



The Influence of Reproductive Health Education Using Chain Whispering Methods on Knowledge and Attitudes of Young Women

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A B S T R A C T

Health Education is an activity to create health education that seeks to make young people aware of how to take care of their health, how to avoid or prevent things that are detrimental to their own health, one of the problems of young women is the lack of knowledge of reproductive health. This study aims to determine the effect of reproductive health education using the whisper chain method on the knowledge and attitudes of young women. The design of this research is pre-experimental. The design of this study uses the Pre-test – Post-test Design. The population of all grades VI students is 22 students. The sampling technique was carried out by purposive sampling with 21 female students who met the inclusion and exclusion criteria as respondents. Data was collected using knowledge and attitude questionnaires before and after the provision of reproductive health education. Reproductive health education using the chain whisper method was carried out for 1 time for 120 minutes. Statistical test using the Wilcoxon Test ≤ 0.05 . The results of the research on knowledge of young women before being given reproductive health education (poor) after (good) $p=0.001$, attitudes of young women before being given reproductive health education (negative) after (positive) $p=0.000$. This means that there is an influence of reproductive health education using the chain whisper method on the knowledge and attitudes of young women. The researchers hope that this research can be used as a form of routine activity to add insight to female students about reproductive health.

INTRODUCTION

Adolescence is a period of transition from childhood to adulthood, not only in a psychological sense, but also physically. In fact, the physical changes that occur are the primary symptoms in adolescent growth. Meanwhile, psychological changes arise, among others, as a result of changes in physical growth (Yulia Dewi Nurjanah, 2013). Among the secondary signs in young women, one of them is menstruation (Asih, 2014). Survey institutions in Indonesia state that a portion of the number of adolescents in Indonesia at the age of 10 to 24 years behaves unhealthy (Puji, 2016). Reproductive health is physical, mental and social health as a whole, not solely free from disease or disability related to reproductive systems, functions and processes (KemenKes RI, 2015).

According to WHO, adolescents are residents in the age range of 10-19 years (WHO, 2022), according to Regulation of the Minister of Health of the Republic of Indonesia Number 25 of 2014, adolescents are residents in the age group of 10-18 years (Permenkes RI, 2014), and according to the Population Agency and Family Planning (BKKBN), the age range for adolescents is 10-24 years old and unmarried (Ministry of Health Republic of Indonesia 2015). Data from the Ministry of Health of the Republic of Indonesia for

2017 shows that 17% of Indonesia's population is aged 10-19 years, with a percentage of 8.7% male and 8.3% female (RI Ministry of Health, 2018).

Indonesia is ranked 2nd in ASEAN, and ranked 8th in the world for cases of young marriage (child marriage). There has never been health education about reproductive health for young women so that young women's knowledge about reproductive health is still low. The impact of misunderstanding about menstruation and sexuality in adolescents makes them try to experiment with sexual problems without realizing the dangers that arise from their actions, and when problems caused by their sexual behavior begin to emerge which can affect reproductive health such as sexual behavior with multiple partners. Premarital sex which causes unwanted pregnancies (abortions, as well as the risk of contracting sexually transmitted infections (STIs). Pregnancy in adolescence can have a negative impact on the health of adolescents and their babies, as well as social and economic impacts. Pregnancy at a young age includes risks of birth premature birth, low birth weight babies (LBW), and childbirth bleeding, which can increase maternal and infant mortality. Pregnancy in adolescents is also associated with unwanted pregnancies and abortions (KemenKes RI, 2015).

Handling is one of the ways that reproductive health education can help delay the first sexual intercourse in adolescents. Zelnik (Letisa Azelia Astri, 2016) states that adolescents who have received reproductive health education tend to rarely have sex, but adolescents who have never received reproductive health education tend to experience more unwanted pregnancies. Another study by Fox and Inazu (Letisa Azelia Astri, 2016) also showed the same result, if reproductive health education is given to adolescents from an early age and starts from the family, sex can be prevented.

One of the preventions can be done by providing reproductive health education using a chain whisper method to the knowledge and attitudes of young women. Reproductive health education can be carried out for students through various methods. Methods that can be used include the game-based learning method, which is a learning method that uses game applications that have been specifically designed to assist the learning process (Tetty, 2015). Games do have enormous potential in building motivation in the learning process of students, especially elementary school (SD) students. This is because learning for children of primary school age can be done with a play approach so students don't feel bored in following the lesson. Game-based learning (games) can also make students understand the material and achieve learning goals in a more interesting and fun way. The existence of fantasy and challenge elements in games leads to greater interest for students and increases learning efficiency. One example of the application of the game-based learning method that can be made by teachers in elementary schools, namely: (Whispering) Through this method of learning by games, whispering in chains (chain messages) can train children's listening skills with satisfying results, moreover, it can encourage children to concentration when receiving learning

material, so that children who initially get bored quickly and even lack interest in any subject become interested in any subject.

