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# JURNAL NERS DAN KEBIDANAN INDONESIA INDONESIAN JOURNAL OF NURSING **AND MIDWIFERY**

The effect of genre and tarosi snake and ladders education media on reproductive health knowledge of adolescent in Karangsari Pengasih Village, Kulon Progo, Yogyakarta

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### **ABSTRAK**

Latar Belakang: Kesehatan reproduksi merupakan keadaan sejahtera secara fisik, mental dan sosial dalam segala aspek yang berhubungan pada sistem serta fungsi serta prosesnya. Dampak masalah kesehatan reproduksi adalah terjadinya kehamilan tidak diinginkan, penularan penyakit menular seksual, dan penggunakan Narkoba/NAPZA.

Tujuan : Dari penelitian ini adalah untuk mengetahui pengaruh media edukasi ular tangga genre dan laga tarosi terhadap tingkat pengetahuan kesehatan reproduksi pada remaja di Desa Karangsari Pengasih Kulon Progo Yogyakarta.

Metode: Penelitian ini yang digunakan pre – eksperiment dengan menggunakan rancangan one – group pra – posttest design. Penelitian ini dilakukan di Desa Karangsari Pengasih Kulon Progo dengan populasi remaja ada 400 remaja. Sample penelitian ini adalah 20 responden. Analisa bivariat dilakukan untuk mengetahui pengaruh media edukasi ular tangga genre dan laga tarosi terhadap tingkat pengetahuan kesehatan reproduksi pada remaja dengan uji paired t-test untuk sampel yang berpasangan.

Hasil: Hasil penelitian menunjukan tingkat pengetahuan remaja tentang kesehatan reproduksi dengan menggunakan media laga tarosi (ular tangga kesehatan reproduksi) lebih besar dibandingkan dengan menggunakan ular tangga genre yaitu nilai rata rata pretest adalah 11,80 dan posttest 16,40, tetapi kedua media mempunyai pengaruh yang sama terhadap tingkat pengetahuan kesehatan reproduksi pada remaja, hal ini dapat diandai dengan nilai hasil signifikan dari kedua media adalah 0,000<p0,05.

Kesimpulan : Penelitian ini adalah ada pengaruh media edukasi ular tangga genre dan laga tarosi terhadap tingkat pengetahuan kesehatan reproduksi pada remaja di Desa Karangsari Pengasih Kulon Progo Yogyakarta.

KATA KUNCI: edukasi; media;permainan; reproduksi; remaja

#### **ABSTRACT**

Background: Reproductive health is a state of physical, mental, and social well-being in all aspects related to the system and its functions and processes. The impact of reproductive health disorders is the occurrence of unwanted pregnancies, transmission of sexually transmitted diseases, and the use of drugs.

Objectives: This study was to determine the effect of the tarosi genre and educational media on the knowledge of adolescent reproductive health in Karangsari Pengasih Village, Kulon Progo, Yogyakarta.

**Methods**: This type of research is pre-experimental with a one-group pre-posttest design. This research was conducted in Karangsari Pengasih Village, Kulon Progo, with a population of 400 teenagers. The sample of this research is 20 respondents. Bivariate analysis was conducted on the influence of educational media for snakes and ladders Genre and Tarosi on adolescent reproductive health knowledge using Paired t-test for paired samples.

Results: This study shows that the level of knowledge of adolescents about reproductive health using Tarosi education media is greater than those using Media Genre, namely the average pre-test score is 11.80 and post-test is 16.40. Moreover, the two media have the same influence on the level of knowledge of reproductive health in adolescents. This can be shown by the results of the significance value of the two media of 0.000<p 0.05. Conclusions: This study concludes that there is an influence of the tarosi genre and educational media on the knowledge of reproductive health in adolescents in Karangsari Pengasih Village, Kulon Progo Yogyakarta.

**KEYWORD:** education; media; game; reproduction; adolescent

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### INTRODUCTION

Adolescence is a period where the change from childhood to adulthood. Adolescence is a period between the ages of 10 and 24 years. Adolescence is a period where the change from childhood to adulthood is marked by changes in physical appearance and physiological function (1). The characteristics of adolescence are characterized by physical organs, development of thought, and adolescence as a bridge between asexual and sexual children that cannot be separated from the reproductive system (2).

Reproductive health is a condition of wellbeing both physically, mentally, and socially as a whole (not only avoiding disability or disease) in all matters relating to the reproductive system and its functions and processes (3). Health in the reproductive organs can be defined as a physically and biologically prosperous condition, especially in the reproductive process, not only from disease and infection in the reproductive organs. Infections of the reproductive organs are increasing due to a lack of hygiene in the reproductive organs (4). Data on the reproductive health situation in adolescents is sourced from survey data on demographic and health data, especially adolescent reproductive health.

