Improving Knowledge Of The Impact Of Early Marriage Among Adolescent: Podcast And Flipchart Methods

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***Abstract**.*
Health promotion through reproductive health education can help increase adolescent girls' knowledge about the impact of early marriage. Indonesia is one of the countries with the highest number of early marriages. Selection of effective health education media is an urgency as an effort to reduce the number of early marriages. This study aims to evaluate the effectiveness of health education using the podcast and flipchart methods. This study used a quasi-experimental with non-equivalent control group design which was carried out from December 2021 to January 2022 on 106 adolescent girls in Cibatur Keusik Village, Lebak Regency. Research respondents were divided into podcast groups and flipchart groups. In the podcast group, adolescent girls received health education using the audio method from the podcast while the flipchart group received the visual method from the flipchart. The analysis used in this study is univariate and bivariate. The results showed that the average value of the podcast group (32.49) was lower than the flipchart group (69.25). Statistically, it can be concluded that health education using the flipchart method is more effective than the podcast method (p=0.000; t=-6.21; df=104). Health education using the flipchart method is more effective than the podcast method. The method can be used by health promoters to improve adolescents' understanding of the impact of early marriage.

*****Keywords****: Health education, early marriage and health promotion.*

I.   INTRODUCTION

Early marriage is one of the important health issues in Indonesia. One in 9 girls aged 20-24 is married before the age of 18. It is estimated that there will be 1,220,900 children aged 20-24 who were married before the age of 18 in 2018 and this figure places Indonesia in the 10 countries with the highest absolute number of child marriages in the world (UNICEF, 2020).The high rate of child marriage causes various health problems, including mothers who are under 18 years of age have a 35% to 55% higher risk of giving birth to babies with Low Birth Weight (LBW) compared to mothers who are over 19 years old. The infant mortality rate is 60% higher for mothers who are under 18 years of age. The results of the study show that children under 5 years of age from young mothers have a 28% greater risk of death (Oktavia, 2018).

The biggest factor causing early marriage is the lack of knowledge of adolescent girls about the impact of early marriage. The government has made efforts through the Marriage Age Maturity Program (PUP) through health promotion activities carried out by the Population and Family Planning Agency. According to Putri (2019), health promotion activities using the lecture method, leaflets, booklets, and mass media can provide visualization for adolescents so they understand what is the problem in the PUP program (Putri, 2019).Knowledge is an important domain for the formation of actions or behavior in a person. Behavior based on knowledge will last longer than behavior that is not based on knowledge. Therefore, the methods used in providing effective health education are very important for increasing knowledge (Medinah, 2017).

II.   METHODS

This study used a quasi-experimental design with a non-equivalent control group design. The research was conducted from December 2021 to January 2022 in Cibatur Keusik Village, Banjar Sari District, Lebak Regency, Banten Province. The number of respondents was 106 adolescent girls aged 10-18 years selected purposively. Respondents were divided into 2 groups, namely the podcast group and the flipchart group. Both groups were given a pre-test first, then given an intervention, then given a post-test. As many as 53 respondents in the podcast group received health education using the audio method derived from

the podcast while 53 respondents in the flipchart group received the flipchart method.Data collection started before giving the intervention and after doing the intervention. The duration of this activity is approximately 1 hour. This research will show the effectiveness of the two methods used. A total of 30 questionnaire questions must be answered by respondents. The scores from the pre-test and post-test will be the basis for calculating univariate and bivariate statistics.

III. RESEARCH RESULTS

Table 1. Characteristics of Respondents based on Podcast and Flipchart Method Groups

Characteristics	*Podcast*		*Flipchart*	
	f	%	f	%
Age				
10	1	1,89	2	3,77
11	6	11,32	5	9,43
12	5	9,43	6	11,32
13	3	5,66	4	7,55
14	10	18,87	9	16,98
15	3	5,66	4	7,55
16	8	15,09	7	13,21
17	9	16,98	8	15,09
18	8	15,09	8	15,09
Parents' Education				
Primary				
Secondary	22	41,51	20	37,74
High School	26	49,06	25	47,17
	5	9,43	8	15,09
Parents' Occupation				
Entrepreneur				
Laborer	8	15,09	11	20,75
Farmer	20	37,74	23	43,40
Driver	22	41,51	14	26,42
	3	5,66	5	9,43

Respondents in this study were adolescent girls in Cibatur Keusik Village aged 10-18 years. Most of the respondents in each group were 14 years old (18.87% and 16.98%). The data states that the education of the respondent's parents is elementary school, but most of the respondent's parents in each group have junior high school education, respectively 49.06% and 47.17%. 43.40% of the parents of the flipchart group respondents worked as laborers and 41.51% of the parents of the respondents in the podcast group worked as farmers.

