

# Reproductive Health Snake Game in Prevention of Before Marriage Sex Prevention in Adolescents

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## ABSTRACT

Kemenkes reports that as many as 4.31% of junior and senior high school boys and girls have been forced to have sexual relations before marriage. BPS reports also reported 0.9% of children aged 10-17 in South Sulawesi had been married and as many as 0.11% had been divorced. This study aims to analyze the effect of reproductive health snake media games on adolescent knowledge and attitudes in the prevention of premarital sex in SMA 1 Parepare City. This type of research is a Quasi Experiment with the design of two control and comparison groups. The sample selection uses accidental sampling, divided into two groups namely the control group and the control group with 15 people each. Data analysis using the Independent sample t - test. The results of the study after being given the game snakes and ladders obtained an average value of knowledge of the training group 34 and the control group 30.07 while the mean value of attitudes in the care group 109.47 and the control group 99.67. This study can conclude what should be given, there are no significant differences in the value of the settings and control groups and there are significant differences in the values of the settings and controls. After playing the snakes and ladders game, the average score of difference of knowledge ( $p = 0.018$ ) and attitude ( $p = 0.000$ ) was obtained in the training and control groups. The school is needed to use the media as a means of adolescent reproductive health education.

**Keywords:** *snakes and ladders game reproductive health, knowledge, attitude*

## 1. INTRODUCTION

Adolescents in their development begin to be attracted to the opposite sex, so adolescents are encouraged to date. Dating behavior will encourage adolescents to engage in premarital sexual behavior [3]. Teens with less life skills will easily engage in premarital sex. Psychosocial development in early adolescents is still unstable different from late adolescents who tend to be more stable and ready to become independent adults. Therefore, early teens will tend to engage in unhealthy sexual behavior compared to late teens. Adolescence or adolescence is an important phase for human development [4].

Based on data from Kemenkes [1] reports that as many as 4.31% of middle and high school adolescents, both men and women have been forced to have sexual relations before marriage.

Based on Susenas [2] funds in Indonesia, around 39.17% or 2 out of 5 girls aged 10-17 years were married before the age of 15 years, 37.91% were married at the age of 16 years and 22.92% were married at the age of 17 years. For South Sulawesi, 0.9% of children aged 10-17 years were married and 0.11% were divorced.

In the study of Mathur, et al [5]. previously stated that 4.26% of respondents claimed to have had premarital sex. This is supported by data that adolescents aged 13-16 years reported that they had kissed with a partner. Yuni, et al [6]. study mentioned that of 10 students of class VIII, it was

found that 6 teenagers had girlfriends, and two of them had kissed.

Premarital sexual behavior causes pregnancy outside marriage and sexually transmitted diseases. A survey conducted by Kemenkes [3] states that most of the causes of premarital sex are curiosity that tends to arise in adolescent boys. The reason for teenage girls who engage in premarital sex is that it just happens and is forced by a partner. Another study stated that 15% of respondents claimed to be forced or seduced by a boyfriend to have premarital sex.<sup>6</sup> HIV / AIDS is a disease that can arise from premarital sexual behavior.

The existence of ease in finding various kinds of information including information relating to sex problems, is one of the factors that can make most teenagers trapped in unhealthy sexual behavior. Various information can be accessed by teenagers through the internet or in magazines that are presented both clearly and in a raw manner, that is, only teaches ways of sex without any explanation of healthy sexual behavior and the effects of risky sex, for example, diseases caused by unhealthy sexual behavior. The research of Yuni et al [6]., states that media exposure in the form of pornographic shows and attitudes that support premarital sex relationships are a strong factor in the behavior of adolescent premarital sexual relations in Bali.

Educational game methods have advantages in the learning process to be fun and allow for active participation from students. A suitable type of game media given to adolescents is snakes and ladders. The advantage of snakes

and ladders is this game can be done outside the classroom or in the classroom, but it can stimulate children to move in groups or individually [7].

