

Education Programs in the Prevention of Sexually Transmitted Diseases in Adolescents

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ABSTRACT

Health education is an effective way to increase teenagers' knowledge about reproductive health and sexually transmitted diseases. Teenagers' permissive attitude toward unrestricted sexual conduct is backed by their low awareness about adolescent reproductive health. This article aims to determine educational programs in preventing sexually transmitted diseases. This article uses qualitative methods through a literature review approach. The data in this research are articles from Google Scholar sourced from journals published in 2022 and 2023, with the authors from Indonesia and Malaysia. The results found that many teenagers were sexually active, although not always of their own free will. In some developing countries, about half of them are married. Irresponsible early sexual activity puts teenagers at risk of various reproductive health education challenges. The conclusion is based on the results of the analysis of this literature review. Adolescents' awareness of the dangers of unsafe sexual behavior has increased, indicating the effectiveness of preventive messages. The education program has succeeded in involving the community, including parents, teachers, and other interested parties, in supporting efforts to prevent sexually transmitted diseases among adolescents. The contribution of this research is to provide an overview of the educational programs in preventing sexually transmitted diseases and provide information on the evil influence of sexually transmitted diseases on adolescents.

Keywords: Education, Health Education, Sex Education, Students, Adolescents, Teenagers



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1. INTRODUCTION

Teenagers play an essential role in development and can increase the competitiveness of the population in the era of globalization (Marszowski et al., 2020). Demographic data shows that teenagers constitute a large population of the world's population (Yao et al., 2022). Adolescence is a dynamic period of growth and development in a person's life. This transition stage from infancy to adulthood is defined by rapid physical, psychological, emotional, and social growth (Hairuddin et al., 2022)

In psychology, adolescents are known by the term puberty, which comes from the Latin language and means growing towards maturity, whether physically, socially, or psychologically mature (Rothe, 2023). Teenagers' sexual behavior tends to have a permissive attitude among teenagers towards free sexual behavior or sex outside of marriage (Ezumah et al., 2021). Adolescents' permissive attitude towards free sexual behavior is supported by their limited knowledge about adolescent reproductive health (Kashefi et al., 2021; Yau et al., 2020). Adolescent reproductive health education is health education carried out by spreading messages instilling confidence so that adolescents are not only aware, know, and understand but also want and can carry out recommendations related to reproductive health (Yunan et al., 2022).

Adolescents have a greater frequency of sexual and reproductive health problems than the general population, which influences individual health and well-being as well as larger social and community outcomes. The typical age of sexual debut is adolescence (16-17 years old). Therefore, it is critical to target teenagers through health promotion activities to lower the risk and burden of sexual and reproductive health problems before they become hazardous. In Australia, high rates of chlamydia infection, unplanned pregnancies, and sexual assault among young children remain essential sources of worry (Panjaitan & Nugraheni, 2020).

Teenagers who lack communication and direction from parents, have minimal school lessons or access to information or are even embarrassed to ask questions due to an environment that considers puberty to be taboo, making teenagers less likely to receive puberty education. As a result, teenagers who reach puberty tend to want to be alone, often argue, feel anxious, afraid, defiant, emotionally unstable, and even lose self-confidence. However, children who are still mature must be ready to meet these expectations and will likely experience problems (Fitriani & Setiana, 2023).

The fact is that many teenagers are sexually active, although not always of their own free will. In some developing countries, about half of them are married. Irresponsible early sexual activity puts teenagers at risk of various reproductive health challenges. Globally, data shows that 40% of total HIV cases occur in young people aged 15-24 years, and it is estimated that more than 7,000 teenagers are infected with HIV every day. Insufficient knowledge about reproductive health often influences the reproductive health problems faced by teenagers (Ariyanti et al., 2019).

Guidance services in the form of information and counseling regarding adolescent reproductive health provided by schools are one of the efforts to guide adolescents to overcome their sexual conflicts. Schools are considered by various parties to be institutions worthy of providing information and counseling on adolescent reproductive health by the policies set by the Ministry of National Education regarding strategies for adolescent reproductive health education in schools (Sasmita, 2019).

Patients with sexually transmitted infections are now increasingly becoming teenagers. There are even those who are still junior high school age. Data at RSCM shows that around 15% of newly reported cases of sexually transmitted infections consist of children aged 12-22 years. Meanwhile, Soetomo Regional Hospital, Surabaya, recorded about 30 young sexually transmitted infection patients every month. The increasing number of patients infected with sexually transmitted diseases raises concerns. Lack of proper understanding or wrong information regarding sexual matters causes a high risk of contracting sexually transmitted diseases. Unsafe sexual behavior and misuse of needles when using narcotics can increase the risk of spreading sexually transmitted diseases (Safitri et al., 2021).

