

## An effective reprodutive health education model in adolescents

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**Abstract:** Adolescents' understanding of accurate reproductive health information is crucial, and effective reproductive health education necessitates a balanced blend of technical expertise and methodological approaches to ensure that adolescents can effectively receive and comprehend the information provided. Key considerations in this endeavor encompass defining educational objectives, tailoring educational materials appropriately, identifying suitable participants and facilitators, and optimizing time and learning methodologies. This study aimed to ascertain the efficacy of different models in adolescent reproductive health education among secondary school students, employing a quasi-experimental design involving all eighth-grade students at SMP N 2 Baturraden (259 participants) with 99 respondents, utilizing a One Group pretest-posttest approach. The sample was divided into an implementation group for simulation games and a control group for focus group discussions. The outcomes revealed a non-significant difference in knowledge acquisition between the lecture method and game simulation, as indicated by a Mann-Whitney value of 456,500 with a p-value of 0.254. However, the mean rank difference favored the simulation game. Conversely, a statistical test comparing knowledge acquisition between focus group discussions and game simulation yielded a value of 391,000 with a p-value of 0.046, indicating a higher knowledge gain in the game simulation method. These findings suggest the need for a diverse range of teaching methods to intensify reproductive health education for students.

**Keywords:** Adolescents; Reproductive Health Education

### INTRODUCTION

Getting married at an early age is a reproductive health problem because the younger the age at marriage, the longer the time span for reproduction. The pregnancy rate for women aged 10-54 years is 2.68 percent, there are pregnancies under 15 years of age, although very small (0.02%) and pregnancies in teenagers (15-19 years) are 1.97 percent. If pregnancy is not regulated through a family planning (KB) program, it will affect fertility levels in Indonesia. (BKKBN.2017).

Teenagers need to know correct reproductive health information. With this information, it is hoped that they will have responsible attitudes and behavior regarding the reproductive process. Reproductive health education itself requires both a technical approach and a method of providing information, so that the information provided can be received and understood by teenagers. Factors that need to be considered in choosing this method include: educational objectives, nature of educational material, participants, facilitators and time and learning approach. This research aims to determine an effective model in adolescent reproductive health education for secondary school children.



## METHODS

Quasi experiment research with a population of all middle school students in class VIII at SMP N 2 Baturraden 259 and a sample of 99 with "One Group pretest-posttest. The sample consisted of a game simulation group, and a focus group discussion and lecture control group).

## RESULTS AND DISCUSSION

### Students' Knowledge About Reproductive Health in Focus Group Discussion Groups

The research results showed that students' knowledge about reproductive health after carrying out focus group discussions showed the highest increase with a percentage of 42% and the lowest remained with a percentage of 21%. The results of the Wilcoxon test obtained a p value of 0.887 ( $p \text{ value} > 0.05$ ), which means that the pre and post knowledge values after being given the FGD were not significantly different.

The results of this research are different from research conducted by Rizki, 2012 regarding focus group discussion and simulation game methods to increase reproductive health knowledge. Focus Group Discussion or focus group discussion is a process of gathering information on a particular, very specific problem through group discussions (Irwanto, 1998) dalam Sitoresmi, 2023.

Hening and Columbia (1990) stated that a focus group discussion is an interview of a small group of people led by a resource person or moderator who subtly encourages participants to dare to speak openly and spontaneously about things that are considered important related to the discussion topic. being discussed (Manju, 2021).

So that all group members can freely participate in the discussion, the sitting formation of the participants is arranged in such a way that they can face each other or look at each other, for example in the form of a circle or rectangle Puji Hastuti, (2018).

### Students' knowledge about reproductive health in the simulation game group

The research results showed that students' knowledge about reproductive health after carrying out the Simulation Game increased the most with a percentage of 58% and the lowest decreased with a percentage of 18%. The results of the Wilcoxon test obtained a pvalue of 0.011 ( $p\text{value} < 0.05$ ), which means there is a significant difference between the pre and post knowledge scores after being given the game simulation.

The results of this research are in line with research conducted by Rizki, 2012 regarding focus group discussion and simulation game methods on increasing reproductive health knowledge, showing that there is a difference in the influence between the FGD method and the GIS method on increasing class XI students' knowledge about adolescent reproductive health ( $p=0.001$ ) .

Simulation is a learning activity that gives students the opportunity to imitate an activity required in their daily work or related to their daily work or related to their responsibilities. Simulation is also defined as a learning activity that gives students the opportunity to imitate an activity or job that is required in daily life or is related to tasks that will be their responsibility when the student later works.

