characterize the factors related to risk and factors related to protection and the scenarios involving the adolescent in the context of sexual behaviors, knowledge and attitudes towards HIV/AIDS in migrant adolescents, through the perspective of young people, parents and intervention technicians.</td>
<td>Quantitative and Qualitative</td>
<td></td>
</tr>
<tr>
<td>Torres et al.</td>
<td>1999</td>
<td><em>Latin American Journal of Nursing</em></td>
<td>To identify the knowledge and opinions of a group of adolescents about AIDS prevention.</td>
<td>Descriptive</td>
<td></td>
</tr>
</tbody>
</table>

The articles included in this integrative review varied in sample size and methodological design. Each of the research had limitations and the results of the studies should be interpreted considering the context, with findings representing specific populations that cannot be generalized.
The publications included in the review were mostly distributed in the LILACS database (43.75%), followed by the SciELO virtual library (37.5%). The studies were published between 1999 and 2017, however, most publications were concentrated in 2007 and 2015, with three studies each. As for the level of evidence, the studies were all concentrated on Level 5 (100%). Regarding the approach of the studies, 81.25% were characterized as quantitative.

It was evident in this study that knowledge about STIs among adolescents was unsatisfactory. The percentages of young people who were unaware of the signs and symptoms were even higher in relation to the lack of knowledge about the forms of infection.

Chart 4 shows the main doubts about STIs among adolescents. In 50% of the studies, doubts were pointed out by the adolescent public regarding knowledge about STIs.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Doubts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pinto; Pinheiro et al.18</td>
<td>Transmission Mode</td>
</tr>
<tr>
<td>Corzo et al.19</td>
<td>Transmission Mode</td>
</tr>
<tr>
<td></td>
<td>Prevention Mode</td>
</tr>
<tr>
<td>Sierra et al.20</td>
<td>Transmission Mode</td>
</tr>
<tr>
<td></td>
<td>Prevention Mode</td>
</tr>
<tr>
<td>Silva et al.21</td>
<td>Transmission Mode</td>
</tr>
<tr>
<td></td>
<td>Appearance</td>
</tr>
<tr>
<td>Dias et al.6</td>
<td>Prevention Mode</td>
</tr>
<tr>
<td>Almeida et al.22</td>
<td>Risk of Contagion</td>
</tr>
<tr>
<td>Carvalho et al.8</td>
<td>Signs and Symptoms</td>
</tr>
<tr>
<td>Brêtas et al.5</td>
<td>Transmission Mode</td>
</tr>
<tr>
<td></td>
<td>Signs and Symptoms</td>
</tr>
</tbody>
</table>

Chart 4 - Doubts of adolescents about STIs

It was found that the sexually transmitted infection of greatest evidence in the studies was that caused by the Human Immunodeficiency Virus (HIV).

As for the mode of transmission, it was noticeable that there is still poor knowledge regarding the transmission of HIV, and it is possible to find doubts about: being transmitted through saliva18, at the time of delivery19, through breastfeeding19-2, by mosquito bites19, through oral sex and during pregnancy21. Furthermore, in one
study it was evidenced that the adolescents did not know how to score or recognize
the modes of transmission of the following STIs: Syphilis, Gonorrhea, Genital Herpes,
Condyloma and AIDS.\\n
Regarding prevention, the following questions were highlighted: whether the
risk of HIV transmission from the pregnant woman to the fetus could be reduced with
special drugs, and whether the intrauterine device (IUD) and the diaphragm
prevent STIs.\\n
When it comes to appearance, it is observed that adolescents still question
whether a healthy-looking individual can be infected with HIV.\\n
Regarding the risk of infection, it was estimated that 38.5% of the adolescents
in urban areas and 34.5% of those living in non-urban areas had no knowledge about
the risks of contracting AIDS.\\n
About the signs and symptoms, high percentages of adolescents did not
recognize some of them, such as: inguinal lymphadenopathy, pain/latency when
urinating, genital pruritus, and abdominal pain as signs and symptoms of STIs.\\n
It is important to point out that although the studies have shown doubts on the
part of the adolescents, only one of them pointed out an educational action with the
purpose of solving them, conducted through informative classes, given after analyzing
the data. On the other hand, the others highlighted the importance of working on
the subject with this public.\\

