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HEALTH EDUCATION WITH MEDULA (EDUCATIONAL MEDIA) AS AN EFFORT TO INCREASE ADOLESCENT KNOWLEDGE ABOUT REPRODUCTIVE HEALTH

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Abstract

Adolescence is the time when a person goes from child to adult in 10 to 24 years. This period is a worrying time for teenagers when they want to get away from dependence on their parents, feel curious to know more, and are very vulnerable to risky behavior. Bina Lestari High School students have never been given counseling on how to maintain adolescent reproductive health (KRR). In order for the reproductive health status of adolescents to be maintained, it is necessary to provide assistance for health and welfare care for adolescents. The purpose of this activity is to increase the knowledge, understanding, behavior, and attitudes of adolescents about reproductive health. The health education method used is in the form of counseling and mentoring discussion groups with the snake and ladder game media (MEDULA). The results of the evaluation showed that many Bina Lestari High School students gained increased knowledge after they studied reproductive health through the snake and ladder media, which included understanding reproductive health, reproductive organs, puberty, menstruation, unwanted pregnancy, and abortion, as well as sexual diseases and HIV-AIDS.

Keywords: Adolescence, Educational Media, Reproduction Health

INTRODUCTION

Adolescence is a period of rapid growth and development both physically, psychologically, and intellectually. Based on UNICEF (2021) data, the number of Indonesian youth in the 10-19 year age group reached 46 million or 17 percent of the 270 million population (Unicef, 2021). With a large youth population, improving the health and well-being of adolescents is critical for Indonesia to fully reap the demographic benefits.

The characteristics of adolescents who have great curiosity, love adventure and challenges and tend to dare to take risks for their actions without being preceded by careful consideration, make adolescents enter a population that is vulnerable to problems, especially health problems. If the decision they make to end the conflict is not right, they will enter into a risky situation and have to think about the consequences at all levels of health, both physical and psychosocial (Kemenkes RI, 2014).

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Teenagers are vulnerable to reproductive health problems because they have a strong desire to know more about reproduction. One way they do this is to start a relationship with the opposite sex which is called "dating". According to Infodatin (2017) data, the largest number of teens first dated at the age of 15-17 years. 33.3 percent of women and 34.5 percent of men started dating at <15 years. Teenagers in this age group do not have good enough life skills, so they are at risk of having unhealthy dating habits, such as having premarital sex. Doing active premarital sex for adolescents is at risk of causing adolescents to become pregnant and transmit sexually transmitted diseases. A pregnancy that should not occur in a young woman can lead to abortion and early marriage. Both will have an impact on the future of the teenager, the fetus in the womb, and his family.

Salisa (2013) says that the role of the family, the low level of religious education, and how much information is received through the mass media are factors that make teenagers want to have sex. However, the most important factor is how far adolescents' knowledge of reproductive health is. Teenagers sometimes think that talking about reproduction is taboo, giving rise to misinformation and making them engage in risky sex acts. In line with the results of previous research, Rizky (2010) stated that 72.2% of adolescents do not know enough about how reproductive health affects adolescent health. Meanwhile, the results of research by Nurjanah (2013) found that the level of adolescent knowledge about reproduction affects how they protect their own health.

Lack of knowledge, attitudes, and risky behavior in adolescents that have an impact on adolescent reproductive health status require the availability of adolescent health services that can meet the health needs of adolescents, especially adolescent-friendly reproductive health services. Health education is very important to do and one of the effective ways to change adolescent behavior with health education is the peer education method. how many studies show that health education through peer educators can reduce adolescent health behavior (Asdar et al., 2015). Peer education is a knowledge transfer process between peer educators and peers with continuous interaction so that the delivery of information is more intensive.

SMA Bina Lestari, which is located in Gandus District, has never given education and counseling to its students about adolescent reproductive health (KRR). Even though it is in the working area of the Gandus Health Center, there has never been a stakeholder/health officer who has provided counseling on adolescent reproductive health. About 40% of student residences are located in densely populated areas and on the outskirts of the Musi River, so for their daily water needs including bathing and washing genital organs, residents use river water directly without filtering. Based on initial data collected by the service, it is known that 50% of students in this high school complain of vaginal discharge in the genital organs. Seeing the partner's problems, it is necessary to provide health education on reproductive health for adolescents at the school. The teaching methods that have been applied in schools only use lecture and classical methods which tend to be monotonous and boring, so many students do not understand because they are not interested and do not pay attention to the material. This intervention creates a new innovation in health education media, namely by using MEDULA (Snakes and Ladders Educational Media). This educational media invites students to learn while playing so that they become more interested and enthusiastic about participating in the health education process.

IMPLEMENTATION METHOD

This community service activity is carried out through several stages ranging from preparation, and implementation to activity evaluation.

