

Does Audiovisual Health Education Improve Knowledge of Premarital Sexual Behavior Among Adolescents?

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ABSTRACT

Premarital sexual behavior among adolescents remains a major public health concern due to its potential negative consequences, including unwanted pregnancy, sexually transmitted infections, and psychosocial problems. This study aimed to determine the effectiveness of audiovisual media in improving knowledge regarding premarital sexual behavior among Grade XII students at State Vocational High School 1 Merangin. A quantitative study with a pre-experimental one-group pretest–posttest design was conducted involving 75 students selected using purposive sampling. Data were collected through structured questionnaires administered before and after the intervention and analyzed using the Wilcoxon Signed Rank Test. Before the intervention, most respondents had poor knowledge (55%), while after the intervention, 87% demonstrated good knowledge. The mean knowledge score increased from 58.45 to 88.07. Statistical analysis showed a significant difference between pretest and posttest scores ($p = 0.001$). Audiovisual media is an effective educational tool for improving students' knowledge regarding premarital sexual behavior.

I. Introduction

Adolescence represents a critical transitional phase characterized by rapid physiological maturation, psychological development, and heightened curiosity regarding identity and sexuality. During this period, senior high school students undergo significant changes in primary and secondary sexual characteristics, which frequently translates to a growing interest in romantic and sexual behaviors. According to global health frameworks established by the World Health Organization, individuals in this ten-to-nineteen age bracket are uniquely vulnerable to reproductive health threats if they lack accurate information to navigate their emerging impulses. Globally, unguided sexual curiosity in the digital era exposes adolescents to pervasive, unvetted, and often unregulated streams of media via smartphones and digital networks, which can inadvertently lower their cognitive threshold for engaging in high-risk activities (WHO, 2023).

Premarital sex is defined as sexual intercourse among young people before the age of 25 years or between partners prior to legal marriage (Budu et al, 2023). Adolescence is a unique transitional period. During this period, many changes occur. These changes include: physical, mental, emotional, spiritual, as well as social and economic. Physical changes occur faster compared to mental and social changes. Sexual behavior in adolescents can be demonstrated in various ways such as attraction, sex, holding hands, kissing on the cheek, hugging, kissing on the lips, touching breasts over clothes, touching genitals over clothes, and engaging in intercourse (Dwi Astuti, 2022).

The consequences of premarital sexual behavior remain a major public health concern. Globally, approximately 21 million girls aged 15–19 years become pregnant each year in low- and middle-income countries, with around 12 million resulting in live births (WHO, 2024). Adolescent pregnancy is associated with increased risks of maternal anemia, preterm birth, obstetric complications, and neonatal mortality. Furthermore, pregnancy and childbirth complications remain among the leading causes of death



among girls aged 15–19 years worldwide (WHO, 2024).

In addition to unintended pregnancy, adolescents are increasingly affected by Human Immunodeficiency Virus (HIV) and other Sexually Transmitted Infections (STIs). According to the Joint United Nations Programme on HIV/AIDS, approximately 1.5 million adolescents aged 10–19 years were living with HIV globally in 2024, while nearly 98,000 adolescents acquired new HIV infections during the same year. Young people aged 15–24 years account for a substantial proportion of new HIV infections worldwide (UNAIDS, 2024). Similarly, the WHO estimates that more than one million curable STIs are acquired every day globally, with adolescents and young adults representing one of the most affected population groups (WHO, 2024).

The lack of literacy and education about sexual and reproductive health often has negative effects and becomes a serious consequence of sexual behavior before marriage. These impacts include unwanted teenage pregnancies, unsafe abortions, social stigma, as well as rising rates of Sexually Transmitted Infections (STIs) and HIV/AIDS (Chandra-Mouli & Akwara, 2024; WHO, 2020). Although existing data shows the broad benefits of multimedia and digital platforms in health promotion in general, turning increased knowledge into lasting behavior change remains a challenge (Isaacs et al., 2024). Therefore, an effective educational approach is needed to improve teenagers' understanding of premarital sexual behavior and its risks.

Empirical research specifically tracking the cognitive efficacy of targeted audiovisual media in reshaping high schoolers' understanding of premarital sexual risks remains relatively sparse across diverse regional settings. Most institutional sex education curriculums still lack unified, engaging digital frameworks, and there is an ongoing debate regarding whether audiovisual media outperforms traditional peer-led educational strategies in institutional environments (Pangesti, 2025). Therefore, a clear knowledge gap exists regarding whether a structured audiovisual intervention can measurably elevate knowledge profiles compared to baseline levels.

II. Methods

The research method used is quantitative research. This type of research is a Pre-Experimental Design with a one group pretest–posttest design. The population of this study is all grade XII student State Vocational High School 1 Merangin, totaling 304 people. The sample determined is 75 people were selected using purposive sampling based on the following inclusion criteria: being enrolled as a Grade XII student, willing to participate in the study, present during the intervention, and able to complete the questionnaire independently. Students who were absent during data collection or did not complete both the pretest and posttest questionnaires were excluded. Data were analyzed using Statistical Package for the Social Sciences (SPSS), with descriptive statistics used to summarize the data and the Wilcoxon Signed-Rank Test applied to determine differences between pretest and posttest scores at a significance level of $p < 0.05$.

III. Results and Discussion

Result

Table 1 presents the distribution of students' knowledge regarding premarital sexual behavior before the audiovisual health education intervention. Before the intervention, more than half of the respondents (55%) had poor knowledge, while only 13% demonstrated good knowledge. These findings indicate that students' understanding of premarital sexual behavior and its consequences was still inadequate prior to receiving health education.

