

## Educational action as a care technology aimed at raising awareness of Sexually Transmitted Infections for Adolescents

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**Keywords—** Reproductive Health Services, Sexual and Reproductive Health, Adolescent Health, Health Care, Preventive Health Services.

**Abstract—** Objective: report an experience regarding the development of an educational action on Sexually Transmitted Infections (STIs) for high school students from a public school in Belém (PA) – Brazil. Method: A descriptive research, an experience report type, was carried out by nursing and medical academics from a Private Teaching Institution, aimed at 61 high school teenagers from a public school in Belém, which was subdivided into three moments, the first related to the orientation of the theme and organization of materials for the dynamics, the second referring to a lecture on the most prevalent STIs and the third regarding the use of the didactic resource. Results: it was clearly perceived their unawareness on the part of numerous infections demonstrated. In addition, they were focused and participative, having presented relevant doubts that were resolved shortly after the lecture was presented. The educational game presented to the participants allowed a dynamic consolidation of the knowledge previously exposed, based on a methodology of memorization and repetition to fix the subjects. Conclusion: The educational action allowed to develop a process of reflection on the observed reality, realizing the need to lead adolescents to a new knowledge about sexuality and demystifying erroneous ideas, favoring the empowerment of young people regarding infections.

## I. INTRODUCTION

Sexually transmitted infections (STIs) are infectious diseases caused by bacteria, viruses or other microorganisms, transmitted by sexual contact (vaginal, anal and / or oral) without using a condom with an infected individual. In addition, there is a strong relationship between individuals with mental health, violence, sexual behavior and substance use (Shannon, CL & Klausner, JD, 2018).

Diseases arising from STIs have been a global phenomenon, currently presenting themselves as one of the most significant public health problems, due to their high severity and prevalence. Studies report that more than 1 million individuals get an STI daily and it is estimated that, each year, 500 million people acquire one of the curable STIs (syphilis, gonorrhea, chlamydia and trichomoniasis) (Moura, SLO, et al, 2021).

Infections can be recognized through common signs and symptoms, which constitute the syndromic diagnoses that commonly manifest themselves through genital ulcers, vaginal and urethral discharge, discomfort or pelvic pain, and verrucous lesions. In this way, the affected individual is often embarrassed by such symptoms, and they often do not perform adequate prevention (Steiner, R.J, et al, 2019).

The systems for sharing information from the use of the Internet have increased in search of advice on the diagnosis of STIs. There is a large participation of social media to increase the engagement of individuals, including the

acceptance of individuals to perform STI tests (Tucker, JD, et al, 2020).

In principle, these infections happen in specific groups of the community, however, a deviation in the dynamics of incidence has been attempted, where young people start to have emphasis, being responsible for most of the occurrences nowadays. Studies have confirmed that the number of adolescents infected with STIs has increased in recent years, confirming the need to understand the behavior of this group so that comprehensive actions between health and education can be planned to interfere in this reality (Oliveira, L, 2015).

According to the World Health Organization (WHO), adolescence is the period between 10 and 19 years old - it is the phase of human development that marks the transition between childhood and adulthood. It is characterized by changes at the physical, psychological and social levels, and it is in this phase that the discovery of sexuality, knowledge of your body, and the search for pleasure occurs (Moura, SLO, et al, 2021).

Sexual relations in adolescence have started at an increasingly early age, stimulated by curiosity and reinforced by the need to declare their autonomy. Thus, the sexual practices of this population start without adequate knowledge and necessary guidance regarding the sexual act in a safe manner, which makes them an easy target for STI involvement (Oliveira, L, 2015).

The youth population has low adherence to the main infection prevention device, which is the condom. This is easily acquired and made available free of charge by health services, however, there is often resistance to adopt it in sexual practices, due to the aversion to its use, trust in the partner, lack of knowledge about its purpose and benefits (Passos, TS, et al, 2017).

In this context, the school environment is essential for guiding an adequate sexual life and educational activities must be carried out for this group, because the school is characterized as a space of commitment and social responsibility, open to the most varied types of dialogues and discussions. Thus, studies prove that the school is a favorable space for the dissemination of sexual education and, through the health education actions implemented, the school can interact directly with students (Ramos, FBP, et al, 2019).

Health education is a fundamental aspect in the prevention and treatment of sexually transmitted infections, and it is very important that health professionals advise patients on the relevance of the use of condoms related to the prevention of these infections (Passos, TS, et al, 2017).

## II. METHOD

In this sense, the present work aims to report an experience regarding the development of an educational action on STIs for high school students from a public school in Belém (PA), Brazil.

A descriptive research, an experience report type, was carried out by nursing and medical students from a Private Educational Institution, which took place on November 18, 2019. The target audience was high school teenagers from a state school in Belém (PA), where they were 61, divided into 36 men and 25 women, in a prevalent age group between 15 and 17 years old.

In this way, the work was organized by students and professors in the field of care, including medical and nursing students and 1 nurse, thus elaborating the educational action in three moments, where it was necessary to direct the adolescents to a room that would allow the realization of a dynamic and an educational lecture.

