

**THE EFFECTIVENESS OF SEX EDUCATION HEALTH PROMOTION MEDIA
IN INCREASING REPRODUCTIVE HEALTH KNOWLEDGE IN STUDENTS OF
SMK MEDIKA SAMARINDA**

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Abstract

The influence of the spread of stimulation (pornography) through the sexual environment causes the bad character of teenagers to be formed from this environment and the lack of information about the dangers of free sex through audio-visual brochures and others. This research aims to compare the influence of various health promotion media (leaflets, comics, and Whatsapp group applications) in increasing students' knowledge about the dangers of free sex at SMK Medika Samarinda. The research design uses a quasi-experiment, namely a pretest and posttest control group design to determine differences in knowledge that occur due to the influence of treatment (intervention). Data were analyzed using a paired difference test (paired sample t-test) with SPSS. The research results showed that the comic plus counseling method was the most effective in increasing students' knowledge with an increase in scores of 5.46 points. Meanwhile, the counseling plus leaflet method increased teenagers' knowledge scores by 2.53 points, and counseling plus WhatsApp groups given to teenagers were able to increase teenagers' knowledge scores about free sex by 2.70 points. The best method is counseling plus comics because it can change the highest knowledge value. The use of comics as a medium for health education for teenagers needs to be developed to prevent teenagers from the bad effects of free sex and also to form WhatsApp groups for teenagers as well as health education content, especially the bad effects of free sex.

Keywords: Free Sex, Health Promotion Media, Knowledge, Students

INTRODUCTION

The teenage stage is an important phase of sexual development. During this period, adolescents become psychologically and sexually active because of physiological changes, peer pressure, and their tendency to resist behavioral changes through various forms of denial and rationalism. Adolescents are vulnerable to different social, peer, and cultural pressures that can be triggers for sexual experimentation (Akibu et al. 2017).

Sexual behavior of adolescents is categorized as one of the top public health priorities due to the high prevalence of HIV/AIDS, sexually transmitted infections (STIs), and unwanted pregnancies (Noroozi et al. 2014). The adolescent population is estimated to be 1.2 billion people in the world. Nearly 85% of the world's adolescent population resides in developing countries and in some sub-Saharan countries, where the population under 15

years old is five times larger than the population over 55 years old (Behulu, Anteneh, and Aynalem 2019).

Indonesia's adolescent population, according to the 2010 Population Census data, is 43.5 million (5.47%) and will continue to increase. The projected number of adolescents until 2025 is 47.6 million or equivalent to 5.97 percent of the total population (Titisari 2018). Meanwhile, the teenage pregnancy rate in Indonesia is 58 per 1000 women aged 15-19 years. This triggers young women to have abortions. The incident was caused by free sexual behavior in adolescents (Raharja, Emilia, and Rochjati 2018).

Promiscuous sexual behavior is behavior that is driven by sexual desire which is shown in the form of behavior. This form of behavior varies, ranging from mutual attraction to the opposite sex, then dating, making out, and ending with an unfavorable impact, which then has an impact on the environment, social, and personal, especially a very psychological impact (Sarwono 2010).

Unmarried teenagers' sexual deviant behavior has always increased. The results of the 2005 DKT Indonesia Survey show that teenagers who have had premarital sex are quite high. In the city of Surabaya, it was 54%, in the city of Bandung it was 47%, in the city of Medan it was 52% and in the city of Samarinda, it was 37%. This is due to the impact of a teenager's promiscuity with friends who are nuanced in free sexual behavior. Survey data in 33 provinces in 2008 conducted by the National Family Planning Coordinating Board (BKKBN) showed that around 63 percent of adolescents in Indonesia at the age between junior and senior high school had already had sexual intercourse outside of marriage and 21 percent of adolescents had already had sexual intercourse outside of marriage.

Outside of marriage, 21 percent of them reported having abortions. The results of the Indonesian Demographic and Health Survey (IDHS) in 2015 showed that unmarried adolescents had sex, in general, the prevalence was more women than men. Women who had sex were 24.2% while men were 21.8% (BKKBN 2015).

Research results show that various media sources including mass media, computer-based applications, and the internet can be used effectively to increase knowledge and change attitudes about sexual health issues. Media interventions are more effective at achieving these goals when multiple channels are used simultaneously and over time. Media have different

ways of reaching young people and can be part of a broad strategy to encourage healthy actions in different environments. Promotion through public-based media is a very important asset to reach a sizable population (Delgado et al., 2007).

One of the ways to reduce free sexual behavior is by counseling and socializing the dangers of free sex. Septiana's research (2012) showed that counseling about the dangers of free sex can increase adolescents' knowledge. The influence of the spread of sexual stimuli (pornography) through a bad social environment causes the character of adolescents to be shaped by the surrounding environment and the lack of information on the dangers of free sex both through audio-visual media brochures and others.

