Health promotion strategies for adolescents: sexually transmitted infections and dynamic learning tools - an experience report

S. F. Costa, G. A. Ferreira, M. R. S. Silva, G. B. Souza, D. A. Pinheiro, M. G. L. Araújo, E. G. M. Rocha, M. E. S. A. Temperino, E. M. Oliveira, N. L. Pontes, C. B. Toledo, J. A. S. Oliveira, T. R. S. Oliveira

Unieuro University Center

*Author for correspondence: suzane38555@unieuro.com.br

Abstract. Sexually transmitted infections (STI) in adolescents have increased even with access to information. The promotion of adolescents' health depends on the articulated action of the social sectors, with the educational sector fundamental to achieving a positive result. Brazilian studies have shown that STI are among the main diseases related to public health. Thus, there is a need for actions to promote and prevent these diseases among adolescents. Alternative tools such as playful and technological games have influenced teenagers between 12 and 17 years old. The aim of this study was to report the use of strategies aimed at adolescents performed in learning dynamics at a public school in the Federal District. The conceptual strategy was based on Charles Maguerez's Arc Model, which focuses on active methodologies. At the end of the activities, there was a perception of a positive result in the teaching-learning process. It was also possible to identify different behavior patterns, such as indiscipline, lack of interest and conflict between social relationships. The experience of the extension workers allowed a favorable exchange of experiences among the adolescents, as it demonstrated that the recreational means resulted in a greater interest in the prevention of STI.

Keywords: Adolescent behavior, Adolescent health, Sex education, School health promotion, Learning

Introduction

Adolescents have accessed information through the reach and development of new technologies. However, themes related to culture and leisure are the most researched. On the other hand, sexually transmitted infections (STI) are not topics of such interest. Thus, many health professionals and students have sought strategies to transmit this information to everyone, especially the adolescent.

According to the Child and Adolescent Statute (Brasil, 1990), full access for children and adolescents to services and actions for the promotion, protection and recovery of health is guaranteed through the Unified Health System (SUS), obeying the principle of equity. Health promotion strategies must be coherent and are important health prevention guidance tools. For the adolescent public, health promotion occurs through folders, playful games, dynamics and informational websites (Scopacasa et al., 2013).

According to the Ministry of Health Brasil (2010):

“Health promotion, as a health production strategy, that is, as a way of thinking and implementing policies and technologies developed in the Brazilian health system, results in actions that meet social health needs.”

Health promotion among adolescents depends on several social sectors, so, the educational sector is a strong ally for health promotion actions to materialize (Brasil, 2010). The Health at School Program, a joint effort between the Ministry of Education and the Ministry of Health, brings together health and education policies for children and adolescents in the public school system, with the objective of promoting the development of health promotion actions, disease prevention and monitoring of students (Brasil, 2010).

An important fraction of health promotion and prevention is STI, transmitted mainly by sexual intercourse (oral, vaginal, anal) without the use of condoms (Brasil, 2019). The frequent alternation of partners, inadequate sex education and the lack of
use of preventive methods result in an increase in the number of cases (Sousa et al., 2017).

The Ministry of Health considers adolescents similar to the World Health Organization (WHO), being considered the age group of 10 to 19 years old and the classification of youth between 15 to 24 years old (Brasil, 1990). According to the Brazilian Institute of Geography and Statistics (Brasil, 2015), they indicated that most adolescents between 13 and 17 years old have access to the internet at home (98.3% for students in private schools and 77.1% for students in public schools).

In the center-west of Brazil, access is made by 95.5% of students from private schools and 82.7% from public schools. Even having access to information, high technology and the transfer of knowledge so fast, there is a gradual increase in STI among adolescents, generating a public health problem. Estimates by the World Health Organization (WHO) indicated that more than one million people are affected by STIs / day. Of these, it is estimated that 500 million people have acquired treatable STIs, such as syphilis, gonorrhea, chlamydia and trichomoniasis (Nery et al, 2015). In this sense, the syphilis detection rate increased from 59.1 cases / 100,000 inhabitants in 2017 to 75.8 cases / 100,000 inhabitants in 2018 (Brasil, 2019).

Studies have shown (Barbieri, 2019; Sousa et al., 2017) that, in Brazil, STI has increased among adolescents. In this phase, adolescents perform sexual activities early, with a greater number of partners and without the proper use of preventive practices.

