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# Sexual education in adolescence: analysis of knowledge and behavior of schoolchildren

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**Abstract**: Encouraging early sexual initiation, misinformation about sexual health and inexperience to deal with feelings in affective relationships make adolescents more vulnerable to the acquisition of Sexually Transmitted Infections. It is relevant to provide correct information about sexuality in order to ensure safe and satisfactory practices among adolescents. This study aims to analyze the knowledge and behavior of school adolescents about sexual health. It was observed that 08 articles comprised the final sample of the study. There are still gaps related to the sex education methods used by schools, which use a biological vision to provide guidance to adolescents, impacting the low level of knowledge and the adoption of risky practices and behaviors for acquiring Sexually Transmitted Infections and for teenage pregnancy.

Keywords: Promotion to health in the school environment; Sexuality; Teenager's health

#### 1. Introduction

The disease comprises the transformation of the



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young to adulthood, encompassing changes in the biological, social and psychological spheres and being characterized as a phase of intense discoveries that impact on the personality and individuality of human beings (BALDOÍNO *et al.*, 2018; FERREIRA *et al.*, 2018; OLIVEIRA *et al.*, 2009).

According to the World Health Organization (WHO), 17.5% of the world's inhabiting people are adolescents. In Brazil, this group represents 21.7% of the population (FERREIRA *et al.*, 2018; RCANJO *et al.*, 2007). The implementation of specific policies for this segment becomes a necessity. Understanding the juvenile situation becomes increasingly necessary in the structuring of political especially in the health area (FERREIRA *et al.*, 2018; CASTRO *et al.*, 2017).

Sexuality has always been seen as a forbidden theme throughout the ages, surrounded by labels and stigmas, and this information is transmitted through the familiar generations, from their valor's, beliefs, myths and customs, that is, sexuality is the product of the influence of the social environment, having its values ingrained by this society (CASTRO *et al.*, 2017).

The hormonal transformations inherent to adolescence lead to the exacerbation of sexuality in this phase of life (FERREIRA, 2017). The stimulation of early sexual initiation, through the eroticization of the disease, the fragile preparation and misinformation about sexual health and the inexperience and lack of responsibility and skills to deal with feelings in affective relationships make adolescents more vulnerable to the acquisition of Sexually Transmitted Infections (STIs) (OLIVEIRA et al., 2009).

STIs can be transmitted during the first sexual experiences, especially in uninformed young people with no psychological preparation (FERREIRA, 2017; OLIVEIRA et al., 2009). In this context, it is relevant to provide correct information about sexuality in order to ensure safe and satisfactory practices among adolescents, with the guarantee of protagonist in the affective-sexual and reproductive field, especially to those who are in school, aiming at critical and reflective discussions, with the participation of parents and teachers (FERREIRA et al., 2018; SOUZA et al., 2017).

The Law of Guidelines and Bases of National Education, in 1996, determined as a function of elementary and high schools the transversal approach of sexual orientation in the National Curriculum Parameters (PCN) as a strategy for providing integral information related to sexuality (SOUZA *et al.*, 2017).

In addition, the School Health Program (PSE) also provides for sexual education as a priority axis directed to adolescents (SOUZA *et al.*, 2017). Nurses should use health promotion in order to form and develop new behaviors in this group, making them more critical and conscient and self-care methods (BALDOÍNO *et al.*, 2018).

However, even in view of the information presented, there are several obstacles directed to sexual education in adolescence with a vertical approach to the contents and incompatible with the reality of this public, expanding the susceptibility to the acquisition of STIs (SOUZA *et al.*, 2017).

From this perspective, this study aimed to analyze the knowledge and behavior of school adolescents about sexual health.

### 2. Methodology

This was an integrative review, a type of study that aims to determine the current knowledge on a specific theme, synthesizing results obtained on a theme, in a systematic, orderly and comprehensive way (ERCOLE *et al.*, 2014).

The study was based on the following guide question: What is the national scientific production on the aspects related to the knowledge and behavior of school adolescents about sexual health?

The search for literature took place in the Virtual Health Library (VHL) in December 2019. The databases consulted were: Latin American and Caribbean Literature on Health Sciences (LILACS), Scientific Electronic Library Online (SciELO) and Nursing Database (BDENF). The descriptors were selected from the health terminology consulted in the Descriptors in Health Sciences (DECS-BIREME); they are: "Health promotion in the school environment", "Sexuality" and "Adolescent health".

The inclusion criteria established were: articles published from 2009 to 2019, in Portuguese, with full text available, in lilacs, slightly and been databases and which related to the issues related to the guide question. Exclusion criteria were: articles that were included in more than one of the databases included in the study or on databases not mentioned in the inclusion criteria, incomplete articles, articles in other languages and public articles published outside the mentioned period.

A framework was created to facilitate the analysis of articles with the description of the year of publication, authors, title, method and evidence. Regarding the aspects of the knowledge and behavioral adolescents and students about sexual health, the analysis was made in a qualitative way, with synthesis of the data for the formation of the following categories: level of knowledge of students on aspects of sexuality and with sexual risk.