Based on these data and phenomena, the researchers are interested in identifying further the attitudes of adolescents about the prevention of premarital sex. The researcher's aim was to find out "The Effect of Reproductive Health Snake and Ladder Games on Teenagers' Knowledge and Attitudes in Prevention of Premarital Sex".

## 2. METHOD

Research design using quasi experiment with pre and post designs. This study involved two research groups namely the experimental group and the control group. Where the experimental group and the control group were first given the same questionnaire, then the treatment was carried out namely snakes and ladders in the experimental group. The last thing to do is again giving the same questionnaire. This research was conducted at SMA Negeri 1 Parepare City in May to June 2019. The instruments in this study were questionnaires and snakes and ladders games. The population in this study were students of class XI and XII in SMA Negeri 1 Parepare with a total of 698 students. The sample counting technique uses the Ferderer formula, so that a sample size of 30 people is obtained. So the sample size is 15 respondents for the experimental group and 15 respondents for the control group.

## 3. RESULTS AND DISCUSSION

Based on 30 respondents in the study location, namely in class XI and XII, the number of male respondents was 17 (56.7%) and female respondents were 13 (43.3%). Age of respondents 16 years as many as 16 people (53.3%) and aged 17 years as many as 14 people (46.7%).

In Table 1 shows the knowledge of respondents before and after treatment, it is known that in the control group with a sample of 15 people has an average value of 28.33. Whereas in the experimental group with a sample of 15 people with an average value of 27.07.  $p$  value in the control group and the experimental group before giving the snake ladder game is  $0.494 > 0.05$  then  $H_0$  is accepted and  $H_a$  is dit. So it is stated that there is no difference in knowledge between the control group and the experimental group before giving the intervention. After being given treatment in the experimental group the average value of knowledge increased to 34 and in the control group had an average value of 30.2667.  $p$  value in the control group and the experimental group after giving the snake ladder game is  $0.030 < 0.05$  then  $H_0$  is rejected and  $H_a$  is accepted. That is, that there is a difference in knowledge between the control group and the experimental group after the intervention. So it is stated that there is an influence on the knowledge of adolescents in efforts to prevent premarital sex in the control group and the experimental group after giving the snake ladder game.

The game is done in groups to obtain data about the results of pre-test and post-test between the experimental class that is treated and the control class that is not treated. Data analysis conducted in this study was the Independent sample  $t$  - test. The confidence value used is 95%, so the significant value ( $\alpha$ ) is 0.05. if the results of  $p$  value  $< 0.05$ , then  $H_0$  is rejected and  $H_1$  is accepted.

Table 1. Knowledge of Respondents before and after Treatment of Ladder Snake Game in SMA 1 Parepare

	Group	n	Mean	Sd (min-max)	Sig
<b>Pre Knowledge</b>	Experiment	15	27,07	4,89120 (30 - 41)	0,494
	Control	15	28,33	5,12231 (21 - 40)	
<b>Post Knowledge</b>	Experiment	15	34,00	3,50510 (30 - 41)	0,030
	Control	15	30,266	5,28430 (21 - 40)	

In Table 2 shows the average value of the attitude of the respondents before treatment, namely in the experimental group at 90.67 and the control group at 74.20. Based on the results of the independent samples  $t$ -test, it was stated that prior to the treatment there were differences in respondents' knowledge both in the experimental group and the control group, with a sig value of 0.00. After treatment there was an increase in the average value of respondents' knowledge, where in the experimental group was 109.47 and in the control group was only 99.67. Independent samples  $t$ -test results obtained sig  $< 0.05$  so that it can be concluded that after the treatment there was a difference in knowledge in the experimental group and the control group.