Lestari et al's research (2011) showed differences between male and female adolescents in choosing sources of information about sex. Male adolescents obtained the most information through friends (41.8%), then from the internet (8.6%), media and books (2.3%), parents (1.9%), experts (1.1%), and older siblings (0.75%). Meanwhile, adolescent girls get the most information from friends (41.6%). Next are parents (14.2%), books (6.9%), internet (6.5%), teachers and media (3.4%), older siblings (2.7%), and experts (2.3%). The correct understanding and knowledge about sex can reduce or become a factor inhibiting free sexual behavior in adolescents. Understanding sexuality includes knowledge about the function of sexual intercourse due to premarital sex, and factors that encourage premarital sex. Adolescents need to be equipped with an understanding of the negative impacts such as the large number of unwanted pregnancies, especially out-of-wedlock pregnancies.

The preliminary study at SMK Medika Samarinda showed that 6 students in 2022 and 8 students in mid-2023 withdrew from school due to pregnancy outside of marriage. The formulation of the problem is: how is the effectiveness of health promotion media in increasing students' knowledge about the dangers of free sex at SMK Medika Samarinda?

This research aims to measure the effectiveness of various forms of educational media that can be used with adolescents regarding increasing knowledge about the dangers of free sex. Educational media models that will be in-depth include counseling plus leaflets, counseling plus comics, and counseling plus WhatsApp applications used in delivering material about free sexual behavior.

METHODS

The study design used is quasi-experimental with a pretest and posttest control group design which aims to determine the differences in knowledge and attitudes that occur due to the influence of counseling with certain media. The population studied was all 320 students of SMK Medika Samarinda. The sample was determined using a purposive sampling technique of as many as 90 people. The sample was divided into three groups consisting of 30 students in each group. Group 1 was given counseling with leaflets, group 2 was given counseling with comics, and Group 3 with counseling through the WhatsApp application.

The instruments used were questionnaires containing closed and open questions. The questionnaire was given before counseling to each group as a pretest. Then the three groups received counseling with three media models that have been determined in each group. The post-test was conducted four days after each group received counseling. The data analysis used was a paired sample t-test (t-test) for paired groups which aims to test and see the differences in various methods in increasing students' knowledge about the dangers of free sex between before and after the intervention in the treatment group.

RESULTS AND DISCUSSION

Results

Most of the respondents in the three groups were at the age of 15 years, namely 26 people, according to gender the most were women as many as 54 people as described in table 1.

Table 1. Distribution of Samples by Gender and Age

	Group 1		Group 2		Group 3	
	n	%	n	%	n	%
Gender						
Male	17	56,7	11	36,7	8	26,7
Female	13	43,3	19	63,3	22	73,3
Age						
13 years	2	6,7	1	3,3	-	-
14 years	8	26,7	14	46,7	2	6,7
15 years	13	43,3	13	43,3	-	-
16 years	5	16,7	2	6,7	15	50
17 years	2	6,7	-	-	13	43,3

Comparison of Respondents' Knowledge Before and After the Counseling Intervention

In table 2, it can be seen that the average knowledge score before the intervention of each group varied from 10.17 to 11.93 points, with the lowest score of 2 points and the highest score of 15 points. After being given the intervention in the form of counseling plus a leaflet.

Leaflet or comic or WhatsApp application, there was an increase in respondents' knowledge score from a minimum of 10 to a maximum of 19 with an average of 12.70 to 16.43.

Table 2. A Comparison of Knowledge Scores of High School Children Before and After the Counseling Intervention

Intervention	Pre-test			Post-test			Sig.
	Mean	Min-Max	SD	Mean	Min-Max	SD	
Counseling with leaflet media	10.17	2-15	3.705	12.70	10-15	1.489	0,001
Counseling with comic media	10.97	4-14	3.034	16.43	14-19	1.223	0,000
Counseling with group application WhatsApp	11.93	8-5	1.617	14.63	11-17	1.608	0,000

Statistical test results with paired t-test in table 2 illustrate a significant difference in knowledge improvement in the group given counseling with leaflet media (p-value=0.001). There was an increase in the average knowledge score by 2.53 points and a difference in knowledge in the intervention group with a change in standard deviation from 3.705 to 1.489.

Intervention groups with comics showed significant differences in knowledge scores (p-value=0.000) before and after the intervention. Before the intervention, the adolescents' knowledge score averaged 10.97 points and increased by 5.46 points to a total score of 16.43 points. Table 2 also illustrates that the difference in knowledge between adolescents was initially quite large (SD=3.034) and became smaller (SD=1.223).

Utilization of information technology media in the form of WhatsApp applications also gave good results. After providing counseling to adolescents and giving messages through the WhatsApp group, there was an increase in knowledge score by 2.70 points from 11.93 points to 14.63 points. This difference was also statistically significant (p-value=0.000) with a standard deviation change of 1.617 to 1.608. From the comparison of the results of

statistical tests conducted on each group, it can be concluded that counseling with comic media is the most effective way to increase student's knowledge about the dangers of free sex.