#### 3. Results and Discussion

Thirty-three publications were identified from the search in the databases. The selective and exploratory reading of titles and abstracts was carried out, followed by the reading of the articles in full. Subsequently, 08 articles were established as the final sample because they were considering all inclusion criteria. Table 1 points out the selected articles for the sample.

**Table 1.** Selected articles on aspects of knowledge and behavior of school adolescents on sexual health second year, periodic, authors, title, method and evidence of the study (Vitória de Santo Antão, 2019).

Year	Journal of publication	Authors	Title	Method	Evidence
2018	UFPE	Baldoino	Health	Descriptiv	Need for

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	Online Nursing Journal	et al.	education for adolescen ts in the school context: an experienc e report	e study/ Experienc e report	increased sexual education actions in schools
2018	Cogitare Nursing	Ferreira et al.	Adolesce nts in the school space and knowledg e about sexual and reproducti ve health	Descriptiv e, explorator y, qualitativ e study	Lack of cross- sectional and intersecto ral approach in sexual education actions in schools
2017	REME - Minas Gerais Nursing Journal	Souza et al.	Knowledg e, experienc es and beliefs in the sexual field: a study with high school students with differentia ted socioecon omic profiles	Cross- sectional, descriptiv e and analytical investigati on, with convenien ce sampling	Need for education al actions more directed to the practical knowledg e of daily life and the understan ding of adolescen ts
2017	UFPE On Line Nursing Journal	Lamb et al.	School adolescen ts about STD/AID S: when knowledg e does not follow safe practices	Cross- sectional study, quantitati ve approach	Low students' knowledg e about aspects related to sexuality
2017	UFPE On Line Nursing Journal	Castro et al.	Sociodem ographic profile and sexual behavior of school adolescen ts	Cross- sectional study, quantitati ve approach	Working with sexual behavior and practices among adolescen ts requires

					a cross- sectional approach
2017	Journal of Nursing and Health Care - UFTM	Piccin et al.	Adolescer project: promoting health education with adolescen ts from a municipal school	Experienc e report	Need for more education al actions on sexuality to facilitate behavior change
2015	REME - Minas Gerais Nursing Journal	Silva et al.	Sexual behavior of school adolescen ts	Descriptiv e cross- sectional study	Adolesce nt attitudes put their sexual health at risk
2009	Anna Nery- Journal of Nursing	Oliveira et al.	Knowledg e and practices of adolescen ts about STD/HIV /AIDS in two municipal public schools in Rio de Janeiro	Quantitati ve study.	Adolesce nts' knowledg e deficit about aspects related to sexuality

Source: The authors

## 3.1. Level of knowledge of schoolchildren about aspects of sexuality

A study conducted in three state high schools in the city of Macapá (AM) showed that the notions of knowledge related to sexuality among adolescents were associated with the sexual act itself, the protection against pregnancy, prevention of STIs and sexual orientation (FERREIRA *et al.*, 2018). There was a lack of transversality in the conduction of the guidelines by the schools, contrasting with the proposition of the NPS (FERREIRA *et al.*, 2018).

In an experience report of the project 'Young antennae', carried out in a public school in the municipality of Timon (MA), it was concluded that the absence of knowledge of adolescents about sexuality associated with low and inadequate information about contraceptive methods are factors that increase the risk of acquiring STIs (BALDOÍNO et al., 2018). Lamb et al. (2017) corroborates the findings of this study, showing that most adolescents have inadequate

4 Santos, E.V.S.; Nascimento, L.V.A.; Nunes, K.G.; Aguiar, N.C.S.; Silva, E.R.; Melo, J.D.L.; Silva, S.C.S.P; Xavier, L.N.; Oliveira, M.B.; Santos, M.J.L.; Lima, M.S.A. Sexual education in adolescence: analysis of knowledge and behavior of schoolchildren...

general knowledge regarding STIs.

In a study developed by Souza *et al.* (2017), in three schools in the city of Belo Horizonte (MG), the knowledge of adolescent students about the parts and functions of the male and female external genital organs was demonstrated. It was found that the most identified structures in the male genital were the pubis and the testicle and in the female genital organ the pubis and clitoris. The small lips, large lips and vaginal canal were, in this order, the parts of the female external genital with more difficulty identifying by the students. The authors also pointed out that students with better socioeconomic profile and with school parents had greater knowledge about this content.

Male condoms were the contraceptive method best known by adolescents from the three schools of Belo Horizonte (MG), followed by the contraceptive pill and intrauterine device (IUD) (SOUZA *et al.*, 2017). In the study developed by Oliveira *et al.* (2009), with 753 adolescents enrolled in two public schools in Rio de Janeiro (RJ), 98.8% of the adolescents pointed to condoms as the most well-known contraceptive method, a finding in agreement with the study by Souza *et al.* (2017).

Baldoino *et al.* (2018) observed that boys showed greater knowledge regarding the use of male condoms when compared to girls. In addition, few students knew of the existence of the female condom. Piccin *et al.* (2017) also pointed out that most participants reported knowing the male condom, but did not know how to use the female condom. Even with two decades of the emergence of female condoms, the guidelines on its use are little addressed by educational institutions in Brazil (SOUZA *et al.*, 2017).