In the first moment, there was a meeting to plan activities and build intermediary didactic materials and, subsequently, to carry out STI prevention awareness and awareness activities. Thus, during an organization stage considered as characteristics of the target audience, adolescents, for an approach more directed to the context of vulnerabilities.

In the second moment, a lecture was held on the most common STIs - such as HIV (Human Immunodeficiency

Virus)/AIDS (Acquired Immunodeficiency Syndrome), HPV (Human Papillomavirus), Chlamydia, Gonorrhea, Syphilis, Hepatitis B and C, among others. In this sense, the most frequently present factors were presented, including epidemiology, clinical aspects, recommended treatment, and prophylactic measures, with emphasis on the latter aspect due to the possibilities of controlling related morbidity and mortality.

In the third moment, a didactic resource directed to the reality of the participants developed by the organizers was used, entitled "Memory game", an easily understood technology organized in 20 pairs of cardboard cutouts that contained images and concepts on the previously discussed subject, so that students could recognize the figures and relate to the respective concepts.

The purpose of the game was to encourage understanding through a playful resource, thus making the environment more attractive for the activity, in addition to serving as motivation and stimulus for learning, given the greater assimilation of the information passed on during the playful dynamics.

## III. RESULTS AND DISCUSSION

During the initial presentation of the STIs to the students of the institution, it was noticed their lack of knowledge on the part of numerous infections demonstrated, referring to prevention measures, drugs currently used, more frequent and rapid diagnostic methods, and clinical signs which were not so clear, even with a piece of certain knowledge about the subject addressed.

According to Shannon, CL & Klausner, JD (2018), sexually transmitted infections are a growing concern among young people, with routine screening and treatment being essential points for the control of comorbidities. Therefore, priority should be given to preventive work, such as vaccination against Human Papillomavirus. Many current STI literature does not address the uniqueness of sexually transmitted diseases in adolescents, so there is an urgent need for additional research on effective strategies for the prevention and treatment of sexually transmitted diseases for adolescents.

Also, it was found that they were focused and participatory, having presented relevant doubts that were resolved shortly after the presentation of the lecture. It is worth noting that accessible terms to the age group and the level of scientific knowledge were used, allowing for an easier understanding of the subjects exposed, also favoring the elaboration of questions by the participants as the subject was presented in the dynamics.

According to Fisher, CB, et al (2018), more than half of young people are concerned about reporting their sexual orientation to providers because of fear of heterosexist prejudice, that their sexual health information is released to parents, and generally believe that young people from sexual minorities are not treated fairly and avoid communicating with service providers about sexual orientation and sexual health issues.

In addition, Ramos, FBP, et al (2019) emphasize, in a study on knowledge and preventive measures conducted with public school adolescents, the importance of discussing, debating, and emphasizing sexually transmitted infections in a clear and objective way. It was found that adolescents knew about the male condom, but did not know how to use it, in addition to not using it frequently. This highlights the need for educational actions aimed at young people, which can take the form of dialogue and action more attractive and conducive to the use of condoms during sexual relations.

Thus, the educational game presented to the participants allowed them to present, in a playful way, a dynamic consolidation of the knowledge previously exposed, using a methodology of memorization and repetition to fix the subjects. The students ensured the fixation of fundamental subjects such as serological exams, more frequent signs and symptoms, and, mainly, the prophylactic measures to prevent infections.

For Passos, TS, et al (2017), one of the fundamental themes for carrying out critical and reflective educational activities is the prevention of Sexually Transmitted Infections, mainly because more than 1 million people worldwide are infected with some STI all days, so it becomes very important to expand the organization of the prevention space, which includes posters and folders explaining about infections, preventive measures, lubricants and condoms for men and women in order to raise awareness of the people belonging to that community on the topic.

According to Ramos, FBP, et al (2019), the integration between education and health enables the formulation of action plans and activities with the population in the development of prevention goals. Health students are group information that has the ability to empower themselves on the subject and to improve their skills and guide the population, especially young people, on the importance of preventing, diagnosing STIs early.

According to Steiner, R.J, et al (2019), adolescence is recognized as a period of fundamental development in the formation of the personal trajectory until adulthood. During adolescence, many young people engage in risky behaviors or experience adverse events that lead to adverse health

outcomes and reduced life opportunities. However, according to Salas-Wright, C. P., et al (2019) the participation of young people in programs to prevent health risk behaviors may be decreasing, compromising the control of new STI cases.

In addition, it is worth noting the presence of cyber sexual harassment among adolescents and its consequences on interpersonal relationships. In a study by Reed, E, et al (2019) at a health clinic in a low-income urban area in southeastern San Diego County, California, it was found that, in some subgroups, cyber sexual harassment appears to be affecting most girls, resulting in cases of depression and anxiety when exposed victims.

For Weisman, J, et al (2020), adolescents who report high-risk sexual behaviors are less likely to identify primary care physicians and are more inclined to adopt emergency care and visited the Emergency Room more often. However, in these cases, asymptomatic young people rarely took tests or reported their sexual histories, thus missing opportunities to examine high-risk adolescents who may not have access to preventive care.