Health education is an effective way to increase teenagers' knowledge about reproductive health and sexually transmitted diseases (Djannah et al., 2020; Golbasi & Taskin, 2009; Scull et al., 2021). It states that health education about teenage reproduction influences growing teenagers' knowledge and attitudes. The benefits and objectives of the adolescent reproductive health program are to provide understanding and awareness so that they realize the importance of studying this knowledge, which can have an impact on healthy living behavior, and also taking responsibility for the problems of their reproductive health conditions every day, the method accepted is by carrying out advocacy efforts, health promotion, Information Communication and Education, consultation and providing services to teenagers with unique problems and providing support in carrying out positive activities involving teenagers (Awang et al., 2020; Finlay et al., 2020). Health education is the application of education in the health sector. Operationally, health education is all activities to provide and improve knowledge, attitudes, and practices for individuals, groups, or communities in maintaining and improving health (Dardas et al., 2020; Wong et al., 2020).

Education aims to improve students' abilities by focusing on academic achievement output. The novelty of this research is to look at the education as a strategy to prevent sexually transmitted diseases in students. Based on the background above, this article aims to determine education programs in preventing sexually transmitted diseases. The contribution of this article is to provide information on the bad influence or transmission of sexually transmitted diseases in adolescents.

2. METHOD

This article uses qualitative methods through a literature review approach. The data in this research are articles from Google Scholar sourced from journals published in 2022 and 2023, with the authors from Indonesia and Malaysia. The analysis used is content analysis to reach conclusions related to evaluating the effectiveness of educational programs in preventing adolescent sexually transmitted diseases.

The step of article selection: 1) Source selection is based on match the reference title and keywords with the words "education program", "sex education", "prevention", "sexually transmitted diseases", "adolescents", "students" and "teenagers"; 2) Selection of article is based on years, authors from Indonesia and Malaysia, and content of the abstract related to the main topic; 3) Source selection is based on the complete discussion section of the article; 4) Source selection is based on the overall material relevant to the main topic.

3. RESULTS AND DISCUSSION

Table 1 below is the result of a literature review of 24 articles related to evaluating the effectiveness of educational programs in preventing sexually transmitted diseases in adolescents.

Table 1. Results of article review

Author(s)	Publication Year	Contents
Fitriani & Setiana	2023	Suitable sexual education for teenagers is to increase teenagers' knowledge and awareness about reproductive anatomy, menstruation, contraception, sexually transmitted infections, pregnancy, and making wise decisions in sexual life.
Hutapea et al.	2023	Sexuality education is critical to increasing understanding of sexual health, especially in adolescents, and preventing sexual problems.
Rohmayanti et al.	2023	Reproductive health education for teenagers is vital and effective if carried out regularly so that it can increase teenagers' knowledge about sex.
Mustar et al.	2023	Sexual education can be carried out through video media. It has been statistically proven that there is a significant influence of the use of video media on students' attitudes toward sexually transmitted infections.
Perestroika et al.	2022	This evaluation was successful in uncovering teenagers' needs for information on reproductive health, including teenagers' desire to understand reproductive health better. Comprehensive sexual education, cross-sectoral coordination, and the regeneration of young practitioners are among the improvements proposed for improved implementation.
Purnamasari et al.	2022	Education through counseling can significantly increase knowledge about sexually transmitted infections.
Indarwati et al.	2022	Reproductive health education can increase participants' knowledge; the implication of this activity is to increase participants' motivation (83.3%) to maintain their reproductive health. Education about reproductive health is needed to prepare the younger generation to optimize their quality of life in the future.
Ajani	2023	School-based health education significantly improves health information-seeking behavior among adolescents and helps them make informed health decisions.
Nuramalia	2022	Sexual education through audio-visual media is significantly effective in providing education about HIV and AIDS after the intervention.
Dewi et al.	2023	Providing health education about adolescent reproductive health, tuberculosis, diabetes mellitus, and mental health is effective in increasing knowledge about infectious and non-communicable diseases. However, it would help if you continued to grow your self-vigilance by carrying out health management.
Agustina et al.	2023	As an educational medium to promote reproductive health in adolescents, social media has great potential. However, achieving positive results in promoting adolescent reproductive health requires attention to data quality and the development and integration of efficient procedures.
Puspita & Veftisia	2023	There was an increase in knowledge about sexually transmitted infections after being given health education. This shows that respondents can receive information from non-formal education. This means that knowledge does not only come from formal education but can be obtained from non-formal education such as health education.