METHOD

This research is a quantitative non-experimental study with a pre-experimental design with a pre-test post-test design. The population in this study were female adolescents aged 10-13 years who experienced a lack of reproductive health knowledge at UPT SD Negeri 60 Gresik, Cerme District, Gresik Regency, as many as 22 students. The sample of this research is 21 female students with purposive sampling technique. Samples that meet the inclusion criteria: 1) Teenagers who are willing to be respondents and follow research procedures until the final stage; 2) Adolescents who have not been given reproductive health education counseling at all. Exclusion criteria: 1) Exclusion criteria from this study are: 1) Adolescents who do not attend school; 2) Young women who have received menstrual health education and free sex. The independent variable of reproductive health education and the dependent variable is the knowledge and attitudes of young women. The research instrument was the SAP chain whisper and the attitude knowledge questionnaire prepared by researchers who had previously tested the validity of the reliability. The researcher explained the procedure of the chain whisper game by dividing into 4 groups, 1 group consisting of 5-6 people. Health education with a chain whisper method is carried out for 1 time 120 minutes. Previously, it was explained about the meaning of health education, the purpose of health education, the puberty of young women, the meaning of menstruation, the meaning of free sex, the impact of menstruation, the impact of free sex, steps to avoid sexual intercourse before marriage. After that the researcher asked questions related to the explanation that had been given to the young woman, the researcher pointed to one of the children who raised her hand to answer the question from the researcher. The researcher asked the child who answered the question to come forward. New questions from researchers for the next child are 4 children who come forward. After that the researcher asked the child who came forward to appoint/choose 5-6 of his friends to be made into the Whisper Chain group and so on. The researcher arranged the distance per group and lined up, so they weren't close together. The researcher did a chain whisper game by calling child 1 from each group to take turns to come forward and the researcher gave a sentence to be whispered to his friend behind him alternately the friend behind him who submitted the sentence to the researcher in front counted by the researcher 10 seconds had to submit the sentence to the researcher. Continue in order until the last player. The last player must say the words or sentences or story that was whispered. This game can be contested in groups. This game trains listening or listening skills. And the researcher gives the score with the most who is the winning group. Before the chain whisper game begins, I first explain material related to reproduction, and we, as researchers, ensure that the material that I convey can be clearly understood by grade VI students, for

example, a question-and-answer session related to the material is held first. And of course, before the game starts, I explain in advance the rules and procedures for the game to the students. For knowledge assessment: Good if the value is $\geq 76-100\%$; Enough if the value is $60 - 75\%$; Less if the value is $\leq 59\%$. Positive attitude assessment: SS (4), S (3), TS (2), STS (1) $T \geq 50$; Negative: SS (1), S (2), TS (3), STS (4) $T < 50$. Data were processed and statistically analyzed Wilcoxon test with p value < 0.05 . DF reliability validity test results: (N-2) Respondents: $21-2 = 19$ (R Table = 0.432) significant 0.05 (Knowledge Validity Results Valid) and (Knowledge Reliability Results) > 0.6 with a result of 0.923 said Reliable. DF: (N-2) Respondents: $21-2=19$ (R Table = 0.432) significant 0.05 (Attitude Validity Results Valid) and (Attitude Reliability Results) > 0.6 with a result of 0.814 is said to be Reliable.

RESULT

Table 1 shows that most of the respondents were 12 years old, with 17 respondents (81.0%). based on information obtained by class VI young women obtained from peers as many as 10 respondents (47.6%).

Table 1. Characteristics of Respondents in Class VI Young Girls at UPT SD Negeri 60 Gresik on February 4, 2023

No	Category	F	%
1	Age		
	10 th	0	0
	11 th	4	19
	12 th	17	81
	113 th	0	0
2	Information Source		
	School	5	23.8
	Media	4	19.05
	Health Workers	2	9.5
	Friends	10	47.6

Based on the table 2 that from 21 respondents before being given menstrual reproductive health education and free sex by distributing knowledge questionnaires, it was found that 15 respondents (71.4%) lacked knowledge. After being given Health Education, 17 respondents (81.0%) had good knowledge. It can be concluded that there was a change in which the increase in respondents' knowledge was getting better after being given menstrual reproductive health education and free sex using the chain whisper method. The value of $P=0.001$ was obtained, meaning $p<0.05$ that there was an effect of reproductive health education using the chain whisper method on the knowledge of young women.

