



Differences Teenage Women's Motivation Score in the Prevention of Adolescent Pregnancy Before and After Providing Health Education Through Video Media

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ABSTRACT

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Pregnancy among teenagers can have a bad effects on teenagers, both physically, psychologically, emotionally, and environmentally due to the unpreparedness of adolescent in facing their pregnancy, even to the point of causing death. This study aims to prove the difference in motivation scores of adolescent in avoid adolescent pregnancy before and after being given health education use video media. The type of research is pre-experimental with a one group pretest posttest design. The sample of this study were 58 girl students in grades X, XI and XII at SMA Negeri 2 Mengwi using a probability sampling technique, namely simple random sampling. Data analysis used the Wilcoxon test. The results of the study showed an increase in the average motivation score of adolescent before and after being given health education through video media (p value 0.000) with a mean rank of 9.21. These results indicate a difference in motivation scores of adolescent in avoid adolescent pregnancy before and after being given health education use video media. Further research is expected to be able to carry out different interventions regarding pregnancy prevention in adolescents.

INTRODUCTION

Adolescence is a transitional phase of life that marks the transition of growth and development from childhood to adulthood, from the age of 15-19 years. This process involves significant transformations in aspects of physical, cognitive, and psychosocial growth, which significantly affect adolescents' perceptions, thoughts, decision-making, and interactions with their surroundings. In adolescence, individuals have entered a phase where they are able to develop independent behaviors, including eating habits, physical activity, and friendship networks that can be related to sexual activity before marriage.¹

Data from Badan Kependudukan dan Keluarga Berencana Nasional (2021) shows that the youth population, which includes individuals aged 10-24 years, reaches 24% of the total population of Indonesia, which is 67 million people based on the 2020 population census data, so that youth are an important focus of attention in the national development framework². The deep concern for sexual



issues in Indonesia indicates urgency, especially considering its potential impact on the high incidence of pregnancy at a young age. The problem of free sex in Indonesia is not only seen in large cities, but has also reached various smaller cities. This is influenced by the current rapid development of technology, especially among teenagers, with significant progress in the development of communication devices and the wide availability of internet access³.

According to a new report from the World Bank, the incidence of adolescent births in girls is estimated at 47.3 per 1,000 individuals. This is a slight increase compared to the global average of 44 and has not changed significantly since the mid-1990s⁴. In addition, the results of the Indonesian Demographic Health Survey stated that the prevalence of pregnancy in the 15-19 year old adolescent age group in Indonesia reached 36 per 1,000 pregnancies, providing further insight into the challenges at the national level. Basic Health Research shows that the number of pregnancies in 15-19 year olds in Bali is 50 out of a total of 3,936 pregnancies or 1.27%⁵.

Education level is one of the factors that can affect the incidence of pregnancy in adolescents. There is a relationship between basic education and the factors that cause teenage pregnancy in Indonesia⁶. Apart from the educational aspect, environmental factors and unhealthy dating styles among teenagers, such as engaging in sexual activity before marriage, can result in pregnancy at an early age. Based on data from the SDKI (2017) several examples of dating activities carried out by teenagers include hugging (10.2%), holding hands (55.6%), groping/being touched (3.7%), and kissing on the lips (21.4%). These dating activities can trigger sexual relations in teenagers and cause teenage pregnancy⁵.

The condition of unwanted pregnancy, especially among teenagers, has an impact that can be detrimental to teenagers, both physically, psychologically, emotionally and environmentally due to the teenager's unpreparedness in facing their pregnancy⁷. Many teenagers experience complications in pregnancy and childbirth, this is the main cause of the increase in maternal mortality rates in the 15-19 age group and infant mortality in the world⁸. Based on data from SDKI (2017) it was also reported that abortion incidents among unmarried women aged 15-19 years reached 6,750, which is twice the rate compared to the 20-24 age group which was recorded at 3,221⁵. Based on data reported in the Bali Health Profile, the absolute maternal mortality rate (MMR) in Bali Province in 2022 was 68 cases, and there were still 8 cases of MMR recorded in Badung Regency. One of the risk factors that causes an increase in MMR is 4 Too which includes the condition of the mother giving birth too young (<21 years), too old (>35 years), having births too close together, or having too many children⁹.

Based on the experience study conducted by the researcher while studying at SMA N 2 Mengwi, there were several cases of pregnancy that had occurred to female students at the school. Then based on the results of the preliminary study conducted by the researcher in January 2024, that at the school there had never been any socialization or counseling about teenage pregnancy. The results of interviews with 10 female students, that the female students did not know about the impact of pregnancy on teenage age. The knowledge possessed by adolescents can influence the motivation of adolescents in preventing teenage pregnancy.

From the problems that occur, teenagers need solutions to overcome their health problems. Efforts that can be made are by implementing health education for teenagers with video media to increase motivation in preventing early pregnancy.

Education and technology are now increasingly advanced, especially among teenagers. Teenagers are usually more interested in things that are varied and not boring. The learning stages are arranged as well as possible so that they can be easily understood by teenagers. The effectiveness of delivering information in the learning process is influenced by the media used. The learning process will be more effective if using interesting media in delivering information. One of the media that can be used is video media. Health education with video media has advantages because it provides a display in the form of audio and visuals that involve the senses of hearing and sight¹⁰.