### Students' knowledge about reproductive health in lecture groups

Students' knowledge about reproductive health after receiving the lecture showed the highest results increasing with a percentage of 62% and the lowest decreasing and remaining with a percentage of 18% respectively. The results of the Wilcoxon test obtained a p value of

0.001 ( $p$  value  $< 0.05$ ), which means there is a significant difference between the pre and post knowledge scores after being given the lecture

The results of this research are not in line with research conducted by Tarigan, 2015 regarding the effectiveness of lecture and group discussion methods on knowledge and attitudes about reproductive health in adolescents at the Harapan Mekar Medan educational foundation, showing that the group discussion method is more effective than the lecture method in increasing knowledge and attitudes about reproductive health in adolescents at the Harapan Mekar Medan educational foundation. (Mertia, dkk 2010)

Puji Hastuti, 2017 in research on Health Education Improving Practices of Kangaroo Method Care (PMK) for Postpartum Mothers with Low Birth Weight Babies revealed that health education is a process to improve the health of low birth weight babies.

Health education is also to achieve a perfect level of health, both physical, mental and social, so people must be able to recognize and realize their appreciation, needs and be able to change or overcome their environment (physical environment, socio-cultural environment, etc.) Muhammad azinar (2013).

In order to provide effective health education, it needs to be done using appropriate methods and interesting tools. Health education methods can be provided individually or in groups according to needs, situations and conditions (Frida, 2000).

The health education method applied to large groups is lectures. The lecture method is a way of presenting learning material through narrative (oral explanation) by the instructor to students. The lecture method, apart from being simple, is also effective in conveying information quickly to a fairly large target group.

### Students' knowledge about reproductive health in focus group discussions, game simulations and lectures

The results of research regarding students' knowledge about reproductive health in focus group discussions, game simulations and lectures are presented in the Table 1.

**Table 1.** Frequency distribution of respondents based on student knowledge in focus group discussion groups, lecture simulation games.

Knowledge	FGD		Game Simulation		Lecture group	
	F	%	F	%	F	%
Up	14	42	19	58	21	62
Still	7	21	8	24	6	18
Down	12	37	6	18	6	18
Total	33	100	33	100	33	100

FGD :  $p$ value 0,887, Game Simulation :  $p$ value 0,011 ( $p$ value  $< 0,05$ ), Lecture group  $p$ value 0,001

The results of the research showed that students' knowledge about reproductive health increased the most in the lecture group with a percentage of 62% and the lowest in the focus group discussion group with a percentage of 42%. Students' knowledge about reproductive health remains the highest in the game simulation group with a percentage of 24% and the lowest in the lecture group with a percentage of 18%. Students' knowledge about reproductive health fell the most in the focus group discussion group with a percentage of 24% and the lowest in the game simulation and lecture groups with a percentage of 18% each.

Of the three educational methods, the lecture method is the most effective method with the highest increase in knowledge among respondents, namely 62%, followed by game simulation with 48% and the lowest in the focus group discussion group with a percentage of 42%.

The results of this research are different from previous research conducted by Tarigan, 2015, which stated that the group discussion method was more effective than the lecture method in increasing knowledge and attitudes about reproductive health in adolescents at the Harapan Mekar Medan educational foundation.

There are several methods that can be used in conducting outreach, including lecture methods, group discussions, brainstorming, panels, role playing, demonstrations, symposiums and seminars, where each method has advantages and disadvantages (Effendi, 1998).

Alternative methods that can be used in adolescent reproductive health education are the lecture method and group discussion method. The lecture method, apart from being simple, is also effective in conveying information quickly to a fairly large target group, while the group discussion method can be used to convey information by providing more opportunities for students to gather opinions, draw conclusions or develop various alternative problem solutions (Sofa, 2008).

Reproductive health education materials can use simulation methods such as sociodrama, games and dramatization. This method aims to train students to understand the educational concepts or principles presented so that they can solve problems related to their reproductive health. In the study, students took part in a simulation game session of a reproductive health card game. When 1 game theme has been completed they play roles by acting out the character according to the card

## CONCLUSION

Students' knowledge about reproductive health in the Focus Group Discussion group was not significantly different with a p value of 0.887 (p value > 0.05). There is a significant difference in students' knowledge about reproductive health in the Simulation Game Group with a p value of 0.011 (p value < 0.05). There is a significant difference in students' knowledge about reproductive health in the lecture group with a p value of 0.001 (p value < 0.05). Increasing students' knowledge about reproductive health in focus group discussion groups, game simulation and lectures were most effective in the lecture method with an increase of 62%, followed by game simulation with 48% and the lowest in focus group discussion groups with a percentage of 42%.

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