Table 2 Knowledge Analysis of Class VI Young Girls Before and After Being Given Reproductive Health Education

Category	Pre-Test		Post Test	
	F	%	F	%
Good	3	14.3	17	81
Enough	3	14.3	2	9.5
Not Good	15	71.4	2	9.5
Total	21	100	21	100
N	21		21	
Mean	2.5714		1.2857	
Std.Deviation	76.642		64.365	
Uji Wilcoxon	p=0,001			

Table 3 shows that before being given menstrual reproductive health education and free sex by distributing attitude questionnaires, it was found that most of the respondents were categorized as negative, namely 19 respondents (90.5%). After being given health education, 19 respondents were categorized as positive (90.5%). The results of data analysis using the Wilcoxon test on respondents' attitudes towards menstruation and free sex obtained a value of $P = 0.000$ meaning $p = <0.05$, so there is an influence of reproductive health education using the chain whisper method on the knowledge and attitudes of young women.

Table 3. Analysis of the Attitudes of Class VI Young Girls Before and After Being Given Reproductive Health Education

Category	Pre-Test		Post Test	
	F	%	F	%
Positive	2	9.5	19	90.5
Negative	19	90.5	2	9.5
Total	21	100	21	100
N	21		21	
Mean	1,9048		1,0952	
Std.Deviation	30,079		30,079	
Uji Wilcoxon	p=0,000			

DISCUSSION

Knowledge and Attitudes of young women before being given reproductive health education.

Based on table 2, it can be explained that knowledge before being given menstrual reproductive health education and free sex by distributing knowledge questionnaires found that most of the respondents were categorized as lacking (71.4%), namely 15 respondents. The condition of the respondent is categorized as lacking, the condition of the respondent's knowledge is lacking because there are several factors that can cause adolescents' knowledge about menstrual reproduction and free sex including unclear information, mass media that are not necessarily facts, the influence of the closest people, parents, friends, and discussions (Tofa, 2012).

Based on table 3, it can be explained that the attitude before being given menstrual reproductive health education and free sex by distributing attitude questionnaires found that most of the respondents were

categorized as negative (90.5%), namely 19 respondents. The condition of the respondent is categorized as negative. The attitude of the respondents is negative because there are several factors that can cause adolescent attitudes about menstrual reproduction and free sex including personal experience, the influence of other people, cultural influences, mass media, emotional factors (Saptiawan, 2010).

Based on table 1, out of 21 female respondents in class VI, they were given menstrual reproductive health education and free sex using the chain whisper method. Most were at the age of 12 as many as 17 respondents (81.0%) The normal age for a woman to get menstruation for the first time at the age of 12 or 13 years, but there were also those who experienced it earlier at the age of 8 years or later at the age of 18 year. (Hasanah, 2016). And a small portion at the age of 11 years as many as 4 respondents (19.0%). This is because those aged 11 and under are not fully mature and do not understand the changes that will come during puberty, namely menstruation and free sex.

The results of previous researchers for age from Lestisa Azelia Astri's 2016 study showed that at the age of 11 there were 30 respondents (55.6%), aged 12, there were 13 respondents (24.1%). With the brainstorming method in implementing the brainstorming method, gets more attention from students. Based on the observations of researchers, students were more enthusiastic about participating in reproductive health education using the brainstorming method. The researcher used colored paper media which was distributed to each student, so that students were immediately interested in giving their opinions. The results obtained were that the knowledge of the respondents got results, but the attitude of the respondents was not equivalent to their knowledge. When the group discussion took place, the average student was less active in the group, this was because grade 5 elementary school students were not yet able to discuss independently. The material provided is about the early signs of puberty, physical changes when entering puberty, emotional changes when entering puberty, namely (menstruation), and free sex that occurs in teenage pregnancy and its consequences. This is based on Miswanto (2014) in Nurfitriani's research, which states that success in conveying information is largely determined by the nature and quality of the information received and this in turn is determined by the nature and quality of the relationships between the individuals involved.

Knowledge and Attitudes of young women after being given reproductive health education.