The review identified the low level of evidence of primary studies. It is
noteworthy that the production of scientific knowledge is the basis for changes in
educational practice, besides being indispensable in assistance, enabling autonomy,
grounding of practice and safety in the work process.\\n
In the bibliographic survey, it was highlighted that adolescents had doubts
about STIs. The data points to the challenge and the need to work on sexual education
with this public, especially in the school environment, where most of them are. The
studies had a greater focus on HIV, and young people had limited knowledge
about the various STIs, relativizing a more specific knowledge for the infection cited.
The survey of young people’s knowledge about STIs, in school and non-school environments in different regions of Brazil, is essential. Taking into account that it is a heterogeneous country, and for presenting cultural differences and resulting in different profiles of knowledge on the same subject.24

Health education is a primordial aspect for health promotion, particularly with adolescents and youth. Studies have shown the importance of developing informative strategies on preventive health, sexuality and sex education as well as the effectiveness of promotion and health education on STIs for adolescents, applying strategies that are feasible and reproducible.25, since sexual practice has started early, with an average age of 14 years for both sexes.26-7

There are several important media that can disseminate information on the subject, among the media most cited by the study subjects as the main sources were television7,28, web27, school29-30, friends6,31 and their parents32. It is important to emphasize that the source of information must be reliable, and when the information about sexuality happens among friends, one of the main means used by young people, it can collaborate to the dissemination of information, sometimes incorrect, because it can arrive in a wrong way.6

It is also noteworthy that none of the records analyzed mentioned Hepatitis B, a sexually transmitted disease. A study conducted with 187 adolescents shows that 62.6% of them did not know how to prevent Hepatitis B, an infectious disease transmitted by a virus, and 88.2% did not know how the disease was transmitted. On the other hand, it is valid to point out, about the Human Papilloma Virus (HPV), that it needs to be recognized as an individual and public health problem, and that this way it is urgent to base the dialogue between knowledge about HPV and preventive practices, since if it is not exactly unknown, the understanding about it is insufficient or sometimes absent.33-4

Corroborating the findings of this study, a survey conducted with 265 adolescents aged between 12 and 19 years showed a higher knowledge about the mode of HIV transmission, where they mentioned the following forms of transmission: blood transfusion, sexual intercourse with a heterosexual partner, sharing needles, pregnancy, sharing razor blade and relationship with a homosexual partner. On the other hand, it was still noticeable deficiencies, even if in a smaller portion, since they
mentioned kissing (10.19%), the common use of toilets (8.68%), cutlery (4.15%), shaking hands (1.89%) and sharing ice cream (0.75%) as a means of transmission. \(^{35}\)

It was observed that the adolescents’ main questions were about how to get infected and the signs and symptoms of infections in general, which stands on the lines of the findings of this work.\(^{26}\)

Moving on to the mode of prevention, ways and modes of how to prevent something or something, knowledge tended to be higher, since young people were able to indicate that the IUD and the diaphragm were contraceptive methods. About STIs, not sharing syringes, coupled with care in blood transfusions were employed. It is important to emphasize that all these ways of prevention should be worked using the media.\(^{36}\)

Many adolescents knew that condoms are the best method of prevention, knew the importance and effectiveness of this method against STIs and agreed that they should be used in all sexual relations. However, there is still resistance in adopting it in sexual practices, because they do not like to use it, or because they often trust their partner and/or because of the occurrence of casual sex with random partners.\(^{37-8}\)

Regarding the mode of transmission, this was one of the most frequent doubts. In one study, 68.6% had low knowledge about the forms of protection and prevention, which leads us to think that adolescents not having knowledge of these forms end up becoming vulnerable to contracting and/or transmitting STIs.\(^{27}\)

The limitations of this study are the small number of studies on the investigated theme and the delimitation of texts in Portuguese, English, and Spanish.

**CONCLUSION**

Given the study carried out, it was possible to identify the most prevalent knowledge and doubts about Sexually Transmitted Infections. Furthermore, the results of this research indicated that adolescents had poor knowledge regarding the mode of transmission, prevention, identification of signs and symptoms and the risks of infection.

Regarding the source of information about the disease, it was evident the need to establish the importance of disseminating information on the subject, especially in schools, families, and the community, in order to plan interventions that provide the
participation of individuals in building their own health. However, it is a great challenge for the team, whether teachers or health professionals themselves, because talking about sex education is still a taboo.

Thus, this study can help nurses and/or other health professionals in the development of educational and clinical interventions in the prevention and control of these infections.

**CONTRIBUTIONS**

The study lists a series of contents that emphasize the need to address the issue for nursing, especially for better care with a scientific basis, where they can provide comprehensive care, not only focusing on infection, but in all aspects related to sexual vulnerability. In short, this study raises the need for better preparation in the formative journey of professional nurses, with educational strategies that discuss this topic during graduation to prepare them to address the issue with the adolescent audience.

**CLASH OF INTERESTS**

Nothing to declare.

**FINANCING**

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