1) Preparation phase

At this stage, the servant makes a problem-solving framework first. The problem-solving framework is a series of procedures and steps in community service activities that aim to obtain the stages of implementing activities and documentation that are structured system so that the implementation of community service can be carried out effectively and efficiently.

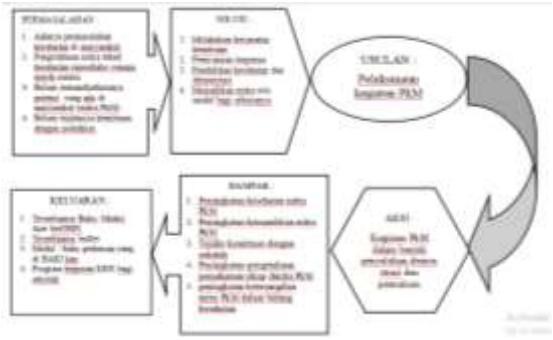

Figure 1. Partner Problem-Solving Framework

Furthermore, the servant conducts a needs analysis before carrying out health education which aims to find out what needs are needed to support the smooth and successful implementation of activities such as preparation of meeting rooms/rooms, infocus, projector screens, counseling materials, leaflets, snakes and ladders game tools, and evaluation sheets.

The next preparation is the time and meeting schedule that is adjusted to the student's empty lesson schedule or the agreed time can be done during recess or after ishoma with a meeting time of 150 minutes.

Figure 2. Service tools in the form of leaflets

2) Implementation Stage

The implementation of the activity starts at 09.00-12.00 WIB according to the results of the agreement with the participants. Each participant is given a form of willingness to participate in health education activities. Then to measure the participants' knowledge before receiving health education, each participant filled out a pretest sheet containing questions about reproductive health. Then the participants were divided into seven groups and asked the participants to choose a friend who would join their group. This is so that the learning process

can be more effective because each participant will be more open to discussing with group members who they know well. Each group is accompanied by one person who acts as a facilitator. The service team then distributed leaflets and delivered education on adolescent reproductive health including reproductive organs and functions, puberty, menstruation, unwanted pregnancy, and abortion, as well as sexual diseases and HIV-AIDS.

Each participant was given the opportunity to ask questions about the material that they felt was not well understood. The facilitator then provides feedback by giving other participants the opportunity to answer questions from these participants. This is intended to encourage students to dare to express their opinions. The results of the answers from the other participants are then concluded together so that each participant feels that they contribute to providing positive input from an existing problem, and then the participants are expected to be able to develop an assertive and solution-oriented attitude, from every problem of themselves and their peers.

After all the material has been delivered, the next stage is to play a snake and ladder game to measure the increase in students' knowledge regarding adolescent reproductive health. Each group is given a set of snakes and ladders game tools complete with dice, pawns, and a game board. The rules of the game are the same as the game of snakes and ladders in general, but the difference is that each square on the snake and ladder board is filled with statements and answers about reproductive health. Each player must say the statement and answer aloud when the pawn stops on the square containing the statement related to reproductive health. If the statement is positive, the pawn will move up, but if the statement is negative, the pawn will move down. The winners in this game are those who finish the game first to the finish line.

Figure 3. Service tools in the form of MEDULA

3) Evaluation Stage

This community service activity has been successfully implemented. All participants were very enthusiastic and took an active role in participating in each activity session, especially in the snake and ladder game session. To measure the level of success and increase participants' understanding, the service team threw competing questions to all participants, and the fastest participant to raise his hand and give the correct answer will be given a reward in the form of a gift. A thorough evaluation is carried out at the end of the

activity, where each participant will be asked to fill out the posttest sheet again.

RESULTS AND DISCUSSION

This community service activity was carried out on September 18, 2021, involving 57 Bina Lestari High School students, Gandus District, Palembang. The characteristics of the training participants are presented in the following table:

Table 1. Characteristics of Participants

Variable	Amount (n=57)	
	n = 57	%
Information about Reproductive Health		
Once	33	57,89
Never	24	42,11
Student Age		
Early teens (10-12 yr)	0	0
Middle teens (13-15 yr)	21	36,84
Late Teen (16-19 yr)	36	63,16
Class Level		
X	22	40,35
XI	22	40,35
XII	19	33,33
Number of siblings		
Only child	1	1,75
1-2 sibling	12	21,05
>2 sibling	44	77,19
Parents' job		
Laborer	44	77,19
Trader	3	5,26
Farmer	5	8,77
Fisherman	2	3,51
Self-employed	1	1,75
BUMN	2	3,51

The majority of the training participants had heard information about reproductive health (Kespro) 57.89%, with the highest age being in the late teens (16-19 years) with a percentage of 63.16%, most of the training participants had siblings >2 people, namely amounted to 77.19% with a range of 3-9 siblings, most of the parents' jobs were laborers, namely 44 people (77.19%) the rest worked as private employees, entrepreneurs, traders, farmers, fishermen, and state-owned enterprises.

