

The Effectiveness of Sexual Education for Adolescents as a Prevention of STIs: Literature Review

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ABSTRACT

Sexual education in adolescents is an important and interesting topic to explore. Prevention of sexually transmitted infections in adolescents is one of the priorities of health measures. This study is to find out how effective sexual education in adolescents is to prevent sexually transmitted infections. Result: a large amount of scientific evidence that related to the subject was identified. Effectiveness in sexual education for adolescents support by the combination of actions and techniques, the implementation of digital technology and social media. Conclusion: Sexual education in adolescents is more effective when supported by appropriate methods and with the use of digital technology and accurate repetition of information.

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1. INTRODUCTION

Adolescents, women, children, and older people in the poorest communities. These population groups are even more vulnerable in the humanitarian crises and fragile settings that need to be addressed in order to achieve the Sustainable Development Goals. For example, an estimated 26 million women and girls of reproductive age live in emergency situations, and all of them need sexual and reproductive health services (WHO, 2018). Adolescence is among the most confusing periods in the lifespan, largely because it is when we start to doubt whatever our parents taught us while we struggle with finding something new to hold onto and guide us through life. In other words, a process known as identity formation starts in adolescence (Klimstra & Doeselaar, 2017).

Sexually transmitted infections (STIs) have a profound impact on sexual and reproductive health worldwide. More than 1 million sexually transmitted infections (STIs) are acquired every day worldwide, the majority of which are asymptomatic. WHO estimated each year there are an estimated 374 million new infections with 1 of 4 curable STIs: chlamydia, gonorrhoea, syphilis and trichomoniasis. More than 500 million people 15–49 years are estimated to have a genital infection with herpes simplex virus (WHO, 2022).

Health education is the provision of accurate and evidence-informed information about STIs so that a person becomes knowledgeable about the subject and can make informed choice (WHO, 2021). Health education in particular sexuality is defined as teaching about human sexuality, including intimate relationships, human sexual anatomy, sexual reproduction, sexually transmitted infections, sexual activity, sexual orientation, gender identity, abstinence, contraception, and reproductive rights and responsibilities. Developmentally appropriate and evidence-based education about human sexuality and sexual reproduction over time provided by pediatricians, schools, other professionals, and parents is important to help children and adolescents make informed, positive, and safe choices about healthy relationships, responsible sexual activity, and their reproductive health. Sexuality education has been shown to help to prevent and reduce the risks of adolescent pregnancy, HIV, and sexually transmitted infections for children and adolescents (Breuner et al, 2016).

2. METHOD

Literature review is carried out by searching several journals through the database electronics with adolescent keywords, sexual education and sexually transmitted infections. As for the inclusion criteria the established include: full text, published in the period 2015-2023, quantitative and qualitative

design and has main content regarding adolescents, sexual education and sexually transmitted infections. Data used in this study obtained not based on observations directly, but the data obtained based on the results of previous research selected based on suitability on theme. Data search in this study uses online data bases such as ProQuest, Pubmed, Wiley and ScienceDirect, EBSCO and Google Scholar.

3. RESULTS AND DISCUSSION

Based on a search of results in the research database found five articles that met the inclusion criteria. The results of the review in the table below:

Table 1. Characterization of publications by reference.

Autor, Year and Country	Title	Type of Study	Number of Participants/ Age Group	Result
Cortínez-López, A.; Cuesta-Lozano, D.; Luengo-González, R, 2021, Spain	Effectiveness of Sex Education in Adolescents	quasi-experimental pre-post studies.	12-19 years	Sex education on STIs and contraceptives is effective in increasing knowledge, but this increase is not always related to changes in sexual practices.
Haruna, Hussein et al, 2018, Tanzania	Improving Sexual Health Education Programs for Adolescent Students through Game-Based Learning and Gamification	a randomized controlled trial	120 participants (11–15 years)	The use of GBL and gamification teaching methods to effectively deliver and improve sexual health knowledge of secondary school adolescents
Inthavong, Khonesavanh et al, 2020, Vietnam	Knowledge of safe sex and sexually transmitted infections among high school students, Vientiane Prefecture, Lao PDR	cross-sectional design and used a structured questionnaire	337 respondents Participants were aged 14–20 years	Significant positive associations were shown between knowledge of safe sex. Participants (49.5%) had a good knowledge of safe sex and 51.9% of the respondents had a good knowledge of STIs
Hinds, Darlene. 2013, Maryland, USA	Effectiveness of a Theory Based Comprehensive Sexual Education Program at a Baltimore City High School	quasi-experimental, one group pretest, posttest design	38 students, 17-18 years old	This study provides evidence that a theory based comprehensive sexual education program can be effective in Baltimore City High Schools. There were statistically significant increases in both the knowledge survey and self-efficacy scores