Based on the background above, researchers are interested in conducting research on “Differences Teenage Women’s Motivation Score in The Prevention Of Adolescent Pregnancy Before and After Providing Health Education Through Video Media”

METHOD

This study uses pre-experimental research with a one group pretest posttest design. The type of research used aims to determine the difference in motivation scores of adolescent girls in preventing teenage pregnancy before and after being given health education with video media. The research was conducted at SMA N 2 Mengwi, Badung Regency in May 2024. The population in this study included all female students in grades X, XI, and XII of SMA N 2 Mengwi totaling 715 people. The inclusion criteria in this study were female students who were willing to be research subjects, female students in grades X, XI, and II, and female students aged 16-18 years, while the exclusion criteria were female students who did not attend school and did not participate in counseling and pretests. The sample was calculated using a paired numerical analytical research formula and a sample of 58 people was obtained. The sample in this study used probability sampling techniques, then at each level used simple random sampling. The type of data collected in this study is primary data obtained by conducting a direct survey of students of SMA N 2 Mengwi using a questionnaire given during the pretest and posttest. This study uses a questionnaire with a Likert scale consisting of positive statements and negative statements with a total of 10 statements. The answer scores for positive statements include: always (5), often (4), rarely (3), almost never (2), never (1). While negative statements include: always (1), often (2), rarely (3), almost never (4), never (5). At the data collection stage, the researcher first explained the questionnaire filling in order to minimize the possibility of errors. The pretest filling was carried out for 10 minutes. After that, the researcher provided health education through video media that showed short videos about adolescent pregnancy and provided educational materials such as reproductive organs, definition adolescent pregnancy, risk factors, impacts and efforts to prevent adolescent pregnancy. Then the posttest was conducted by distributing the questionnaire for 10 minutes with a 3-day interval. According to Vaus (2005) in Saloso (2011) to reduce the possibility of external exposure before the intervention, the distance between the pretest, intervention and posttest should be as short as possible. In the research of Andriani, et al. (2017), the posttest was given 3 days after the intervention and the results showed an increase in motivation. This is due to the encouragement or motive created by researchers by conducting health education. The dependent variable in the study is the difference in motivation scores of adolescents in preventing adolescent pregnancy, the independent variable of the study is health education using video media. The statistical test analysis used was the nonparametric Wilcoxon test because the data was not normally distributed with a significance level of 0.05.

RESULT AND DISCUSSION

This study is a pre-experimental study that examines the differences in motivation of adolescent girls in preventing adolescent pregnancy before and after being given health education through video media with a total of 58 respondents. The study was conducted directly at SMA Negeri 2 Mengwi. The characteristics of the research respondents are described based on age, education level, menarche, age of menarche, obtaining information and sources of information. with the following data:



Table 1.
 Description of Characteristics of Female Adolescent Research Subjects
 at SMA N 2 Mengwi (n=58)

Characteristics	Frequency (f)	Percentage (%)
Age		
16 years	24	41.4
17 years	20	34.5
18 years	14	24.1
Class		
10	16	27.6
11	20	34.5
12	22	37.9
Age of Menarche		
≤ 12 years	6	10.3
> 12 years - ≤ 15 years	52	89.7
Exposed to Information		
Yes	38	65.5
No	20	34.5
Information Source		
Not Yet Exposed	20	34.5
Social Media	26	44.8
Health Care Workers	7	12.1
Teachers	5	8.6
Total	58	100

From the table it can be seen from 58 respondents that 41.4% of female students aged 16 years old, 34.5% of 17 years old and 24.1% of 18 years old. As many as 27.6% of respondents came from grade 10, 34.5% of respondents from grade 11 and 37.9 respondents from grade 12. Most respondents experienced menarche at the age of > 12 years - ≤ 15 years, namely 89.7%. The majority of respondents had been exposed to information about adolescent pregnancy, namely 65.5% of respondents, and 34.5% had never received information. Judging from the source of information, most respondents got information from social media, namely 44.8%, then 12.1% got information from health workers and 8.6% from teachers.

Motivation of Adolescent Girls Before and After Being Given Health Education Through Video Media About Adolescent Pregnancy

Table 2.
 Data Normality Test Results

Motivation	df	Sig.
Pretest	58	0.027
Posttest	58	0.001

Based on the results of the data normality test using the Kolmogorov-Smirnov test, each data has a p value <0.05 and it can be concluded that the data is not normally distributed. The data analysis test in this study used a non-parametric statistical test, namely the Wilcoxon test.



Table 3.
Motivation of Adolescent Girls Before and After Being Given Health Education Through Video Media About Adolescent Pregnancy (n=58)

Motivation	Mean	Min	Max	Median	Standard Deviation
Pretest	36,76	26	46	38	5.481
Posttest	45,97	36	50	46	2.669

Based on the results of the study, the average score of motivation of adolescent girls before being given health education through video media was 36.76. The highest score was 46 and the lowest score was 26 with a standard deviation of 5.481, while the average score of motivation of adolescent girls after being given health education was 45.97. The lowest score was 36 and the highest score was 50 with a standard deviation of 2.669.