Adolescence is a period marked by vulnerabilities in which there are physical and psychosocial conflicts. The discovery of pleasure often occurs at this time, with the need to guide adolescents on the risks of contracting STI.

Brazil has a population of 51,402,821 adolescents and young people between 10 and 24 years old, according to the 2010 census (Brasil, 2018).

The country has 184.1 thousand schools, of which 112.9 thousand (equivalent to 2/3) are the municipal responsibility. Of the total of schools, 78.3% are public (Fortuna & Moura, 2018).

According to the State Department of Education, the public school system in the Federal District has 680 schools. Among these, 601 are urban and 79 are rural. In addition, the network has 54 early childhood education centers and 60 affiliated units, totaling 792 school units. Due to the extensive number of schools, the ideal would be the implementation of methods for discussions about STI (Barbieri, 2019).

In this scenario, the promotion and prevention of STI among adolescents is suggested, highlighting the use of alternative tools for these actions such as playful games and technology.

Research indicates that low education, unequal gender relations and little contact between health professionals and adolescents increase the prevalence of STI among women (Barbieri, 2019; Nery et al., 2015). In this sense, the adolescent must be the protagonist in the elaboration of methods for discussions about these diseases (Santos et al, 2019).

As a facilitator of these strategies, the use of educational and active teaching-learning technologies stands out. These strategies are beneficial to health, due to self-awareness, causing healthy care to be performed among adolescents (Scopacasa et al., 2013).

Given the above, the objective of this study was to report the use of health promotion strategies among adolescents through the application of dynamic learning tools in a public school in the Federal District.

**Contextualization and analysis**

*The place and population participating in the activities*

The health promotion activities were carried out with adolescents and developed by the extension project of a private institution in the Federal District, consisting of the Nursing, Physiotherapy, Pharmacy and Dentistry courses, with the approach of the recrudescence of sexually transmitted infections.

The activities were carried out at an elementary school in the Federal District from August to November 2019, targeting students in the afternoon, both genders and between 12 and 17 years old.

**The first steps**

A technical visit was carried out by four researchers in order to know the location, the public and the time of availability of the students. The strategic plan was presented to the school principal, who signaled the school's local and logistical limitations, allowing the choice of a unique approach.

The strategy adopted was the Charles Magueres arc model (Prado et al., 2012), which focuses on active methodologies. Educational conceptions are guided by pedagogical trends, that is, the way in which the teaching-learning process is understood. These trends refer to the way in which the educational process takes place, classified into: traditional pedagogy, renewed, by conditioning and criticism (Pereira, 2003).

The Active Methodology allows for critical-reflective, co-responsible for the construction of lifelong learning (Reibnitz, 2006). Its use implies not only knowing the modes of operation, but fundamentally the pedagogical principles that support it, that is, the principles of critical pedagogy.

This methodology can be arranged through conversation circles between educators and students, playful and dynamic games that facilitate understanding and effective search by students in the construction of knowledge for themselves and others. Educator Paulo Freire is an important representative of critical pedagogy. For Freire, the student needs to be the protagonist of his learning
The stages developed in the group

On the first day, an interaction between researchers and adolescents was proposed, promoting the welcoming suggested by the National Humanization Policy (Brasil, 1990). Thus, the project was presented, as well as the academic training of researchers.

For the presentation of each teenager a plush was used, which identified the person who had the opportunity to speak, bringing organization and respect. It was suggested that adolescents talk about their fears and dreams, in order to show that everyone has similar emotions, thus bringing respect and empathy with others.

This dynamic was carried out with three groups of 60 students, arranged in a circle. After the presentations, a small urn, made of cardboard, was placed in the middle of the circle and the participants were given a paper with the question: "What are your doubts about sexuality?". The students answered freely, anonymously, taking this question to the ballot box, which helped researchers to identify the degree of difficulty and/or ease of students on the proposed theme.

For the analysis, the questions were listed by the prevalence of doubts about HIV/AIDS; Syphilis; HPV; Condom; Sexuality, pregnancy and anatomy of the female and male reproductive system. The doubts presented culminated in the development of activities on the second day.

In view of the doubts, strategies were developed that could respond in a more dynamic way. The researchers were divided into groups to attend eight classes in one day, being subdivided in such a way as not to harm the activities proposed by the institution. Each group contained two or three responsible researchers; however, these groups addressed the same content and the same dynamics.