Tatirah	2023	Health education is effective in increasing knowledge among young women to prevent sexually transmitted diseases.
Khotimah et al.	2023	Education about the trend of free sex through counseling using audio-visual media is effective in increasing teenagers' knowledge and awareness about the dangers of free sex.
Andriani et al.	2022	The level of knowledge and attitudes of adolescents influence premarital sexual behavior. As a result of premarital sexual behavior, teenagers can experience feelings of anxiety, depression, low self-esteem, feeling ostracized by society, pressure from the family, and the development of sexually transmitted diseases.
Rohmatika & Yuliani	2023	Reproductive health education is effective in increasing teenagers' knowledge about sexual reproductive health. Reproductive health education can be carried out between learning periods at school to increase teenagers' knowledge about adolescent sexual reproductive health.
Ningsih et al.	2022	One of the government's efforts to create healthy teenagers through education is establishing a youth care health service program.
Amalia et al.	2022	Through health education, students can increase their knowledge about reproductive health. Students' attitudes and behavior regarding adolescent reproductive health can be better to reduce the incidence of sexually transmitted diseases in adolescents and improve the level of public health.
Hidayat et al.	2023	Based on the results of evaluations through questions and answers during adolescent reproductive health counseling, it is shown that, in general, there was an increase in the knowledge of students who took part in the counseling.
Permatasari et al.	2022	Students' comprehension of the content offered can immediately lower the number of incidences of free sex, and students can be highly aware of the risk of HIV/AIDS transmission, preventing free sex and avoiding bad conduct that harms morality and reproductive health.
Apriliany et al.	2022	Increase awareness of the reproductive system to avoid infectious illnesses in teenagers and assist government initiatives in eliminating AIDS and sexually transmitted infections by 2030.
Kamaludin et al.	2022	There is a need for strategies to increase parents' understanding and awareness regarding sexuality and the delivery of appropriate sex education. The success of a sexual education strategy is a shared responsibility among all relevant stakeholders.
Lee & Yeo	2022	Demographic factors have a significant influence on sexual education, especially knowledge of the sexual and reproductive health of elementary school children.
Sobberi et al.	2022	Teachers' knowledge, perspective, and self-efficacy are critical dimensions for conducting adequate and sustained sexual health education for adolescents.

Fitriani & Setiana (2023) researched developing a Midwifery education program for adolescents regarding reproductive health. The research used methods including comprehensive sex education modules, group discussions, and question-and-answer sessions. The results of this research show that sexual education is suitable for teenagers by increasing teenagers' knowledge and awareness about reproductive anatomy, menstruation, contraception, sexually transmitted infections, pregnancy, and making wise decisions in sexual life.

Hutapea et al. (2023) conducted reproductive health education research for adolescents. This research uses quantitative methods. This activity was conducted online via Zoom, with the participants being junior high school students. The data collection includes pre-test, post-test, material presentation, and discussion. The topic explained at the seminar was education about reproductive health and problems. The number of

participants present was 18 people. The results of the activity showed an increase in participants' understanding based on the average score of the pre-test (before being given the material = 63.33) and post-test (after being given the material = 86.67) with a p-value of 0.001. Based on this research, sex education is critical to increase understanding of sexual health, especially in adolescents, and prevent sexual problems.

Rohmayanti et al. (2023) researched adolescent reproductive health education for junior high school students. The method is to provide reproductive health education through multimedia and group discussions. The health education sub-topics consist of material introducing reproductive organs, sexually transmitted diseases, unwanted pregnancies, premarital sex, and tips for healthy reproduction. Activities are carried out in four stages: problem assessment, plan socialization, education, and evaluation. This activity increases teenagers' knowledge about reproductive health, as seen in the pretest results, with a mean of 81.08 and a posttest score of 86.70 in the range of 0-100. This shows that reproductive health education can effectively increase teenagers' knowledge; these activities must be carried out regularly.