Hall, Karen Lynn. 2020, America	Comprehensive Sexual Education: A Comparison Study of Effectiveness in an Urban School District	secondary analysis of retrospective survey data	data of the Niagara Falls High School (NFHS) in 2015-2016 and 2019-2020	Students exposed to the Comprehensive Sexual Education program reported a slight decrease in early sexual debut and there was a decrease in students who have had ≥ 3 sexual partners in their lifetime
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Adolescence is a unique time of physical and psychological growth and, for many, a time when sexual and romantic exploration begins. Increasingly, attention is being focused on protective aspects of adolescent sexual health and the recognition that adolescents have sexual rights. The right to sexuality information has become the foundational rationale for sexuality education (Mullinex, 2017). These are similar to reports by Cortínez-López et al (2021) that educational programs should focus on STIs and contraception but also need to address topics such as healthy sexuality, self-esteem, teenage change and sexual diversity. These programs should be delivered by health professionals or teachers.

Study by Inthavong et al (2020) shows that approximately half of the participants were aware of safe sex and had knowledge of STIs. There is a need to have comprehensive sexual education, particularly emphasising family planning, STIs, and HIV/AIDS for all grades in school. The two most common sources of information for STIs including HIV/AIDS were also from films or television (85.1%) and Facebook (84.8%). The study showed factors associated with higher knowledge of safe sex were living with people other than parents, studying family planning and belonging to a religion. This finding related to study by Lee et al (2015) were identified five influential factors related to sexual behaviors: family-centered cultural values, parental relationship, acculturation, gender roles, and lack of knowledge and information about sex and STIs.

Study by Hinds (2013 and Hall (2020) have a similar finding about comprehensive sexual education program can be effective at increasing self-efficacy and the knowledge of risks associated with sexual activity and efficacy in relation to practicing healthy sexual behaviors.

The use of role playing that focused on appropriate dialogue to say no, delay intercourse and discuss contraception assisted in the increase of scores on the posttest. It was evident at the beginning of the project; the knowledge of risks associated with sexual intercourse and the most effective methods of prevention was minimal and incorrect in many instances. Sexual education in adolescents needs to be carried out by various methods to obtain good results. Delivery in the traditional way becomes less effective especially when communication is one-way, as adolescents become less interactive (Inthavong et al, 2020). Research by Haruna et al (2018) found that the use of appropriate media can increase adolescent knowledge about sexual health through digital games.

The support of various stakeholders was instrumental and further supports the use of the participatory approach to develop Game-Based Learning (GBL) and gamification teaching methods. The study confirms that if used in a positive way, games can be powerful educational tools in low resource settings and regions where discussions about sexual issues are taboo for adolescents vulnerable to high-risk sexual behaviour (Haruna et al, 2018). Similar with study by Anaemeje et al (2022) Using animated videos has been shown to improve adolescent knowledge by stimulating thoughts, feelings, concerns, and willingness to learn. Study by Farid et al (2018) finding that the internet-based method significantly improved adolescents' knowledge of sexual and reproductive health. Employing effective learning tools to communicate essential sexual health topics may reduce adolescent vulnerability to sexual abuse, coercion, sexually transmitted infections and improve health and wellness.

4. CONCLUSION

The effectiveness of sexual education in adolescents is supported by appropriate delivery methods. The use of digital technology with the right design can be one of the innovative learning methods that need to be developed that can make sexual health education more effective.

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