In the meetings, the students were organized in the classroom for greater comfort, different from the traditional model, in which the teacher transmits the information and the students passively accept it, often without question and with lack of interest.

The main criticism is that in banking education (traditional model), the teacher is considered as a subject and the student as a "deposit", in which he will be a recipient of content without his participation, without dialogue between the educator and the student. Therefore, the methodology used in the first two meetings in the classroom was active, where there were conversation circles, to facilitate communication and dynamism, sharing information about the proposed subjects (Freire, 1983).

In the third meeting, each pair/trio of researchers addressed topics such as syphilis and human papilloma virus (HPV). Resources such as computers (notebook models), television, data show, whiteboard brush and whiteboard were used during the presentations. The themes were fully presented in each class, composed of 30 7th grade students (B, C, E, F), in which the proposed time was 25 minutes to talk about syphilis, 25 minutes to talk about HPV, 20 minutes for questions about "myths and truths", and to solve the doubts that arose during the conversation.

In the second timetable, presentations to the 7th grade classes (A, D, F, I) were made in a short time for internal reasons of the institution. The materials and dynamics were presented, but with a duration of 15 minutes for each theme, and then 10 minutes for questions about "myths and truths", and together they solved the students' questions about the proposed theme.

"Myths and truths" were made in order to review students' knowledge at the end of each topic studied. The adolescents received a small plaque written on both sides (one side "myth" in red and the other side "truth" in green), in the sequence, the question was presented and students raised the signs to answer them. According to the correctness index, the correct answers and why it was "myth or truth" were explained. This strategy became a small debate, in which it aroused curiosities, thus leading to greater interaction and explanations in an active way.

Following the schedule, the theme: HIV/AIDS was addressed at the fourth meeting, presenting the clarification of doubts about transmission, prevention and treatment. In addition, an explanation of the myths and truths of the theme. Finally, in order to fix the content, dynamics were developed with the students in the classroom.

The class was divided into two groups to carry out the activity called "find the pair". This game is about cards that symbolize the question and the respective answer, since these cards are made up of different colors and with the same geometric shapes, signaling the correct answer. Since the use of recreational activities in groups promotes a more fun environment, with critical thinking and teamwork.

Then, another ludic activity, called "party", was explained. This activity simulated a party situation, where the participants had to choose between three geometric figures: the circle that symbolizes "STI", the triangle that symbolizes "AIDS" and the square that depicts a "healthy" person.

In order to become a realistic environment, music was used to characterize a party and entertain participants, who were instructed to talk to each other and exchange symbols. As commonly happens in this type of festive environment, given that the conversation was a pun, because in most parties people use kiss as an exchange of affection and show of affection, discarding the possibility that the person who is in the relationship now can have some kind of sexually transmitted infection.
At the end of the song, the meaning of each symbol was presented and the adolescents were made aware of the importance of prevention, as ITS can be masked, going unnoticed by their partners. The methodologies active in promoting the health of adolescents, as a whole, as well as another means of intervention, require that their implementations contain a unique approach that encourages adolescents to create their own paths for the development of knowledge.

A priori, activities would address only ITS. However, after analyzing the doubts deposited in the exposed urn, we assessed that the adolescents had many doubts regarding sexuality, anatomy and human physiology, which made it possible to carry out interventions based on the needs of the information.

Difficulties and possible solutions

During the actions, limitations were found for the health promotion process, such as lack of structure, TV, microphone, lack of communication between the coordinators. Still, the environment was very hot, and especially the difficulty of collaboration on the part of the students.

Even with the difficulties presented, there was an adaptation to reach the goal. The educational infrastructure is fundamental in the quality of education and, when it is not offered, in addition to the discomfort to carry out the work, it prevents them from offering quality education.

Final considerations

Health education actions promote access to information for those involved, clarify doubts and fill gaps in the knowledge process.

At the end of the activities, a positive result was noticed in the teaching-learning process. This work identified some perceptions of the school environment, taking as an example, different behavior patterns, indiscipline, lack of interest and conflict between relationships.

Dealing with these aspects was challenging, since there are several points that influence the behavior of adolescents. However, the researchers' experience made it possible to affirm that the exchange of experiences among adolescents is favorable, as they demonstrated that the adoption of recreational means mobilized the students' interest.