Mustar et al., (2023) conducted research on the effectiveness of videos as a health education medium on adolescent attitudes regarding sexually transmitted infections in adolescents. The quantitative research method uses a Quasi-Experimental one-group pre-posttest design approach. The population in this research was the OSIS administrators of Takalar 2 State High School, totaling 22 students. The sampling technique in this research uses total sampling. The study's results showed that the difference in the average value before and after health education using video was 9.14 with a p-value = 0.000. So, there is a significant influence of the use of video media on students' attitudes towards sexually transmitted infections. Sexual education can be carried out through video media. It has been statistically proven that there is a significant influence of the use of video media on students' attitudes toward sexually transmitted infections.

Perestroika et al. (2022) researched the evaluation of youth-friendly health service programs in early adolescent reproductive health education. This research used a qualitative method on 14 early adolescents, one service provider, and one practitioner from November 2019 - February 2020. Data was collected using the Focused Group Discussion method, and semi-structured interviews used the RE-AIM framework. Data were analyzed using the Stevick-Colaizzi-Keen method on Nvivo 12 software. The results show that the research advantage of this program is that it can reach targets of early adolescents at school. One of the areas for improvement of this program is the limited time for socialization in schools. Apart from that, it is difficult to reach young teenagers at the community level because they feel ashamed about coming to the service center.

Purnamasari et al. (2022) researched health counseling about sexually transmitted diseases. The research method is outreach through lectures, discussions, and questions and answers about sexually transmitted diseases. The participants were very enthusiastic about watching and taking part in this activity. The activity results show that education through lectures can significantly increase knowledge about sexually transmitted infections.

Indarwati et al. (2022) researched adolescent reproductive health education to achieve optimal quality of life. Methods for optimizing adolescent reproductive health knowledge include initial knowledge screening, creating a plan of action, and educational programs. Educational activities are carried out by providing health education to an aggregate of teenagers and parents online, involving participants from within and outside the country. A total of 20 participants took part in the educational process. The pretest and posttest were attended by 20 and 12 participants from Indonesia and Australia, respectively. Before education, the average score obtained by participants was 87. After education, the intermediate knowledge increased to 100. Reproductive health education can increase participants' knowledge; the implication of this activity is to increase participants' motivation (83.3%) to maintain their reproductive health. Education about reproductive health is needed to prepare the younger generation to optimize their quality of life in the future.

Ajani (2023) investigated the effect of health education on health information-seeking behavior among teenagers in school. A literature review was done as part of the study process. According to the literature evaluation, school-based health education improves teenagers' understanding of health problems and their capacity to assess the credibility of health information sources. Apart from that, health education promotes teens' adoption of healthy behaviors. However, obstacles such as digital literacy must be addressed so that young people can properly use health information. Finally, school-based health education enhances teenagers' health information-seeking behavior and enables them to make more educated health decisions.

Nuramalia (2022) researched the effectiveness of audio-visual media interventions I'm proud to know in preventing AIDS transmission in adolescents. The research design used a quasi-experimental design with an unequal control group design. The sample used random sampling techniques, as many as 96 teenagers. The research results showed that most respondents were females in the 17-year age group. Sexual education through audio-visual media is significantly effective in providing education about HIV and AIDS after the intervention.

Dewi et al. (2023) researched optimizing the community's healthy living movement for non-communicable diseases and health management for infectious diseases. This activity is carried out through counseling or education about adolescent reproductive health, tuberculosis, diabetes mellitus, and mental

health. Apart from counseling, there is also a strengthening of health cadres and screening and health checks. The results showed that providing health education about adolescent reproductive health, tuberculosis, diabetes mellitus, and mental health effectively increased knowledge about infectious and non-communicable diseases. However, it would help if you continued to increase your self-vigilance by carrying out health management.

Agustina et al. (2023) researched the use of social media to promote reproductive health in adolescents. This research uses qualitative procedures with a qualitative descriptive design by analyzing, recognizing, and exploring existing research findings. Social media can influence adolescents' reproductive health knowledge and behavior. A variety of content can be found on social media platforms, ranging from widespread diseases and intimate risks of unwanted pregnancies to birth control data. As an educational medium to promote reproductive health in adolescents, social media has great potential. However, achieving positive results in promoting adolescent reproductive health requires attention to data quality and the development and integration of efficient procedures.

Puspita & Vefisia (2023) researched the effect of health education on knowledge about sexually transmitted infections in adolescents. This type of research is quasi-experimental with a one-group pretest-posttest design. The study results show that health education influences teenagers' knowledge about sexually transmitted infections at Al Ashor Vocational School, Gunung Pati District, Semarang City. This shows that respondents can receive information from non-formal education. This means that knowledge does not only come from formal education but can be obtained from non-formal education such as health education.