Based on table 2, it can be explained that knowledge after being given menstrual reproductive health education and free sex by distributing knowledge questionnaires found that most of the respondents were categorized as good (81.0%), namely 17 respondents. The condition of the respondent is categorized as good. Adolescents who have correct knowledge about reproductive health can be careful in their steps, especially when they say that it is puberty, namely menstruation. Teenagers will be able to provide an assessment of whether it is appropriate to have sexual relations with their partners before marriage. The assessments made by the youth were made consciously and not under compulsion (Frantin, 2012).

Based on table 3, it can be explained that the attitudes after being given menstrual reproductive health education and free sex by distributing attitude questionnaires found that most of the respondents were categorized as positive (90.5%), namely 19 respondents. The condition of the respondent is categorized as positive, a good (positive) attitude will make someone not take negative actions related to reproductive health (Aritonang, 2015).

From game-based learning that knowledge and attitudes about reproduction for young women will improve and increase. Through this method of learning by whispering games (chain messages) this can train children's listening skills with satisfactory results, moreover it can encourage children to concentrate when receiving learning material, so that children who initially get bored quickly and even lack interest in any lesson, become interested in any subject. Which has been specifically designed to assist the learning process (Prasetya et al, 2013). One example of the application of the game-based learning method that can be made by teachers in elementary schools is the chain whisper. Games do have enormous potential in building motivation in the learning process of students, especially elementary school (SD) students.

The Influence of Reproductive Health Education by Chain Whispering Method on Knowledge and Attitudes of Young Women.

Tables 2 and 3 show that based on the results of the Wilcoxon statistical test, it is known that the average value (mean) before being given menstrual reproductive health education and free sex and distributing knowledge questionnaires was 2.5714 with a standard deviation value of 76.642 while the average value (mean) after being given menstrual reproductive health education and free sex and distributing knowledge questionnaires, namely 1.2857 with a standard deviation value of 64.365. The research results obtained from the analysis with the Wilcoxon test obtained a significant value of $P = 0.001$, meaning $p < 0.05$, then H_1 is accepted, meaning that there is an influence of reproductive health education using the chain whisper method on the knowledge and attitudes of young women.

Provision of menstrual reproductive health education and free sex using the chain whisper method to class VI teenage girls. To find out the knowledge and attitudes of young women before and after being given reproductive health education. The researcher measured the knowledge and attitudes of grade VI young girls by distributing knowledge and attitude questionnaires. Before being given the knowledge and attitude questionnaire, most of the sixth-grade girls experienced a decrease in knowledge, especially about menstruation and free sex, to an increase about reproduction, especially menstruation and free sex. The benefits of health education, especially reproductive health for grade VI girls, is to equip and make children aware of the importance of maintaining their health, welfare and dignity by instilling self-protection. a hope that changes will occur in the knowledge, attitudes and behavior of individuals, families, and communities in maintaining healthy living behaviors or an active role as an effort to manage

optimal health status (Sarowono, 2020). The effect of health education on adolescent knowledge about reproductive health in 2018 (Danang Ari Setyawan 2018).

The effect of providing reproductive health education on the level of knowledge of early elementary school adolescents in the tourist area of Bandungan, Semarang Regency, October 2016 (Letisa Azelia Astri, Sri Winarni, Yudhy Dharmawan 2016). So that the results of research conducted after being given menstrual reproductive health education and free sex with the chain whisper method to class VI adolescent girls experienced an increase in knowledge, indicating an increase in knowledge before and after being given health education about adolescent reproductive health, this proves that in addressing the respondent's ability In receiving and understanding adolescent reproductive health material that is given differently, health education is an effective method for increasing adolescent knowledge. According to Notoadmodjo (2012) the delivery of information is influenced by the method used in which the method and media for delivering information can have a significant effect on increasing knowledge.

CONCLUSION

Knowledge before being given Health Education was in the less category while after being given Health Education it was in the good category. The attitude of adolescents before being given health education was in the negative category, while after being given health, the attitude of adolescents became positive. The knowledge of class VI adolescents UPT SD Negeri 60 Gresik has experienced a good increase so that it is maintained. However, to increase their knowledge, adolescents must play an active role in seeking information about reproductive health such as reading books, reading articles from the internet and information from electronic media. It is intended that the information obtained by adolescents is not wrong and can be used as a reference for adolescents to socialize properly. For young women to take better care of themselves, especially at the beginning of puberty (menstruation). So that the results of this study can be used as basic data in developing science and adding to the author's insight regarding knowledge about reproductive health. This research is expected to be able to facilitate more information about adolescent reproductive health such as increasing reading in the library and increasing counseling activities about adolescent reproductive health.

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