The researcher's assumption is that there are still respondents who do not know the impact of pregnancy at a young age. This can be influenced by several things, one of which is the lack of health education received by teenagers. This is supported by the explanation obtained from the teacher that students are rarely given health education or health counseling, especially about pregnancy that can occur at a young age. Health education is important to support health programs so that it can produce changes or increase knowledge and motivation of adolescents in preventing early pregnancy. In line with research conducted by Dinata, Utami dan Zulfitri, (2021) that providing health education has an effect on increasing adolescent motivation¹¹.

One way that can be done to increase the motivation of adolescent girls in preventing teenage pregnancy is by providing health education. In this study, information was delivered through the provision of health education using video media. Video is one of the interesting media because it can present material in audio and visual form. When the research was conducted, respondents seemed interested in paying attention to the material presented in video form. The use of video media in providing health education can overcome boredom in the learning process because it makes the teaching material more varied and not only verbal so it is not boring¹². Health education is an effort to increase knowledge. Increasing knowledge and motivation is one strategy to avoid risky sexual behavior in adolescents¹³. Providing appropriate and clear health education is expected to increase the motivation of adolescents to prevent pregnancy during adolescence.

Differences in Motivation Scores of Adolescent Girls Before and After Being Given Health Education Through Video Media About Adolescent Pregnancy

Table 3.
Differences in Motivation Scores of Adolescent Girls Before and After Being Given Health Education Through Video Media About Adolescent Pregnancy (n=58)

	Time	Mean	Mean Difference	N	Mean Rank	Sum of Rank	Z	P Value
Motivation	Before	36.76	9.21	0 ^a	0.00	0.00	-6.629 ^b	0.000
	After	45.97		58 ^b	29.50	1711.00		
				0 ^c				
Total				58				



The results of the analysis of adolescent motivation data in preventing teenage pregnancy before and after being given health education were 9.21 and a p value of 0.000. This shows that there is a difference in the motivation scores of female adolescents before and after being given health education through video media. The mean value before being given treatment was 36.76 and the mean value after being given treatment was 45.97. This means that there is an increase in the motivation scores of adolescent girls after being given health education through video media. Based on the results of the Wilcoxon test after health education was given, the results of Asymp. Sig. (2-tailed) were 0.000, which means the p value < 0.05 , so it can be stated that H_0 is rejected and H_a is accepted.

The results of this study are in line with the research of Dinata, et al. (2021) that there is an increase in the motivation of adolescents who are given health education through video media¹¹. Research conducted by Umami, et al. (2021) and Mahayani, et al. (2021) stated that providing intervention in the form of health education through video media had a significant effect on the knowledge of adolescent girls^{14 17}. The results of a study conducted by Ismail et al., 2021 also stated that health education using audiovisual media is more effective in increasing adolescent motivation, this is because video is an audiovisual media that can show objects and events as they are, by using video someone is able to understand learning messages more meaningfully so that the information conveyed through the video can be understood in its entirety¹⁸. Video is an electronic learning media that combines audio and visual technology at once to produce an interesting and dynamic learning display. Video media will have more influence on humans, because the video display is in the form of light so that it can affect a person's emotions and thoughts, and it will be easier to understand learning¹⁵. The evaluation results of this study showed that 86% of respondents stated that the material provided in the video was easy to understand.

The use of video media in health education can provide stimulation to hearing and sight, so that it can optimize students' understanding of the material that has been given¹⁶. The use of video media in health education can overcome boredom in the learning process due to the delivery of information that seems monotonous. Video is an electronic learning media that combines technology in audio and visual aspects simultaneously so that it can create an interesting and dynamic learning display. Video media will have a greater influence on humans, because video displays are in the form of light so that they can influence a person's emotions and thoughts, and it will be easier to understand learning so that it can increase motivation in teenagers¹⁷. This is also supported by the results of the evaluation to respondents that 90% of respondents stated that the appearance of the video media is interesting. As many as 87% of respondents stated that the content in the video media can increase insight and knowledge.

The results of the motivation scores of female adolescents before and after health education were given increased. This indicates the success of health education implemented by researchers and the provision of health education through video media is beneficial for adolescents.

CONCLUSION

Based on the research results, it shows that there is a difference in the motivation scores of young women in preventing teenage pregnancy before and after being given health education through video media at SMA N 2 Mengwi as seen from the p value = 0.000 $< \alpha = 0.05$. It is recommended that research sites improve health promotion through health education for adolescents in the extracurricular activities of the Adolescent Health Information Center (PIK-R) and invite more female students to join and be active in these activities. It is hoped that teenagers will be more active in seeking information, joining organizations that can accommodate obtaining information about health and actively participating in health education activities. For further researchers, they can develop this research with other variables or media so that it can provide the latest innovations in health education, and can add inclusion criteria for adolescent dating status, and motivation measurements can be carried out with a time span of 2 weeks to 1 month to be more effective in measuring motivation.



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