Table 1. Frequency of Knowledge About Premarital Sexual Behavior Before Intervention Among Grade XII Students at State Vocational High School 1 Merangin

Knowledge Level	Criteria	Frequency (n)	Percentage (%)
Good	$\geq 75\%$	10	13
Moderate	56–74%	24	32
Poor	$\leq 55\%$	41	55

Knowledge Level	Criteria	Frequency (n)	Percentage (%)
Total		75	100

Table 2. Frequency of Knowledge About Premarital Sexual Behavior After Intervention Among Grade XII Students at State Vocational High School 1 Merangin

Knowledge Level	Criteria	Frequency (n)	Percentage (%)
Good	$\geq 75\%$	65	87
Moderate	56–74%	10	13
Poor	$\leq 55\%$	0	0
Total		75	100

As shown in Table 2, the proportion of respondents with good knowledge increased from 13% to 87%, while no respondents remained in the poor knowledge category. This shows that after health education interventions through audiovisuals, there was a significant increase in knowledge.

Tabel 3. Effectiveness of Health Education Using Audiovisual Media on Students' Knowledge of Premarital Sexual Behavior Among Grade XII Students at State Vocational High School 1 Merangin

Knowledge Variable	N	Mean	SD	Z	p-value	r
Pre-Test	75	58.45	15.99	-7.537	0.001	0.87
Post-Test	75	88.07	8.53			

The effectiveness of audiovisual health education was assessed by comparing pretest and posttest knowledge scores. The mean pretest score was 58.45 ± 15.99 , with scores ranging from 34 to 94. Following the intervention, the mean posttest score increased to 88.07 ± 8.53 , with scores ranging from 67 to 100. This finding demonstrates a considerable improvement in students' knowledge regarding premarital sexual behavior after exposure to audiovisual educational media.

The Wilcoxon Signed-Rank Test showed a statistically significant difference between pretest and posttest scores ($Z = -7.537$; $p < 0.001$). Furthermore, the calculated effect size was 0.87, indicating a very large intervention effect. These results suggest that audiovisual health education was highly effective in improving students' knowledge regarding premarital sexual behavior.

Discussions

The research results showed that the average knowledge of premarital sexual behavior among respondents before the intervention was 58.45 and increased to 88.07 after the intervention. Based on statistical analysis using the Wilcoxon test, a p-value of 0.001 ($p < 0.05$) was obtained, which means there was a significant increase in the average knowledge score about promiscuous sexual behavior after the intervention. Therefore, it can be concluded that providing health education using audiovisual media is very effective in improving students' knowledge about Premarital Sexual Behavior Among Grade XII Students at State Vocational High School 1 Merangin.

In line with previous research conducted by Shafira Nur Mega and Isnaeni (2022), their study states that adolescents' knowledge about free sex is still low and the risks of its negative impacts are high, such as unwanted pregnancy and sexually transmitted diseases. The results of the study show that before receiving counseling, adolescents' knowledge about free sex was still low, with an average score (mean) of 52.23 and a standard deviation of 6.901. Most respondents were in the low knowledge category. After receiving health counseling using audiovisual media, audiovisual media are learning media that combine sound (audio) and images (visual) to convey information and messages to the audience. This media can include videos, films, multimedia presentations, TV programs, and so on. The audio element allows messages to be delivered through hearing, while the visual element allows messages to be delivered visually. (Mayang Serungke et al, 2023) edia, there was a significant increase, with the post-test average

score rising to 87.23 with a standard deviation of 6.578, and all respondents were in the good knowledge category.

A study conducted by Sulistiyowati in 2021, titled 'Improving Teenagers' Knowledge About Free Sex Through the Use of Audiovisual Media,' examined the effect of audiovisual media on increasing teenagers' knowledge about free sex. Using a pretest-posttest method, the results showed that providing health education through audiovisual media had a significant impact on students' knowledge about free sex. Statistical data from the Wilcoxon Sign Rank Test showed a p-value of 0.000 ($p < 0.05$) with $Z = -4.667$, which means the null hypothesis (H_0) was rejected and there is a positive effect of the audiovisual intervention on teenagers' knowledge about free sex.

Another study conducted by Muhammad Kurniawan (2022) titled "The Effectiveness of Information Services Using Audio-Visual Media to Improve Knowledge of Free Sex Behavior Among Tenth Grade Students at PAB 8 Saentis High School in the 2021-2022 Academic Year" showed that providing information services to tenth-grade students at PAB 8 Saentis High School during the 2021-2022 school year went as planned. Before the information service was developed, many students did not know about free sex behavior, its associated risks, and its negative impacts. Students started to understand the harmful effects of free sex after receiving information services in two sessions, and they began to pay more attention to physical contact with others. To raise awareness about free sex behavior, advice and counseling services were used through information service strategies.

In this study, the researcher believes that information conveyed through audio-visual media is very effective because audio-visual media is seen as a means that can attract attention, increase focus, and facilitate understanding, so that material regarding the impact of premarital sex is more easily received and remembered by students.

IV. Conclusion

The provision of counseling with Audio-Visual Media is effective on knowledge of free sexual behavior, where there is an increase in students' knowledge about free sexual behavior at State Vocational High School 1 Merangin after being given an intervention with a value of $p = 0.001$ ($P \leq 0.05$).

Audiovisual media is proven become means education modern, engaging, and highly effective for increase knowledge senior high school students regarding premarital sexual behavior. The parties high school recommended for keep going using audiovisual and other educational media continuous, whereas power health can make study this as reference in promotional program development health at Vocational High School.

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