Thus, the need to use playful tools to stimulate learning and make the adolescent protagonist in the educational act becomes visible.

References

BARBIERI, C. Educação: GDF turbina salário de diretores e anuncia nova gratificação. 2019. Available from: https://www.metropoles.com/distrito-federal/politica-df/educacao-gdf-turbinasalario-de-diretores-e-anuncia-nova-gratificacao. Access on 05 mar. 2020.

BARBOSA, S. M. et al. Jogo educativo como estratégia de educação em saúde para adolescentes na prevenção às DST/AIDS. Available from: <https://www.revistas.uff.br/ften/article/view/6710/6951>. Access on 29 nov. 2019.

BRASIL. Boletim epidemiológico de HIV e AIDS: Secretaria de Vigilância em Saúde. Brasilia: Ministério da Saúde. 2019. Available from: <file:///C:/Users/natha_000/Downloads/boletim_ist_aids_2019_especial_versao_web.pdf>. Access on 30 nov. 2019.

BRASIL. Boletim epidemiológico de sífilis: Secretaria de Vigilância em Saúde. Brasilia: Ministério da Saúde. 2019. Available from: file:///C:/Users/natha_000/Downloads/boletim_sifilis_2019_internet.pdf. Access on 30 nov. 2019.

BRASIL. Instituto Brasileiro de Geografia e Estatística - IBGE. Pesquisa Nacional de Saúde do Escolar. 2015. Ministério do Planejamento, Desenvolvimento e Gestão. Available from: https://biblioteca.ibge.gov.br/visualizacao/livros/liv97870.pdf. Access on 30 nov. 2019.

BRASIL. Lei no 8.069, de 13 de julho de 1990. Dispõe sobre o Estatuto da Criança e do Adolescente e dá outras providências. Diário Oficial [da] República Federativa do Brasil, Brasilia, DF, 16 jul. 1990. Available from: <http://www.planalto.gov.br/ccivil_03/LEIS/L8069.htm#art266>. Access on 01 dez. 2019.

BRASIL. Marco teórico e referencial: saúde sexual e reprodutiva de adolescentes e jovens. Brasília: Ministério da Saúde; 2006.

BRASIL. Ministério da Saúde (MS). Secretaria de Atenção à Saúde. Diretrizes Nacionais para a Atenção Integral à Saúde de Adolescentes e Jovens na Promoção, Proteção e Recuperação da Saúde. Brasília: MS; 2010. Available from: <http://bvsms.saude.gov.br/bvs/publicacoes/diretrizes_nacionais_atencao_saudede_adolescentes_jovens_promocao_saude.pdf>. Access on 01 de dezembro de 2019.

BRASIL. Ministério da Saúde. (Org.). Protocolo Clínico e Diretrizes Terapêuticas (PCDT): Atenção Integral às Pessoas com Inseções Sexualmente Transmissíveis (IST). 2. ed. Distrito Federal: Ministério da Saúde, 2015. 122 p. Available from: <http://bvsms.saude.gov.br/bvs/publicacoes/protocolo_clinico_diretrizes_terapeutica_atencao_integral_pessoas_infeccoes_sexualmente_transmissives.pdf>. Access on 30 nov. 2019.

BRASIL. Ministério da Saúde. Política Nacional de Humanização. 1ª edição, Brasília, DF, 2013. Available from: <http://bvsms.saude.gov.br/bvs/publicacoes/politica_
nacional_humanizacao_pnh_folheto.pdf>. Access on 01 dez. 2019.

BRASIL. Ministério da Saúde. Secretaria de Atenção à Saúde. Ações para Saúde de Adolescentes e Jovens. Brasília: MS; 2013. Available from: <file:///C:/Users/User/Desktop/Enfermagem/TCC/acoes_saude_adolescentes_jovens.pdf>. Access on 01 dez. 2019.

BRASIL. Ministro da Saúde. Política Nacional de Promoção da Saúde, 2010. Available from:<http://bvsms.saude.gov.br/bvs/publicacoes/politica_nacional_promocao_saude_3ed.pdf> Access on 01 dez. 2019.