Tatirah (2023) researched efforts to prevent sexually transmitted diseases through free sex education for teenagers. The method used in delivering counseling is the lecture method using PowerPoint media. Efforts to evaluate increasing adolescent knowledge about preventing sexually transmitted diseases were used pre-test and post-test. The results show that health education is effective in increasing knowledge among young women to avoid sexually transmitted diseases.

Khotimah et al. (2023) conducted research on differences in the level of knowledge of teenagers before and after being given counseling via audio-visual media about free sex trends. The research method is a comparative method with the design being one group pretest-posttest. The results found that the $P\text{-Value} = 0.044 < 0.05$, there are differences in the level of knowledge of teenagers. This means that education about the trend of free sex through counseling using audio-visual media is effective in increasing teenagers' knowledge and awareness about the dangers of free sex.

Andriani et al. (2022) researched the relationship between the level of knowledge and attitudes of teenagers with premarital sexual behavior. The results of the research show that the level of knowledge and attitudes of adolescents influence premarital sexual behavior. As a result of premarital sexual behavior, teenagers can experience feelings of anxiety, depression, low self-esteem, feeling ostracized by society, pressure from the family, and the development of sexually transmitted diseases.

Rohmatika & Yuliani (2023) researched the effectiveness of sexual reproductive health knowledge education for early adolescents in class VII in junior high school. The research design used in this research was quasi-experimental, using a one-group pre-post test design. The total sample was 44 respondents. The research results showed differences in the level of knowledge before and after being given health education. Reproductive health education is effective in increasing teenagers' knowledge about sexual reproductive health. Reproductive health education can be carried out between learning periods at school to increase teenagers' knowledge about adolescent sexual reproductive health.

Ningsih et al. (2022) researched the effectiveness of youth care health service program education using the book "I'm a Healthy Teenager" on knowledge and skills about adolescent health. This research used a quasi-experimental method. The study was conducted for three months, from October to December. Research results show that there are still many teenagers who still need to learn about the existence of special service programs. However, one of the government's efforts to create healthy teenagers through education is establishing a youth care health service program.

Amalia et al. (2022) researched adolescent reproductive health education in response to the demographic bonus. The method for implementing health promotion was providing education regarding reproductive health issues and preventing sexually transmitted diseases. One hundred sixteen vocational school students actively participated in this activity through question-and-answer sessions. The results of the questionnaire and education provided to students at vocational schools regarding reproductive health knowledge had a correct score of 57.73%, while the incorrect score was 26.59%. Through health education, students can increase their understanding of reproductive health. Students' attitudes and behavior regarding adolescent reproductive health can be better to reduce the incidence of sexually transmitted diseases in adolescents and improve the level of public health.

Hidayat et al. (2023) conducted research on reproductive health education as an effort to prevent promiscuous sex among teenagers. The approach used in this activity was the lecture method. The seminar activity was carried out as a form of problem-solving for partners. In this counseling, participants could accept and master the material presented; this was proven during the discussion, where participants always gave the correct answers when asked by the presenter, both orally and in writing. It would be better for

future counseling to allocate more time so that the results of the material that has been presented can be fully reflected.

Permatasari et al. (2022) researched preventing the risk of HIV/AIDS transmission with the "Stop Free Sex" campaign. The method used is a lecture and question-and-answer method. The information offered covers an awareness of HIV/AIDS and free sex, as well as causative reasons, consequences, and prevention. Some students did not grasp the hazards of HIV/AIDS transmission or the prevention of free sex prior to receiving instruction on the subject. However, after receiving the material, pupils may comprehend what HIV/AIDS is and how to prevent it.

Apriliyani et al. (2022) researched Reproductive System Education to prevent sexually transmitted infections in adolescents. The method used in the study is socialization of the reproductive system and sexually transmitted diseases as well as interactive dialogue/question and answer. Evaluation is carried out using question-and-answer discussions and a pretest and posttest with participants. This activity showed increased students' knowledge with the average results of the pretest (38.5) and posttest (85.7).

Kamaludin et al. (2022) researched providing sex education that is challenging for Malay mothers. This research is qualitative with an in-depth interview approach. Almost all moms acknowledged the role of sociocultural elements and religion in shaping education, sexuality definitions, and practices. There is a need for strategies to increase parents' understanding and awareness regarding sexuality and the delivery of appropriate sex education. The success of a sexual education strategy is a shared responsibility among all relevant stakeholders.