Table 2. Distribution of Pre-test and Post-test scores on Knowledge of the Podcast Method and Flipchart Method Groups

Know-ledge	Score				Statistics	
	Pre-test Mean (SD)	Post-test Mean (SD)	Δ mean (SD)	P*	P**	t**
Podcast Method	6,36	6,72	9,15	0,20	0,00	-20,92
Flip-chart Method	10,22	9,74	11,21	0,20		

*. Kolmogorov-Smirnov (correlation is significant 0,05 level)

**. Paired sample t-test (correlation is significant 0,05 level)

Based on the table data above, it can be seen that the research respondent's data is normally distributed (p> 0.20). The results of the paired sample test showed that there was a significant average difference between the scores before and after being given the health education intervention in each group (p=0.00; t=-20.92).

Table 3. The Effectiveness of the Podcast Method compared to the Flipchart Method

Group	Know-ledge	Mean	SD	p*	t*
Pod-cast	Pre-test	59,43	10,22		
	Post-test	73,66	9,74		
	N-gain	27,87	23,12		
Flip-chart	Pre-test	62,43	6,36	0,00	-6,21
	Post-test	88,72	6,72		
	N-gain	54,95	21,75		

The results showed statistically that p = 0.00 so that there was a significant difference between the podcast method group and the flipchart method. The results of the unpaired sample test also show that t count is -6.21 which is greater than t table (1.66; df=104) which means that the flipchart method is more effective than the podcast method in health education on the impact of early marriage on adolescent girls .

IV.   DISCUSSION

In this study, there were statistically significant differences between the flipchart method and the podcast method. Health education for adolescent girls using the flipchart method is more effective than the podcast method.According to Putri (2019), the respondent's knowledge was influenced by the treatment where the respondent was given education using flipchart media which contained serialized material and images so that the respondent could clearly understand the material provided. In line with the use of the flipchart method, namely simplicity, that is, there is a clear difference between the pictures and writing that is shown and there are main elements that can be highlighted because they have pictures and writing that are quite large. In line with the results of the study (Adinda et al, 2020) which stated that flipchart media had an effect on knowledge with a difference of 28.6 (p=0.00).The use of flipcharts has proven effective in increasing knowledge in a large group (68 people) with statistical test results obtaining a p-value of 0.000, so that it can be ascertained that there are significant differences based on the results of the pre and post-tests for adolescent girls.

Another improvement stated that there were differences in the attitudes of adolescent girls based on the pre-test and post-test scores with the results of the statistical test with a p-value of 0.000. Flipchart media is used because it can be chosen because it can be understood by all groups with different educational backgrounds, because flipcharts are equipped with pictures and explanations of material provided during education (Fauziatin, 2016). Another study by Awanda (2019) before giving attitude counseling was 33.3%, after being given education it increased by 86.7%, which means that there was a significant effect on increasing knowledge after being given education using flipcharts. Statistical test results obtained a pvalue of 0.00.The podcast method is not effective enough because it has drawbacks, including the cost and signal strength needed to access it. Adrianto (2022) in a study entitled The Effect of Podcast Media Education and Animation Video on Nutrition Knowledge of More Adolescents Aged 16-18 Years at SMA PGRI 3 Bogor in 2022 stated that there was no significant difference in changes in post-test scores between education using podcast media and video animation (p>0.05). The results of this study are not in line with Arsyad (2014) who stated that podcast media that involves audiovisuals is 60-80% more effective than those without audiovisuals.

V.   CONCLUSION

Reproductive health education for adolescent girls using the flipchart method is more effective than podcasts. Based on the scores obtained from the questionnaire on the impact of early marriage, there were significant differences between the two intervention groups. The average pre and post test scores in the flipchart method group were higher than the podcast method group. The flipchart method can be more easily understood by adolescent girls because the media is quite simple, uses clear visualizations, and does not require fees and internet access so that it can be used in various urban and rural areas in Indonesia.

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