In conformity with Oliveira, L (2015), the interaction between academics and the population can prove that the university, through health education, can positively impact the exchange of values in the community. Thus, for health promotion to effectively take place with the instrumentalization of health education, in addition to understanding the theme, concepts, and aspects it covers, it is essential to associate this practice with communication, information, continuity, education, and qualified listening.

#### IV. CONCLUSION

It was observed that it is necessary to alert adolescents more about the care they should take in relation to reproductive health in adolescence. It is essential to build critical knowledge of young people in relation to their health, favoring them the promotion of autonomy to take care of themselves, making them responsible for preserving their health and preventing STIs.

In this context, it is noted that for this to occur, it is necessary to disseminate information to improve knowledge, with educational activities being the most appropriate tool for health promotion and disease prevention. Through educational activities, there was a significant contribution for people to acquire autonomy to identify and apply the means and ways to care for and improve their quality of life.

The educational action allowed to develop a process of reflection on the observed reality, realizing the need to lead adolescents to new knowledge about sexuality and to

demystify erroneous ideas. Thus, health education is fundamental and indispensable because it enables the community to acquire knowledge that promotes adolescents' autonomy and empowerment over sexually transmitted infections.

- [11] Passos, T. S., Hora, A. B., Paixão, A. L. S. S., Santos, J., Santos, M. A. A., Oliveira, C. C. C. (2017). Health education for prevention of sexually transmitted diseases in Quilombola communities, 11(10):3965-70, 3965 -3970. 10.5205/reuol.12834-30982-1-SM.1110201734

## REFERENCES

- [1] Tucker, J. D., Shields, K., & Villa, G. (2020). STI perspectives. Sexually transmitted infections, 96(4), 313–314. <https://doi.org/10.1136/sextrans-2019-054272>.
- [2] Shannon, C. L., & Klausner, J. D. (2018). The growing epidemic of sexually transmitted infections in adolescents: a neglected population. Current opinion in pediatrics, 30(1), 137–143. <https://doi.org/10.1097/MOP.0000000000000578>.
- [3] Steiner, R. J., Sheremenko, G., Lesesne, C., Dittus, P. J., Sieving, R. E., & Ethier, K. A. (2019). Adolescent Connectedness and Adult Health Outcomes. Pediatrics, 144(1), e20183766. <https://doi.org/10.1542/peds.2018-3766>.
- [4] Reed, E., Salazar, M., Behar, A. I., Agah, N., Silverman, J. G., Minnis, A. M., Rusch, M., & Raj, A. (2019). Cyber Sexual Harassment: Prevalence and association with substance use, poor mental health, and STI history among sexually active adolescent girls. Journal of adolescence, 75, 53–62. <https://doi.org/10.1016/j.adolescence.2019.07.005>.
- [5] Weisman, J., Chase, A., Badolato, G. M., Teach, S. J., Trent, M. E., Chamberlain, J. M., & Goyal, M. K. (2020). Adolescent Sexual Behavior and Emergency Department Use. Pediatric emergency care, 36(7), e383–e386. <https://doi.org/10.1097/PEC.0000000000001456>.
- [6] Fisher, C. B., Fried, A. L., Macapagal, K., & Mustanski, B. (2018). Patient-Provider Communication Barriers and Facilitators to HIV and STI Preventive Services for Adolescent MSM. AIDS and behavior, 22(10), 3417–3428. <https://doi.org/10.1007/s10461-018-2081-x>.
- [7] Salas-Wright, C. P., AbiNader, M. A., Vaughn, M. G., Sanchez, M., & De La Rosa, M. (2019). Trends in participation in teen pregnancy and STI prevention programming, 2002-2016. Preventive medicine, 126, 105753. <https://doi.org/10.1016/j.ypmed.2019.105753>.
- [8] Oliveira, L., Nascimento, E., Pessoa Júnior, J., Cavalcanti, M., Miranda, F., & Alchieri, J. (2015). Use of male condom in adolescents. Revista de Pesquisa: Cuidado é Fundamental Online, 7(1), 1765-1773. Available: <https://pesquisa.bvsalud.org/portal/resource/pt/lil-742414>. <http://dx.doi.org/10.9789/2175-5361.2015.v7i1.1765-1773>.
- [9] Moura, S. L. O., Silva, M. A. M., Moreira, A. C. A., Freitas, C. A. S. L., & Pinheiro, A. K. B. (2021). Percepção de mulheres quanto à sua vulnerabilidade às Infecções Sexualmente Transmissíveis. Escola Anna Nery, 25(1), e20190325. <https://doi.org/10.1590/2177-9465-ean-2019-0325>.
- [10] Ramos, F. B. P., Carvalho, I. M., Silva Filho, W. P., Nunes, P. S., Nóbrega, M. M. (2019). Health education as a strategic tool for the development of HIV transmission prevention actions: an experience report, 19:e509, 509 – 515. <https://doi.org/10.25248/reas.e509.2019>.