### Knowledge of Respondents

In this study, respondents who were used as research samples were 30 students of Parepare 1 Public High School, aged 16-17 years old and currently attending class XI-XII. Teenagers 16-17 years old are middle adolescents where the knowledge and experience of a teenager is still lacking. At the middle age of adolescents they begin to feel like looking for self-identity, there is a desire to date or attraction with the opposite sex, there arises a feeling of deep love and the ability to think abstractly (fantasize) is growing and has begun to fantasize about matters relating to sex, lack knowledge causes adolescents to tend to find out and want to try things related to sex so that this will affect adolescent attitudes towards sex [8].

Knowledge is the various symptoms encountered and obtained by humans through the observation of the senses. Knowledge arises when a person uses his senses or intellect or is felt before [9]. In this study it shows that the control group gets an average pre-test score of 28.33 and an average post-test score of 30.2667. While the

experimental group got an average pre-test score of 27.07 and an average post-test score of 34 had a percentage. Means it can be said that using snakes and ladders has a good effectiveness compared to not using snake media (control group). This can be shown from the results of the calculation of the average posttest value in the experimental class that is higher by 34 while the average control class is 30.2667. The results of the independent t - test statistical test after giving the ladder snake game are p

value of 0.030 <0.05 which means there is an influence on adolescent knowledge in the prevention of premarital sex in the control group and the experimental group after giving the ladder snake game.

Table 2. Attitudes of Respondents Before and After Treatment

	<b>Group</b>	<b>n</b>	<b>mean</b>	<b>Sd (Min-Max)</b>	<b>p</b>
<b>Pre Attitude</b>	Experiment	15	90,67	8.886 (71-103)	0,000
	Control	15	74,20	9.518 (57-92)	0,000
<b>Post Attitude</b>	Experiment	15	109,47	4.580 (98-114)	0,000
	Control	15	99,67	5.122 (91-107)	0,000

Based on the results of these data at the time of the pre-test, the average level of respondents' knowledge in the experimental and control groups was sufficient. After intervention by using ladder snake media in the experimental group, there was an average increase in the level of knowledge of respondents where students who entered the experimental group had an average increase of 6.93 while in the control group that was not given the intervention had an increase in the mean score the average is 1.9367. This means that the average increase in the experimental group is higher than the control group.

This study is in line with research conducted by Karundeng et al [10], who found that health promotion was very effective in increasing one's knowledge. Therefore, providing information by providing health promotion can make someone who does not know know and who knows can understand the information received. Another thing obtained from the study is that the majority of respondents know that watching porn videos can encourage premarital sexual behavior which will have a negative impact such as pregnancy.

Education using snakes and ladders media influences the level of adolescent education regarding efforts to prevent premarital sexual behavior. The results of the statistical test show differences in the average level of knowledge in the treatment group after the intervention was given even though the control group also had an average increase but was lower than the experimental group. This is because the respondents were enthusiastic during the interview, besides that the respondents were very enthusiastic during the discussion. On certain topics, one of the factors that can cause premarital sexual behavior, male respondents are more active so that at first it was noisy but could be controlled again. According to Pratiwi [11] factors that can cause premarital sexual behavior are sexual experiences, one of which is watching porn videos. From the discussions conducted it was found that almost all male respondents had seen pornographic videos. This is

consistent with previous research which says that pornographic media exposure is a direct factor that can influence sexual behavior in adolescents and the average rate of premarital sexual behavior is higher in adolescent boys [12].

Respondents said that education had never been done with games. This type of educational provision has only been given by the lecture and question and answer method. The results of statistical tests indicate that there is an influence of education with snake ladder media on the knowledge of class XI and XII students at SMA Negeri 1 Parepare in efforts to prevent premarital sexual behavior. The selection of snakes and ladders as a medium in educational grants is because it contains information, pictures and question cards so that teenagers will think of the relationship between the information in the picture and the question sheets obtained. Teenagers experience cognitive development.

Adolescents begin to be able to think abstractly and logically by using probable thinking patterns. At this stage adolescents begin to draw conclusions, interpret and develop hypotheses. Providing education with snake and ladder media that teens will get information first before getting question cards. Therefore, if a teenager gets a question card first and doesn't get an explanation, then the teenager can look at the picture on the bottom of the snakes and draw conclusions to get the answer to the question, not sure that the teenager will get the information before getting the question card. Therefore, if a teenager gets a question card first and doesn't get an explanation, then the teenager can look at the picture on the bottom of the snakes and draw conclusions to get the answer to the question.

