

Research Article

Educational strategy to increase knowledge and risk perception about sexually transmitted infection in polytechnic students

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Summary

Introduction: The incidence of STI-HIV/AIDS is on the rise, making adolescents a vulnerable group at risk.

Objective: To increase the knowledge and perception of risk about STI-HIV/AIDS, through Educational Intervention in students of the Polytechnic Institute "Hermanos Gómez" of the Municipality San José de las Lajas, Mayabeque Province.

Method: Quasi-experimental study, intervention at the "Hermanos Gómez Polytechnic Institute, of the Municipality of San José de la Lajas, through affective, participatory, animation and reflection techniques, the universe being made up of 17 students aged 16-17 years of specialty in Industrial Chemistry, during the period from December 2014 to November 2015. The variables used were: knowledge about STI-HIV/AIDS and perception of risk towards said diseases.

Results: after the intervention, an increase in the level of knowledge of the main STIs in the study was evident: Syphilis, Condylomas, HIV/AIDS, Gonorrhoea, Trichomonas, Candida Albicans and Herpes simplex, which were adequately identified by 60%; 71% recognized the routes of sexual transmission, 60% the typical clinical manifestations, an increase in the levels of knowledge about the use of condoms to prevent STIs, and in the same way the perception of risk in an 83% after the intervention.

Conclusion: After the intervention, there was an increase in knowledge of STIs, transmission routes, clinical manifestations, condom use, and risk perception.

Introduction

Sexually transmitted infections (STIs), including HIV/AIDS, have been estimated by the World Health Organization to be the world's leading cause of disease among men aged 15-44 years, and the second-leading cause (after maternal causes) among young women in developing countries [1-4]. The incidence of STIs continues to be high in most of the world, despite diagnostic and therapeutic advances affecting women and men of all socioeconomic levels and races, Cuba is not exempt from this problem, which is worrying if it is kept in mind that adolescents and young adults are vulnerable groups exposed to risks towards these infections [5,6].

Currently in Cuba, the effective approach to STIs is

rational and objective, which in addition to representing a confrontation with a group of specific infectious agents, is a strategy on which numerous programs have been implemented at all levels of the population [7-10] counting In addition, with the political will to support their resources, which has made it possible to impact HIV transmission, prevent fertility deterioration in both sexes, prevent adverse results of pregnancy, childbirth and prevent neoplasms of the reproductive system, both in men and women, among other complications of Sexually Transmitted Infections [11,12].

Surveillance and Public Health Promotion are essential in the process of disease prevention and control, as well as in risk factors, becoming an important element of the evaluation

More Information

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function, especially in the measurement of impact, and it is essential for the development of appropriate policies. It is not limited to the medical aspect of the problems, but integrates different types of demographic, social, economic information, health events, associated conditions, including also data related to the health system and opinion about your health and the services that receive [11,13,14].

STIs depend more than any other current epidemic on human behavior, which is why prevention and health promotion in this area go beyond the framework of health to be a problem and a responsibility of all sectors of society. Young people can stop the pandemic, to achieve it, it is necessary that commitments are taken and action is taken at all levels and sectors of society to ensure that they possess the knowledge, attitudes and means to prevent infection. For HIV, protect their reproductive health and establish supportive areas, free of stigma and discrimination [15].

Taking into account the above considerations, an intervention study is carried out based on the application of a methodology for the prevention of STIs/HIV/AIDS in adolescents and young people developed by the National Institute of Hygiene, Epidemiology and Microbiology (INHE-M) [16], with the objectives of increasing knowledge about them and obtaining changes in the perception of risk towards said infections.

Method

A quasi-experimental, intervention study was carried out at the "Hermanos Gómez Polytechnic Institute (IPOL) of the Municipality of San José de la Lajas, with a universe of 17 students aged 16-17 years old, specializing in Industrial Chemistry, during the period from December 2014 to November 2015. The variables studied were: knowledge about STI-HIV/AIDS and perception of risk towards them. A methodology was applied for the prevention of STIs/HIV/AIDS in adolescents and young people (ISBN: 959-283-013-4), 7 of proven efficacy in a polytechnic school in Havana⁸ and in the Basic Secondary School «Santa Rita of Hungary" in Bogotá, Colombia, in 2008, within the framework of the International Scientific Cooperation Program for the exchange of researchers.

Technique and procedure

The intervention was applied at times that did not affect teaching activities lasting between 30 minutes and 1 hour each, and it worked in three stages.

First stage: Application of an initial questionnaire developed and validated by an expert from the School Health Department of the National Institute of Hygiene and Epidemiology (INHEM) contained in Manual 7.

Second stage: Educational intervention towards students in which socio-demographic data, knowledge, beliefs, attitudes

and risk perception towards STI-HIV/AIDS are explored through participative affective techniques, of animation and reflection.

Third stage: Final application in which the same questionnaire was applied to evaluate the changes obtained after educational intervention.