BRASIL. Ministro da Saúde: Infecções Sexualmente Transmissíveis (IST): o que são, quais são e como prevenir. Available from: <http://saude.gov.br/saude-de-a-z/infeccoes-sexualmente-transmissiveis-ist>. 2019. Access on 29 nov. 2019.

BRASIL. Proteger e Cuidar da Saúde de Adolescentes na Atenção Básica. 2. ed. Brasília: Ministério da Saúde, 2018. 235 p. Available from: <http://bvsms.saude.gov.br/bvs/publicacoes/protector_cuidar_adolescentes_atencao_basica_2ed.pdf>. Access on 30 nov. 2019.

DE OLIVEIRA SANTOS, J. V. et al. Análise prototípica das representações sociais sobre as infecções sexualmente transmissíveis entre adolescentes. Available from: <file:///D:/Users/PC/Downloads/0124-0137-psico-22-41-00290%20(1).pdf>. Access on 01 nov. 2019.

FORTUNA, D.; MOURA, F. O. MEC divulga dados do Censo Escolar da educação básica. 2018. Available from: <https://www.correiobrasileiro.com.br/app/noticia/eustudante/ensino educaacaoabasica/2018/01/31/ensino educaacaoabasica interna,656887/meccivilg a-pesquisa-sobre-censo-escolar-da-educacao-basica.shtml>. Access on: 01 dez. 2019.

FREIRE, P. Pedagogia do Oprimido. 18 ed. Rio de Janeiro: Paz e Terra, 1983.

MARTINS, A. S.; HORTA, N. C.; CASTRO, M. C. G. Promoção da Saúde do Adolescente em Ambiente Escolar. Revista de Aps, [s.l.], p.112-116, 25 jul. 2013. Available from: <file:///C:/Users/User/Downloads/14602-Texto%20do%20artigo-61721-11-10-20130725.pdf>. Access on: 01 dez. 2019.

NERY, J. A. C. et al. Infecções sexualmente transmissíveis na adolescência. 2015. Available from:<http://residenciapediatrica.com.br/detalhes/170/infeccoes-sexualmente-transmissiveis-na-adolescencia>. Access on: 30 nov. 2019.

PEREIRA, A. L. F. As tendências pedagógicas e a prática educativa nas ciências da saúde. Cad. Saúde Pública, Rio de Janeiro, v. 19, n. 5, p. 1527-1534, Oct. 2003. Available from: <http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0102-311X2003000500031&lng=en&nrm=iso>. Access on 15 Mar. 2020.

PRADO, M. L. et al. Arco de Charles Maguerez: Refletindo Estratégias de Metodologia Ativa na Formação de Profissionais de Saúde. Rio de Janeiro: Escola Anna Nery, v. 16, n. 1, 01 abril. 2012. Available from: <http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1414-81452012000100023>. Access on 1 dez. 2019.

REIBNITZ, K. S.; PRADO, M. L. Inovação e educação em Enfermagem. Florianópolis: Cidade Futura, 244 p. 2006.

Sampaio, J. et al. Ele não quer com camisinha e eu quero me prevenir: Exposição de adolescentes do sexo feminino às DST/AIDS no semi-árido nordestino. Saúde e Sociedade. São Paulo, p. 1-12, mar. 2011. Available from: <http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-12902011000100019&lng=pt&nrm=iso&tlng=pt>. Access on 30 nov. 2019.

Santos, J. V. O. et al. Análise prototípica das representações sociais sobre as infecções sexualmente transmissíveis entre adolescentes. Psicogente, Barranquilla, v. 22, n. 41, p. 290-307, June 2019. Available from: <http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0124-01372019000100290&lng=en&nrm=iso&tlng=pt>. Access on 15 Mar. 2020. http://dx.doi.org/10.17081/psico.22.41.3312.

Scopacasa, L. F. et al. Tecnologia educativa como ferramenta para prevenção das DST/AIDS com adolescentes escolares. 2013. Available from: <http://www.abeneventos.com.br/anais_senpe/17senpe/pdf/1491po.pdf>. Access on 13 mar. 2020.

Souza, C. P. et al. Adolescentes: Maior vulnerabilidade às IST/AIDS? 2017. Available from: <http://www.coren-ce.org.br/wp-content/uploads/2019/02/ADOLESCENTES-MAIOR-VULNERABILIDADE-%C3%80S-ISTAIDS.pdf>. Access on 30 nov. 2019.