Discussion

Teenagers with a good level of knowledge about reproductive health and the dangers of casual sex tend to be more protected from sexually transmitted infections (STIs) and unplanned pregnancies. Accurate and adequate knowledge about reproductive health is an important asset to avoid risks and promote healthy sexual decision-making in adulthood. These are the goals of sexual education interventions. However, before intervening in knowledge gaps, it is important to obtain an accurate assessment of one's knowledge about reproductive health and casual sex. A valid sexual health knowledge assessment can provide insight into the extent of intervention required and the expected outcomes following intervention (Mackin et al, 2019).

The physical and sexual growth tends to be rapid in the adolescent phase. Considerable curiosity without being balanced with adequate reproductive health education puts adolescents at risk of unwanted adverse events such as transmission of sexually transmitted diseases and pregnancy. Health counseling in the form of sex education aims to provide understanding to students so that students are not only aware, know, and understand, but also want and can do so that they can change and increase awareness of healthy living behavior. Counseling methods that can be used are lectures, group discussions, brainstorming, panels, role-playing, demonstrations, symposiums, and seminars (Pratiwi 2023).

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The media of health education is essentially all means or efforts to display messages or information that the communicator wants to convey, be it through print, electronic media (TV, radio, computers, etc.), or outdoor media so that the target can increase its knowledge which is ultimately expected to change its behavior in a positive direction towards its health. School-based sex education programs are a significant tool for disseminating information on sexual health and the prevention of pregnancy in adolescents and youth (Mattebo et al. 2019). Health education is not only a lesson in the classroom but is a collection of experiences anywhere and anytime as long as it can affect the knowledge, attitudes, and habits of the target of education (Triwibowo 2021).

Leaflet is quite effective as a mass communication media for the target group of reproductive health education material. The leaflet is a folded piece of paper that contains printed text and certain images on a specific topic for specific targets and purposes (Suiraoaka and Supariasa, 2019). Leaflets have advantages including being effective for simple and inexpensive short messages, students can learn independently, users can view the contents at leisure, can provide details (e.g. statistics) that are not possible when delivered orally, and students and teachers can study complex information together. Various information can be given or read by members of the target group, so that it can be discussed, can provide detailed information, is easy to make, reproduce, and improve, and is easily adapted to the target group (Setiana 2020).

The use of comics as health education media is also quite effective in generating interest in learning and improving student learning outcomes. Comic media will create a fun and not boring atmosphere for both teachers and students. Comic media proved to be able to improve student learning outcomes by 75%. The increase in learning outcomes is preceded by student interest which can increase student interest and activity in learning the material provided (Wahyuningsih 2021). The results of statistical tests in this study also show that comics are the most effective media compared to leaflets and Whatsapp applications in increasing student knowledge. Students argue that the illustrations used in comics facilitate student understanding.

Gale in Nimah (2020) gives a description in the form of a cone of experience regarding the degree of difference in memory in capturing information based on the type of sensing.

Audiences who see images can remember by 30%, and listening and seeing can remember by 50%. Meanwhile, the absorption of information obtained through vision is 83% and for hearing is 90%. This shows that the use of media comics can increase a person's memory by 90% and information absorption by 80% so that someone who uses more than one of his senses will more easily absorb the information conveyed.

The advancement of information technology, especially in social media applications, deserves to be an alternative option for sharing health information. Whatsapp as one of the social media is currently widely used for the purpose of socializing and as a delivery of messages by both individuals and groups. The additional features provided on the Whatsapp application make it easier for users to send various types of files, not only in the form of text but also in the form of images and videos. Students also think that the existence of features in the form of creating group chats makes it easier for them to interact and share information. Hemawan (2009) in Trisnani (2018) argues that social media can easily create a forum where individuals can communicate with each other and exchange ideas with each other. In this case, it will be very easy to make students communicate and comment on various topics and cases discussed by other students or teachers about the dangers of sexual behavior before marriage. Interactions built by students in the forum can build assumptions, emotions, and trust of other students.

However, the use of WhatsApp as a medium for delivering health information also requires a sufficient level of literacy in students so that they can distinguish valid or invalid information before sharing it in the WhatsApp group forum. The ease of sharing text links, images, and videos needs to be balanced with students' critical thinking to ensure the credibility of the information source.

The teacher or lecturer's role is very important to monitor and clarify the various sources shared in the Whatsapp group. Levin-Zamir and Bertschi (2018) argued that health literacy describes the skills and competencies that enable people to gain access to, understand, and apply health information to positively influence their own health and the health of those in their social environment. Amidst the proliferation of digital information, these skills are needed to access and apply health information.

Health information sources, such as television, the internet, and mobile apps.

CONCLUSION

Based on the results of the research conducted, it can be concluded that counseling with leaflet media, comics, and Whatsapp group applications has a significant effect in increasing students' knowledge about the dangers of free sex. The difference in each knowledge score before and after the intervention showed that the counseling intervention with comics was the most effective because it could increase the knowledge score by 5.46 points while counseling with leaflets increased by 2.53 points and counseling with Whatsapp. increased by 2.70 points. The better change results from counseling with comics are in line with the high interest of adolescents in comics and illustrated comics can be more informative and provide better understanding. It is recommended that schools and families use media that are relevant enough to the times so that adolescents are interested in learning about things related to the dangers of free sex.

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