The qualified variables were:

- Knowledge: identification of entities classified as ITS.
- STI transmission routes
- Clinical manifestations of STIs
- Consequences of contracting ITS
- About protection and proper use of condoms.
- Perception of risk towards STIs

Following the expert criterion, each answer on knowledge, perception of risk of the subject on STIs was evaluated in the questionnaire, in such a way that each one had a value and the following score will be reached for each of these items, if questions were answered correctly. Knowledge: 158 points; Perception: 24 points.

The information was entered into a Microsoft Excel database, which was analyzed using EPIDAT version 3.0 statistical software for epidemiological data for Windows, MXN contingency tables using Chi-square which was significant below 0.05.

Result

Table 1 shows the level of knowledge of the main STIs studied before the intervention, it was inadequate in 65%, after the intervention, 35% of adequate responses increased to 60%. When evaluating the level of knowledge about the transmission routes of STIs, it was observed that before the educational intervention there were 71% of inappropriate responses, reducing these to 29%, after the intervention, thus fulfilling the objectives set in the study of educational intervention towards these infections table 2.

Table 1: Behavior of STI knowledge in IPOL Hermanos Gómez students.

	Before		After	
	Number	%	Number	%
Suitable	6	35	15	60
Inadequate	11	65	2	40
Total	17	100	17	100

p = 0.001

Table 2: Behavior of the knowledge of the transmission routes of STIs in the students of the IPOL Hermanos Gómez.

	Before		After	
	Number	%	Number	%
Suitable	5	29	12	71
Inadequate	12	71	5	29
Total	17	100	100	100

p = 0.016



Table 3 shows the knowledge of the clinical manifestations of STIs, observing an increase in knowledge of the clinical manifestations from 24% to 60% post educative intervention. Table 4 shows the perceived risk of contracting STIs and the need to use a condom to prevent STIs, showing that it was low (59%) before the intervention and that it significantly rises to 83% after it.

Table 3: Behavior of the knowledge of the clinical manifestations of STIs in the students of IPOL Hermanos Gómez.

	Before		After	
	Number	%	Number	%
Suitable	4	24	13	60
Inadequate	13	76	4	40
Total	17	100	17	100

p = 0.002

Table 4: Behavior of the knowledge of the perception of risk and condom use in the students of the IPOL Hermanos Gómez.

	Before		After	
	Number	%	Number	%
Baja	11	59	3	17
High	6	41	14	83
Total	17	100	17	100

p = 0.005

Discussion

The research has been of great importance since it achieves an increase in knowledge about the topic covered and that previously presented inadequate concepts, taboos and myths, the interaction between students and health professionals was achieved, bringing even more closer to two sectors that have aims Similar educational programs empowering moral values such as responsibility, participatory exchange is fostered by combining techniques and knowledge in an enjoyable and instructive way, finally achieving teamwork and ultimately turning students into health promoters with their peers since it is much easier communication between equals, with their language and communion of interests, preparing to lead a full, protected and knowledgeable sexual life about the risks they may face. This education must begin before puberty and continue throughout adolescence and youth [17].

The multiple educational programs developed at the school and community levels [7-9,16], as well as by the mass media, such as the press, radio, and television, have had a great impact on sexual education in adolescents and young, and could be the reason that the rates in Cuba are relatively lower and that the trend of the epidemic, although it is ascending like in the rest of the world, has not reached the magnitude of other countries.

Advances in the cognitive sphere after intervention are similar in these studies and it shows that educational interventions are one of the most useful preventive elements and should be used systematically in schools. And this is demonstrated by the effectiveness of the study carried out

regarding the behavior of knowledge of STIs in students after the intervention and it is similar to other studies such as the educational intervention carried out in several countries and in Cuba [18-21].

Among the identification of STIs, the best known to them were: syphilis, gonorrhea and HIV/AIDS, followed by herpes simplex and condyloma; the others hardly knew them. This coincides with several reviewed works carried out in different provinces of the country [22,23]. Likewise, they correctly answer regarding the level of knowledge of the transmission routes and the clinical manifestations of STIs. Similar results are reported by other studies after the educational intervention [24,25].

However, when measuring the level of knowledge of the consequences or sequelae after suffering an STI, we observe that it falls below what it really presented as an expectation, however, the same results were found in bibliographies consulted as the educational intervention carried out by G. Hoyos and other authors in which they confirmed the same difficulties [26,27]. The perception of risk rises after the intervention, so they fully trust that the condom is an absolute and effective method of protection to avoid STIs, however they forget other ways or ways of contracting them, so it is suggested according to the author of reinforcing this knowledge. Authors, such as Esther and Sarmiento, found low percentages in the perception of risk towards STIs/HIV/AIDS that rose after the intervention [28,29].

In studies carried out in Brazil in 2018, the trend of low risk perception of adolescents is shown, so it is recommended to increase the promotion and education actions for children, adolescents and young people, with the aim of promoting values and attitudes consistent with responsible sexuality, as well as increasing educational interventions related to the topic for this sector of the population and ultimately facilitating the promotion of sexual and reproductive health [30-32].

Conclusion

After the intervention, there was an increase in knowledge of STIs, transmission routes, clinical manifestations, and risk perception.

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