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When educating with snake ladder media, respondents find it easy to understand the material provided. This is evidenced by the increase in the average value of respondents. Students said they felt attracted to playing snakes and ladders and were happy because they could discuss with other participants. The selection of snakes and ladders as educational media, is inseparable from the advantages of learning by using games. According to Sarwono [12], children learn through the five senses and the more the five senses are involved, the easier it is for children to receive information, besides that children also learn through language. Children are given the opportunity to express their feelings. In this snake ladder media game, besides having pictures that make it easy to remember, there are some events that students must respond to, so they can express their feelings. This snake and ladder game, one pawn is held by two people, so that when answering questions, students in one group can exchange ideas so as to increase cooperation and active role of group members.

Reproductive health knowledge that they know is mostly obtained from friends and social media. Respondents who are still in the adolescent category and are experiencing puberty, really need other friends besides family to be invited to discuss reproductive health. Reproductive health knowledge from families is generally in the form of advice, whereas knowledge of reproductive health from friends is generally in the form of personal experience stories [13].

#### **Attitude of Respondents**

In the experimental group with snakes and ladders game media can improve student attitudes because in this media students are invited to think directly about the material in the form of questions and statements concerning student attitudes about reproductive health. For example the questions on the board that contain students' opinions about sexual relations outside of marriage and promiscuity in adolescents. From these questions students are given the opportunity to answer according to their perceptions and almost every student has the opportunity to answer these questions if their dice numbers are in the question box and in this media it is very possible for all students to get a turn

#### **4. CONCLUSION**

The snake and ladder game of reproductive health has an influence on improving the knowledge and attitudes of high school students as an effort to prevent premarital sex. Subsequent studies should examine a larger number of samples and use several different schools, so as to obtain maximum research results.

to get questions because 1 experimental group consists of only 5 students.

Unlike the case with the control group respondents, in this group no treatment was given so that it can be compared with the experimental group given the treatment, and the results obtained suggest that the increase in the average experimental group was higher than the control group. Respondents said that education had never been done with games. This type of educational provision has only been given by the lecture and question and answer method. The results of statistical tests show that there is an influence of education with snake ladder media on the changes in the attitude of students of class XI and XII at SMA Negeri 1 Parepare in efforts to prevent premarital sexual behavior.

This shows that health education can increase knowledge, so that it can change attitudes towards better. Attitude is the second level in behavior. According to Bloom, quoted in Notoadmodjo [9], a person will change his attitude if he is able to change the cognitive component first. Information conveyed in the snake ladder media game gives an influence on one's knowledge or cognitive abilities. New information about reproductive health contained in the snakes and ladders game can provide a new cognitive foundation for the formation of attitudes about reproductive health that carry suggestive messages so that they can provide a strong enough basis in assessing a thing and forming certain attitudes. The result is an increase in attitude value in the experimental group (treatment) of snake ladder media.

Another study Zamzami [14] concluded that snakes and ladders game media can improve students' attitudes before and after being given treatment from the total value of 41.63 to 52.09. Based on these results it can be concluded that health education with snake ladder game media is effective for improving student attitudes. According to Puspitaningrum<sup>15</sup> students who get sex education have increased knowledge and attitudes compared to before getting sex education. This is supported by research by Ahiyanasari and Nurmala [16] which states that the better the experience of the respondent for not having premarital sex, the stronger the respondent's intention to prevent premarital sex.

The results also showed that high school students had a good attitude change to prevent premarital sex. However, most of the respondents just realized that all this time they had premarital sex such as holding hands, hugging, kissing or kissing because of the influence of sexual desire or desire. The positive attitudes of young people can prevent them from premarital sexual behavior.

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