Ferreira *et al.* (2018) also showed that adolescents had little knowledge about the use of condoms. In addition, the authors emphasized low knowledge about reproductive cycles, pregnancy in adolescence and gender orientation.

A quantitative and descriptive survey study conducted in two public schools in Rio de Janeiro (RJ) indicated a lack of knowledge about contraceptive methods and forms of prevention of STIs. A significant portion of adolescent students considered the diaphragm as a method of prevention of STIs. In addition, 10.8% of this sample reported that oral contraceptives prevent these infections. A lower percentage of adolescents associated this function with interrupted intercourse (5.7%), spermicide gel (4.9%) and table (4.0%), evidencing the need for sexual education actions regarding the forms of prevention of sexually transmitted infections and contraceptive methods (OLIVEIRA *et al.*, 2009).

Souza *et al.* (2018) also pointed out the need for investments in educational practices that include less popular contraceptive methods, emphasizing the characteristics, efficacy, advantages and disadvantages of each method.

The main infections identified as likely to be acquired by sexual contact were acquired, acquired immunodeficiency syndrome (AIDS), genital herpes, syphilis and gonorrhea stood out. Low knowledge of adolescent students was observed about urethritis, trichomoniasis, hepatitis B, candidiasis and human papillomavirus (SOUZA *et al.*, 2017).

The knowledge about the main forms of transmission of STIs was expressive for students from the three schools of Belo Horizonte (MG). However, it is important to highlight the low percentage of students who consider dyspareunia and the wound or lesion in the mouth as possible symptoms and signs of STIs (SOUZA *et al.*, 2017).

#### 3.2. Risky sexual behavior

A cross-sectional, descriptive and analytical study conducted in three schools in Belo Horizonte (MG) showed that the sexual initiation of the adolescents in the sample occurred, respectively, with a mean age of 16.25, 16.52 and 15.91 years for the students of the schools (SOUZA *et al.*, 2017). The authors showed that the best educational level and socioeconomic conditions impact on the increase in coitarche and that it has a direct association with the greater use of condoms in sexual relations, in both sexes.

Study developed by Cordeiro *et al.* (2017) with 140 adolescents from the public school system of the City of Parelhas (RN) showed the searched between 12 and 17 years, with predominance of the age group of 14 years. This finding is compatible with a study developed in all state schools in the municipality of Diamantina (MG) where the average coitarche was 14.1 and the average number of partners throughout life was 3.6 individuals (SILVA *et al.*, 2015).

Regarding the use of condoms in the first sexual intercourse, 56.6% reported having used condoms, however among adolescents with active sexual life in the last six months, only 26.42% claimed condom use (CORDEIRO *et al.*, 2017). Silva *et al.* (2015) also observed low frequency of condom use in vaginal relationships with only 28.5% of adolescents claiming continuous use of the method.

The study also pointed out a higher proportion of adolescents opting for sexual practices with fixed partners, however, without the use of condoms (CORDEIRO *et al.*, 2017).

Data from the study developed by Oliveira *et al.* (2009), with adolescents from two public schools in Rio de Janeiro (RJ), also reveal a high percentage of non-use or eventual use of condoms (43.49%), increasing vulnerability to the acquisition of STIs. There was a discrepancy between the number of young people with knowledge about the importance of using condoms as a preventive method and low support regarding its use in sexual relations.

Oliveira *et al.* (2009) also highlight the differences in gender regarding condom use. The authors observed that female adolescents have difficulty in requesting condom use for their partner, believing that this request can be understood as a distrust related to infidelity, characterizing a relationship of subordination. Male adolescents relate non-use to decreased sexual pleasure.

Castro *et al.* (2017), in a study conducted with 674 high school adolescents from public schools in the state of Recife, PE, analyzed the interpersonal relationship of adolescents with their parents with regard to dialogue about sex. The authors observed differences in relationships with parents, with a high percentage of dialogue with boys, when compared to girls. All

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the young people in the sample claimed discomfort to talk about feelings related to sexuality with the father figure.

Piccin *et al.* (2017), in an experience report of the Extension project "Adolescer", in a public school of the municipal network of Santa Maria (RS), showed that the adolescents did not dialogue about sexuality with their parents out of shame, fear of labels and misinterpretations.

#### 4. Conclusions

The findings of the study showed that there are still gaps related to the methods of sexual education used by schools, which use a purely biological view to provide guidance to adolescents, impacting on the low level of knowledge and the adoption of practices and risk behaviors for the acquisition of STIs and pregnancy in the adolescent. The school should perform a high impact work in the construction of self-care by adolescents, however, it is observed that institutions work little on sexual education, a conduct that is far from the transversality proposed by the PCN.

It is essential to expand the actions of sexual health promotion with investments of the various actors that permeate adolescents covering parents, media, family health teams, schools and others. In addition, the guidelines should be guided by the contextualization of each adolescent, respecting their specificities and enabling awareness about the need to adoption of safe sexual practices.

This study contributed to support sexual health policies aimed at adolescents, in the school environment, in an attempt to improve the level of health quality of this population segment, with an impact on reducing the risk of acquiring STIs and the incidence of teenage pregnancy.

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