Sexually Transmitted Diseases: what adolescents know

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Abstract: Sexually transmitted infections (STIs) are a worldwide public health problem. The literature includes more than 30 sat-causing agents that can be classified as fungi, viruses and bacteria that can cause symptoms such as itching or even cause infertility or death. The objective of this study was to evaluate the level of knowledge of adolescents about sexually transmitted infections. A quantitative research was conducted through a questionnaire to assess the level of knowledge of adolescents from public schools in the city of Vitória de Santo Antão- PE (Brazil). Most adolescents knew the meaning of the acronym STIs (80%), 74% said they knew of some sexually transmitted infection, 70% of the participants reported that the school did some kind of activity related to the prevention of STIs.

Keywords: Adolescents; Health education; Sexually transmitted infections.

1. Introduction

Sexually transmitted infections (STIs) are caused by fungi, bacteria and viruses, which are transmitted by sexual contact, without the use of female or male condoms, verticals transmission, syringe sharing or contact with contaminated blood. In the literature there are more than 30 agents that can cause these infections, being a worldwide public health problem. Some types of infections are curable, such as gonorrhea, while others are not, such as human immunodeficiency virus (HIV), which causes acquired immunodeficiency syndrome (AIDS) (BARBOSA *et al* 2019; BRAZIL, 2020; CRUZ *et al*, 2018; MUNIZ *et al.*, 2020; SILVA, BARBOSA, 2018).

According to the World Health Organization (WHO) about 1 million people contract a curable STIs per day. According to the HIV/AIDS epidemiological bulletin of the Brazilian Ministry of Health, approximately 342,459 cases of HIV infection were reported from 2007 to June 2020 throughout Brazil. Where the male sex is highlighted as the predominant sex of cases, still presenting an increase in cases in the age group from 15 to 19 years. In those over 13 years of age, males with 51.6% of those infected stands out, with exposure due to homosexual or bisexual exposure, (BRASIL,

2020; WORLD HEALTH ORGANIZATION, 2016).

Syphilis, which has as an etiological agent a bacterium called *Treponema pallidum*, and stands out with an increase in transmission in all age groups. From 2010 to June 2020, 783 were detected. 544 cases of syphilis acquired in Brazil. There are reports of syphilis since the fifteenth century, being a systemic disease, which is almost silent, but has as one of the first signs a wound in the area where the entry of the bacterium occurred, usually in the genital area that disappears in a few days, also causes body stains even death for having degrees of severity, and may reach visceral organs, this STI is curable if treated at the beginning of symptoms (AVELLEIRA and BOTTINO, 2006; BRAZIL, 2010; BRAZIL, 2020).

According to the WHO, about 357 million cases of curable STIs are diagnosed annually in people aged 15 to 49 years. Trichomoniasis, gonorrhea and chlamydia are curable STIs. Among the clinical signs, they cause genital lesions and urethral and vaginal discharge, in addition to causing pelvic inflammatory disease and can even cause infertility (WORLD HEALTH ORGANIZATION, 2016).

The school is an environment of importance for children and adolescents, it is a place where the first experiences in the social sphere take place. Thus, the school should not be used only as a basic education environment,

but where this adolescent and child can have a lifelong learning. Among the various issues that should be addressed in schools, health education stands out. This approach is based on simple measures that provide an improvement in quality of life with the change of daily habits. Sexually transmitted infections are a risk for the entire population, especially for those vulnerable to information, knowing how to prevent and how to recognize symptoms is important information that every person should know. In view of the above, the objective of this study was to evaluate through a quantitative questionnaire the level of knowledge about STIs of elementary school students from Pernambuco, Brazil (ATALIBA; MOURÃO, 2018, RAMOS; ARAUJO, 2020, SILVA; FERREIRA, 2014).

2. Methodology

This is a cross-sectional, descriptive study using a quantitative approach. Held in state schools in the municipality of Vitória de Santo Antão-Pernambuco, Brazil. A total of 86 adolescents who were attending high school participated in this study in 2019 and 2020. The project was approved by the ethics committee, registered under the number CAAE: 17785319.3.0000.9227. Those responsible for the underage participants signed a free and informed consent form.

Data were collected through questionnaires specifically constructed to measure the degree of previous knowledge of these adolescents. The data extracted from the questionnaires were stored for analysis on the Microsoft Excel platform. After data analysis of the questionnaires, an explanatory lecture was held to elucidate the main doubts or lack of knowledge of the students about the STIs. To explain the subjects, didactic games, group dynamics and distribution of pamphlets and explanation with informative posters were used.