Student Knowledge Apperception Before and After Training

Before providing health education, an appreciation of the level of knowledge of participants about adolescent reproductive health was carried out and after health education, an evaluation of the success of the reproductive health community service training was carried out with the medulla. The results of the knowledge level of reproductive health care workers with medulla can be seen in the following table:

Table 2. Distribution of Students' Knowledge Levels Before and After Health Education with MEDULA

Descriptives				
			Statistic	Std. Error
Pretest	Mean		14,44	.276
	95% Confidence Interval for Mean	Lower Bound	13,88	
		Upper Bound	14,99	
	Median		15,00	
	Variance		4,358	
	Std. Deviation		2,088	
	Minimum		10	
	Maximum		18	
Posttest	Mean		16,14	0,190
	95% Confidence Interval for Mean	Lower Bound	15,76	
		Upper Bound	16,52	
	Median		16.00	
	Std. Deviation		1,432	
	Minimum		13	
	Maximum		19	

Based on table 2, it can be concluded that most students have good knowledge after attending the training where the mean value increased from 14.44 to 16.14 CI before (13.88-14.99) and CI after (15.76-16.52), and the standard deviation fell from 2.088 to 1.432 and the minimum-maximum value range (10-18) before, to 13-19 after health education.

Figure 3. Pre-test and Post-test activities of training participants

Differences in Student Knowledge Before and After Training

To find out whether there is a significant difference in the level of knowledge of students before and after being given training. The differences in the level of knowledge of participants before and after being given the training can be seen in table 3 as follows:

Table 3. Knowledge of students before and after attending the training

Tingkat Pengetahan	Ranks	N	Mean Ranks	Sum of ranks	Ties	Z	Asympt sig (2-tailed)
Sebelum Pelatihan Setelah Pelatihan	Negatif Ranks	2[a]	13,50	27	10[c]	-5,807[a]	0,000
	Positif Ranks	45[b]	24,47	1101			

The results of the Wilxocon test obtained positive ranks (difference) between the scores before and after the training was 45, meaning that there were 45 students who experienced an increase in their understanding of reproductive health with an average increase of 24.47. Based on Asympt.sig (2-tailed) obtained a value of 0.000 (<0.05) so it can be concluded that the level of knowledge of the training participants has increased significantly after being given reproductive health training using snake ladder media (medulla) with a success rate of 81.25%. The percentage of success is obtained by finding the difference in the mean before and after the training divided by the mean before the health education and then multiplied by 100 percent.

Figure 4. Game Session with MEDULA

The results of this analysis are in line with the study conducted by Karayurt, et al. (2009) and Agustin, I., Kumalasari, I., & Jaya, H. (2021), where there is a statistically significant difference in students after being given health education compared to before education.

In the literature, it is proven that health education is very effective in increasing knowledge about reproductive health through media games. However, according to Aisah, et al (2008), knowledge can be increased by a group learning process with peers (peer group). This is possible because in this method there is interaction in groups, individuals will feel there are similarities with one another, and individuals will develop a social sense in accordance with personality development. This means that when health information is conveyed to peer groups, it will be more influential in increasing knowledge and behavior than being delivered individually. This confirms the theory which states that adolescence is strongly influenced by their peers, so training carried out in the same age group and with peers will be more effective in changing knowledge and behavior in a more positive direction.

Figure 5. Feedback in the form of questions and giving the best participant reword

The results of this community service activity are expected that teenagers will know more and understand reproductive health as a whole including the notion of reproductive health, reproductive organs, signs of puberty, fertile and menstrual periods, unwanted pregnancy and abortion, and sexually transmitted diseases/HIV-AIDS. so that adolescents are able to maintain their reproductive health and are also able to avoid and reject things that can harm their reproductive health such as not dating outside the normal limits, pregnancy outside of marriage, abortion, and reproductive tract infections due to intimate relationships.

With increased understanding of reproduction, adolescents have become responsible for themselves, and become aware of the impact and dangers of promiscuity on reproductive health with this training, adolescents have participated in health promotion efforts and become agents of change for their peer groups.

CONCLUSION

Community service activities carried out for Bina Lestari High School students, Gandus District, have had a positive impact on training participants where most of the students experienced an increase in knowledge after participating in adolescent reproductive health training using snake ladder education media as an effort to maintain adolescent reproductive health. So that students' knowledge and skills in reproductive health can be permanent, it is necessary to carry out scheduled training and make a commitment with the school and students who have received training to be willing to become ambassadors of reproductive health for their schools and teach them to their peers.

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