According to central data and information from the Ministry of Health of the Republic of Indonesia in 2010, the largest Indonesian population of 237.6 million were adolescents amounting to 63.4 million, with 32,164,436 boys (5.70%) and 31,279,012 girls. people (49.30%) which is about 27% of the total population (5).

The survey data were obtained from the data center and health information of the Republic of Indonesia in 2015, the cause of adolescents having sex before marriage is because of curiosity or curiosity (57.5%) in men and (38%) in women and coercion from partners (12, 6%) in women. This suggests that the lack of knowledge or understanding of adolescents in healthy life behavior and risks in having sex before marriage (3).

Previous research shows that there are still many adolescents in rural areas who do not know about reproductive health (6). In rural areas, parents still feel taboo when discussing reproductive health in their children. Even though adolescents in rural areas also need to be given information about reproductive health, apart from getting clarity about their reproductive organs, adolescents also know themselves; adolescents can also be responsible for their reproductive health (7).

Tarosi Snakes and ladder game is one of the health promotion media. This game is a multifunctional medium because in performing snakes and ladder game that can be played by boys and girls can even be played by all ages. This game provides many images or writings focus on reproductive health, where this reproductive health material is well packaged. With confidence, respondents will find it curious to do the game using these snakes and ladder medium. In this game of snakes and ladders, respondents exchange information with other respondents about reproductive health. Therefore, snakes and ladders are very effective to do in the delivery or improvement of reproductive health knowledge in adolescents.

Based on Health Office of Yogyakarta, during 2015 the numbers of adolescent childbirths in Yogyakarta were 1,078 Junior High and Senior High School students who had given birth. There are 976 cases of marriage by accident, 102 cases of marriage in adolescence and childbirth in adolescence, cases in Bantul district, 276 cases, Jogja City 228 cases, District 219 cases, Gunung Kidul 148 cases, and Kulon Progo 105 cases (9).

The results obtained from a preliminary study conducted at the Kulon Progo Health Office in October 2019, it was found that in 2014 there were 127 adolescents aged 10-19 years, in 2015 there were 107 adolescents, in 2016 there were 84 adolescents, in 2017 as many as 56 cases and 67 adolescents in 2018. Pengasih sub-district is one of the sub-districts in Kulon Progo Province. It has the highest adolescent pregnancy cases when compared to other sub-districts. Furthermore, the researchers also conducted a preliminary study at the Puskesmas Pengasih II Kulon Progo and obtained the results of teenage pregnancies in 2017 to 2018, namely that there were 6 adolescent to 9 adolescent, while for the number of teenage deliveries 5 to 6 cases. The high rate of teenage pregnancy in Pengasih sub-district is due to the lack of information on reproduction among adolescents. Another factor that affects the high rate of pregnancy among adolescents is the lack of initiative by parents to discuss reproductive health with children because it is taboo. The effort made by the PHC is to conduct socialization to adolescents in youth organizations and youth in vouth Posyandu. However, not all youth in the village participate in the youth and youth Posyandu activities. In Karangsari Village, there are 2 youth posyandu but only one youth posyandu is still active. So that, posyandu activities for teenagers cannot run optimally because not all youth join. Meanwhile, the place studied had never been exposed to the activities of the PIK-R (Center for Information and Youth Counseling). The purpose of this study was to determine the effect of Genre and Tarosi snake and ladders education media on reproductive health knowledge of adolescent in Karangsari Pengasih village, Kulon Progo, Yogyakarta.

#### **MATERIALS AND METHODS**

A pre-experimental design with one group with pre and post-test was used in this study. The characteristic of this research is to reveal a cause and effect relationship by involving a group of subjects. The subject group was observed before being given intervention, then another observation was made after the intervention (4).

The population in this study was 400 adolescents aged 10 to 14 years. Sampling in this study is by means of cluster sampling, taking respondents according to the inclusion criteria, namely adolescents aged 10 to 14 years, residing in a hamlet that has never been exposed by the Center for Adolescent Information and Counseling (PIK R), are willing to be the object of research and attend the research. This research sample amounted to 20 respondents. According to Agung, for simple experiments with tight control, research success can be achieved by using a sample size of 10 to 20 (10).

This study uses a questionnaire measuring tool that has previously been tested for validity and reliability testing. The validity test was carried

out in a different place from the place where the research was conducted. Before the validity test was carried out on 30 respondents with the number of questionnaire questions there were 40 statements, after the validity test was carried out there were 17 valid and reliable questions.