3. Results and Discussion

The study was conducted with the participation of 86 young people and adolescents, 88% aged between 15 and 18 years and 12% over 18 years, who were attending high school. A total of 61% of the participants were female and 39% male. About 80% of the participants said they knew the meaning of the acronym IST, while only 13% said they did not know the acronym. In our study, 80% of the adolescents reported knowing some STIs, however in Sousa et al. (2017) only 46.42% said they knew of some STIs.

In the study by Cruz et al. (2018), adolescents demonstrated the need and interest of higher frequency of classes related to the theme of sexuality (54.7%), in contrast, in our study, the majority (70%) reports that the school does activities related to the prevention of STIs. Carvalho, Pinto and Santos (2018) conducted a study in public schools in the city of Caxias-MA, in which 87.7% of the adolescents who participated in the research know the STIs, and also demonstrated that 51.8% received information about STIs in school, which shows that the school plays a fundamental role in assisting adolescents in the perception of different subjects, including sex education. According to Ataliba and Mourão

(2018) the school is a place that serves as a space for the development of actions that cause reflection and participation. The school has the role of providing information that leads to the formation of intellectual and moral character, it is also a place where the social insertion of the child and later the adolescent occurs. The school is also related to knowledge of different ethnicities, religions and cultures (SILVA; FERREIRA, 2014).

According to the present study, it was possible to observe that among the sexually transmitted infections presented (Figure 1-A), hpv (68%), gonorrhea (60%) and candidiasis (50%), which are the best known among adolescents. HPV (Human Papilloma virus) has the vaccine for its prevention, which potentially reduces the burden of cervical disease and precursor lesions, being made available through the SUS (Unified Health System), exclusively for adolescents, but does not provide protection for other STIs, and therefore requires the use of condoms (BRASIL, 2014).

Figure 1. Questions of the research conducted with adolescents/young people from basic education in Pernambuco, Brazil.

Legend: A- What sexually transmitted infection have you heard of? B- Do you know diagnostic tests for STIs? C - Is HIV/AIDS a type of STIs? D- From what source do you inform yourself about sexuality?

Education for sexual health and reproductive health favors the development and knowledge of adolescents so that they can have positive and healthy attitudes in sexual life (BRASIL, 2018). As figure 1-B shows, most adolescents (62%) they do not know the diagnostic tests for STIs, which demonstrates how important the intensification of attention and care for adolescent health in relation to sexual education and infections that can occur from sexual practices in an unprotected manner becomes.

As an example of infections that occur due to carelessness, such as not using preventive methods, one can speak of HIV, an infection that affects mostly young people and adolescents aged 15 to 24 years (BRASIL, 2006). Within the collected data (figure 1-C) it can be analyzed that most adolescents (90%) has the understanding and knowledge that HIV is an STIs, but still a considerable number of about 6% do not recognize HIV being with STIs, making it important to consider self-care, health care, dialogue about STIs, their definitions and diagnoses, which will offer not only to adolescents, but to so many others the opportunity for educational reinforcement in prevention and treatment for

those who come to discover some STIs (BRASIL, 2006).

In the present study, 50% stated that they are informed about sexuality on the Internet, 47% report to school and 38% to family (Figure 1-D). Similar results were found in the work developed by Carvalho, Pinto and Santos (2018), in which 51.8% had the school as a source of information; also, in Sousa et al. (2017) 46.79% of the participants stated that the source of information is in the school. According to Marola, Sanchez and Cardoso (2011), 40.7% said that they seek information about sexuality on the Internet. This research on the Internet is due to the need to quench curiosities without the weight of judgment, leading the young person to sometimes consider incorrect information as true, which leads to increased transmission of STIs.

Regarding knowledge about contraceptives, 62% stated that these drugs do not protect against STIs. In the present study, 93% of the participating students reported knowing the male and female condoms. While 89% stated that the method of preventing STIs is through the use of condoms in all sexual intercourse. Similar results were found in Carvalho, Pinto and Santos (2018) where 91.8% also stated that condoms should be used in all sexual relations. The majority of participants, 66% said they had never participated in a school project on STIs and 93% showed interest in receiving more information about STIs through school activities. These data demonstrate that the school is a place of reception and multidisciplinary learning where not only curricular subjects should be addressed, but also issues that lead to social well-being and disease prevention.

4. Conclusions

The adolescents participating in the research have previous information related to sexuality and prevention of STIs, especially the majority who know the male and female condoms. It can also be highlighted that the greatest source of search for information on this theme is the Internet, this is a consequence of the advancement of the digital age, in which the world has faced a new pattern of relationship and social communication. Information taken from the internet may be wrong, as it can be written by people who do not have the competence to write about certain subjects. Another problem in seeking information on the Internet is fake news that can generate errors that compromise the physical integrity of this adolescent - In addition it is important to point out that 93% of participants said they were interested in receiving more information about STIs through school projects, which demonstrates the importance of health education in the school environment as a form of health promotion.

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