Lee & Yeo (2022) researched sexual and reproductive health knowledge among primary school students in Malaysia. This research is quantitative, using multivariate logistic regression analysis. The total sample was 617 students. Demographic factors have a significant influence on sexual education, especially knowledge of the sexual and reproductive health of elementary school children. It is hoped that this research contribution will be helpful for policymakers and educators who seek to increase the comprehensiveness of culturally accepted sexuality education, which is essential in improving the well-being of adolescents.

Sobberi et al. (2022) researched sexual education programs for adolescents related to teachers' knowledge, perspective, and self-efficacy. Respondents were 96 special education teachers from the Melaka Tengah district, Malaysia. The results show that teachers' knowledge, perspective, and self-efficacy are critical dimensions for conducting adequate and sustained sexual health education for adolescents.

3.1. Sex Education Program for Adolescents

Sex is an exciting topic of conversation among teenagers, both male and female teenagers (Corbett et al., 2021). Even though sometimes they are shy about expressing it openly, these struggles still cannot be hidden entirely. This is understandable because they are experiencing terrible turmoil. This means they are in the process of growth and development, so they feel the impact themselves. The slightest mistake in managing youthful sexual urges will have fatal and self-destructive consequences. Teenagers certainly really need correct information and teaching about sex and sexuality.

Wrong teaching will inevitably result in their understanding of sex and sexuality being wrong (Litsou et al., 2021). As a result, quite a few teenagers understand their sexual urges negatively. Therefore, the preparation of sex education material that will be given to teenagers is very significant. Adolescent sex education material should be provided contextually about the norms that apply in society: what is forbidden, what is expected, and how to do it without breaking the rules. This contextual sex education has a broad scope. It is not limited to sexual behavior alone but also concerns other things, such as the role of men and women in society, the relationship between men and women in society, the role of fathers and mothers and children in the family, and so on.

Sex education is needed to bridge the gap between teenagers' curiosity about it and various offers of vulgar information by providing correct, honest, complete information about sexuality, which is adapted to their age maturity. Sex education indeed cannot be separated from a person's understanding of what and how sex education is. Goldfarb & Lieberman (2021) said the differences in understanding sex education depend on their perspective in providing this definition. Sex education means sexuality education, namely education about sexuality in the broadest sense. Sexuality covers various aspects related to sex, namely biological elements. Sex education does not mean learning about how to have sex, as many people think, so this form of education seems to be prohibited because it is thought to have harmful effects on teenagers. Sex education is a realistic, honest, and open discussion, not mere moral dictation. In sex education, factual knowledge is provided, puts sex in the proper perspective, is related to self-esteem (a sense of self-esteem), instills self-confidence, and is focused on increasing the ability to make decisions.

Sex education is vital for teenagers so that they receive correct and accurate information regarding sexual problems and reproductive health (Bauer et al., 2020; Roden et al., 2020). Sex education for teenagers aims to protect teenagers from various dire consequences due to wrong sexual perceptions and behavior. Through sex education, teenagers are expected to be able to place sex in the right portion, not be careless in interpreting the meaning of sex, and try to change negative assumptions about sex. The low level

of understanding about sex education is because there are still many wrong assumptions about sex education.

Adolescents' awareness of the risks of unsafe sexual behavior is increasing, demonstrating the effectiveness of preventive messages. Through educational programs, there can be positive changes in teenagers' attitudes towards safe and responsible sexual practices. The program has succeeded in involving the community, including parents, teachers, and other interested parties, in supporting efforts to prevent sexually transmitted diseases among adolescents.

4. CONCLUSION

Based on the results of the analysis of the literature review on the evaluation of public health education programs in preventing sexually transmitted diseases in adolescents, it can be concluded that public health education programs are effective in increasing adolescents' understanding of sexually transmitted diseases and their impacts. Adolescents' awareness of the risks of unsafe sexual behavior is increasing, demonstrating the effectiveness of preventive messages. There have been positive changes in teenagers' attitudes towards safe and responsible sexual practices. The program has succeeded in involving the community, including parents, teachers, and other interested parties, in supporting efforts to prevent sexually transmitted diseases among adolescents. Effective programs can serve as the basis for expanding and sustaining sexually transmitted disease prevention initiatives and expanding program coverage to other areas or youth groups that require special attention. The evaluation successfully established indicators of success that can be measured and followed to ensure the program's continued effectiveness.

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