Analysis of the data in this study was used the Paired Simple t-Test. This research has received approval and research feasibility from the Ethics Committee of the Faculty of Health Sciences, Alma Ata University Yogyakarta in March with the number KE / AA / III / 10126 / EC / 2020.

### **RESULTS AND DISCUSSION**

Based on Table 1, it showed that the characteristics of respondents in this study are the majority of respondents aged 13 to 15 years. namely with a total of 12 respondents (60%), and the few are adolescent aged 10 to 12 years, namely as many as 8 respondents (40%). The numbers of male and female respondents are the same, namely 50% each. The educational characteristics of adolescents who are still in elementary school are 8 respondents (40%), and there are 12 respondents (60%) who are junior high school. Moreover, the respondents are based on information sources that were obtained the most is information obtained from parents as much as 55%.

**Table 1. Distribution of Respondents Characteristics** 

Characteristics	Frequency (f)	Percentage (%)
Gender Male Female	10 10	50 50
Age (Years) 10-12 13-15	8 12	40 60
Education Elementary School Junior High School	8 12	40 60
Information Sources Parents School Book	11 8 1	55 40 5
Total	20	100

## **Bivariate Analysis**

Based on Table 2, it was obtained a significant value of 0.000 < 0.05, so there is an effect of genre and Tarosi snake and ladders on adolescent knowledge. The provision of health education with the Tarosi is more effective on knowledge than using Genre snake and ladders. This can be seen from the results of the Paired Simple t-Test that shows the difference in the average results of the pre-test and post-test is greater than the results of the Tarosi game with a higher post-test score. This is also in line with previous studies which showed the post-test results were greater than the pre-test (11).

The snake and ladder game Genre is a snake and ladder medium that has been established by the National Population and Family Planning Agency (BKKBN). Each box in the game from the snake and ladder Genre includes the age of marriage, healthy behavior, HIV / AIDS, and drugs. Meanwhile, the Tarosi ladder snake is a modification of the Genre ladder snake. This game focuses on reproductive health. There is a case in this game that aims at the respondent to be able of identify, understand and analyze the trigger case of reproductive health in the Tarosi ladder snake. Therefore, the knowledge of adolescents about reproductive health is more increased by using the Tarosi ladder snake game media compared to the Genre ladder snake. Furthermore, it is also supported by the role of parents that can be seen from the distribution of characteristics of information sources. In line with previous research that states that parents are obliged to care for their children by educating, protecting from crime,

Table 2. Paired t-test for Genre and Tarosi Snakes and Ladders

Game	Intervention	Mean	Standard Deviation	Sig. (2 failed)
Tarosi	Pretest Posttest	11,80 16,40	1,476 0,699	0,000
Genre	Pretest Posttest	13,20 16,60	1,135 0,516	0,000

and educating children to live in society. Given that the role or role of parents for children is as a teacher, namely, parents teach motor skills, skills through dexterity, teach rules, and instill behavior in society (12).

### **DISCUSSION**

According to previous research, it revealed that the role of parents is to provide the basis for religious education, to create a warm and pleasant home atmosphere, and to provide an understanding of the good and bad norms that exist in society (13). Furthermore, there is an open attitude between children and parents, the easier it will be for children to capture the information conveyed by their parents. Integrated counseling by health services has an urgent role in advanced knowledge and control about reproductive health problems, for example about HIV / AIDS (14).

Based on the results of previous research, it also shows an increase in students' knowledge and attitudes about sexuality education from the game of snakes and ladders (15). Snake and ladder media is an effective thing to do to increase adolescent knowledge in efforts to prevent pre-marital sex (16). The snake and ladder game aims to provide learning motivation to participants so they can repeat and remember and even increase knowledge about reproductive health that has been gain before or that has not been obtained (17). It is also supported by previous research that shows the results of health education can influence increasing knowledge by providing interventions. Using health education methods will affect knowledge and be able to find out how to prevent things that have an impact on the emergence of psychological problems such as anxiety (18).

This study is in line with previous research that states that there are differences in knowledge and attitudes before and after reproductive health education (19). Therefore, health education using snake and ladder media is very effective in increasing knowledge of reproductive health.

### **CONCLUSION AND RECOMMENDATION**

Based on the characteristics of respondents in the study aged 10 to 15 years with the highest number of 13 to 15 years, with the sexes of 10 males and 10 females with a current education is junior high school with the most source of information is parents with a size of 55%. There is an effect of Genre and Tarosi snake and ladders education media on reproductive health knowledge among adolescent in Karangsari Pengasih Kulon Progo Village, Yogyakarta with a significant result of 0.000 < 0.05. A larger number of respondents and a more varied age range need to be carried out in further research.

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