

THE EFFECT OF "HEALTHY MARRIAGE" BOOKLET EDUCATION ON ADOLESCENT KNOWLEDGE AND ATTITUDES REGARDING THE RISKS OF EARLY MARRIAGE

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Abstract

Early marriage is a marriage carried out by young couples under the age of 18 years. Early marriage typically occurs at the age of 16 years for females and 19 years for males. This research aims to analyze the effect of using booklet media to increase knowledge and improve attitudes among Adolescents regarding early marriage at SMAN 18 Luwu Regency. This research uses the Research and Development (R&D) method with the ADDIE model for development. This research was carried out at SMAN18 Luwu Regency. The instruments used in this research included educational media, informed consent sheets, and questionnaires. Data processing involved several steps: editing, coding, data entry (entering data), and tabulation. The data analysis was divided into: Univariate and Bivariate Analysis, along with Validity and Reliability tests. The results of this research indicate that the Healthy Marriage Booklet is both suitable and valid to be used as an educational medium for increasing knowledge and improving attitudes about the risks of early marriage in adolescents. Educational booklets can increase female adolescents' knowledge about the risks of early marriage and improve their attitudes about the risks of early marriage. Also, educational leaflets can increase female adolescents' knowledge about the risks of early marriage. However, there is no significant improvement in their attitudes about the risks of early marriage.

Keywords: Early Marriage, Healthy Marriage, Adolescents.

INTRODUCTION

Child marriage is defined as an official or unofficial marriage in which one or both partners are under the age of 18 years (Naghizadeh et al., 2021). Individuals under the age of 18 years are considered children, and the marriage of female adolescents remains a common practice in various parts of the world. According to Ahmad et al (2021), child marriage is a violation of every child's right to achieve their true potential, therefore UNICEF has set Sustainable Development Goals (SDGs) to eliminate this practice by 2030.

Child marriage is a widespread problem occurring in many countries globally. This phenomenon has been experienced by children worldwide and (Ahmad et al., 2021) is widely recognized in international human rights treaties as a dangerous and discriminatory practice. Government stakeholders, academics, and international advocates have called on countries to establish legislative frameworks that prohibit early marriage and close legal loopholes that allow marriage under the age of 18 years (Pickett et al., 2021). In South Asia, the number of married individuals aged <18 years reached 47%, followed by East Asia and the Pacific at 13%.

In West and Central Africa, East and South Africa, and Latin America and the Caribbean, 9% of female adolescents marry early. In Eastern Europe and Central Asia, the number reached 5%, while in the Middle East and North Africa, it reached 4% (World Health Organization (WHO), 2021).

The trend of early marriage in Indonesia has increased nationally due to the COVID-19 pandemic. According to the Ministry of National Development Planning/Bappenas, it was recorded that 400-500 children aged 10-17 years married early from 2019-2020, representing 11.21%. (Bappenas, 2020). Meanwhile, the target for reducing early marriage is no more than 8.74% in 2024 and 6.94% in 2030 (BPS 2020). This data show that early marriage in Indonesia remains high and requires serious attention from both the government and public.

The Indonesian Government's efforts to prevent child marriages include passing Law No.16 of 2019, amending Law No.1 of 1974 concerning marriage. This amendment raises the minimum age for women to marry from 16 years to 19 years a measure to prevent child marriage (Bappenas 2019).

Adolescents, the next generation of the nation, must be of good physical and psychological quality, with healthy bodies (jumbo et al 2017). Early marriage poses serious risks to women's physical, mental, and reproductive health, as well as their educational and social status (Abdulazeez, 2018). Risk factors related to the incidence of early marriage include residence (urban or rural), religion, economic status, education level, age at first marriage, and tolerance of domestic violence (Hartoyo, 2020). Child marriage is a major cause of death among young women aged 15-24 years during pregnancy.

South Sulawesi is one of the provinces with the highest burden of child marriage (12.1%)(Hartoyo, 2020). Within a month, the number of early marriages can reach up to 100 cases. The marriage rate for female adolescents aged 15 to 19 years reached 14.10%. This figure is above the national average of 11.21%. (BPS South Sulawesi, 2020). In Luwu Regency, the early marriage rate was 18.9% in 2021 and specifically, in West Suli sub-district, the rate was 12.2% in 2021 and increased to 15.1% in 2022 (Ministry of Religion, 2022)

The government has made efforts to reduce the rate of early marriage among adolescents by providing education in schools. However, the incidence remains high. To address this, focus group discussions (FGDs) have been conducted with local government officials, including the West Suli sub-district head, the head of the health department, the head of the women's empowerment department, the principal of SMAN 18 Luwu Regency, the village head, KUA, and health workers. These discussions aim to find solutions for the incidence of early marriage. One of the conclusions drawn from the FGD is the importance of providing education to adolescents using booklet media.

METHODS

This research uses the Research and Development (R&D) method with the ADDIE model for development. The researchers used a quantitative quasi-experimental design method with a non-equivalent control group design to compare treatment results between the control and intervention groups. This research was carried out at SMAN18 Luwu Regency for the treatment group, and at SMAN 14 Luwu Regency for the control group, from 19 February to 28 March.

Ethical approval was obtained from the Ethics Commission of the Faculty of Public Health, Universitas Hasanuddin, Makassar with the reference number 00625/UN4.20.1/PT.01.04/2024.

The population in this study were all students of SMAN 18 Luwu Regency. The research sample was a subset of this population, selected based on certain characteristics determined by the researchers. The sample size for this study was calculated using the Slovin formula.

The instruments used in this research included educational media, informed consent sheets, and questionnaires. Data processing involved several steps: editing, coding, data entry (entering data), and tabulation. The data analysis was divided into: Univariate and Bivariate Analysis, along with Validity and Reliability tests.

RESULTS AND DISCUSSION

Results

After testing the Healthy Marriage Booklet in both large and small groups, the next stage of the research was to test its effect on adolescents' knowledge and attitudes. Univariate analysis was carried out to describe the characteristics of each research variable in the form of demographic data, and to understand the description of the independent variable, namely the use of booklet media and the dependent variable, namely knowledge and attitudes about the risk of early marriage. Each respondent fills in a questionnaire.

The respondent characteristics showed that most respondents were female (62%), in grade 10 (35.7%), and aged 16 years (35.7%). These respondents frequently used Instagram (42.9%).

In the treatment group, the level of knowledge before being given the booklet media education showed that 11.8% were in the good category, which increased to 97.1% post-intervention. The moderate (sufficient) category decreased from 55.9% to 0.0%, and the poor category decreased from 32.4% to 2.9%. In the control group, the good category increased from 25.0% to 50.0%, the moderate (sufficient) category decreased from 58.3% to 41.7%, and the poor category decreased from 16.7% to 8.3%.

Furthermore, in the treatment group, the attitudes before being given the booklet media education showed that 2.8% were in the supportive category, which increased to 79% post-intervention. The neutral category decreased from 77.8% to 21%, and the unsupportive category decreased from 14% to 0%. In the control group, the supportive category increased from 13.9% to 17%, the neutral category remained at 77.8%, and the unsupportive category decreased from 8.3% to 6%.

Among the 33 respondents, a positive rank was observed, indicating an increase in knowledge after being given the booklet media education. The p-value in the analysis of differences in adolescent knowledge before and after booklet media education was $p=0.000$, which is <0.05 . It was found that 23 respondents showed a positive rank, indicating an increase in knowledge after being given the leaflet media education, while 11 respondents showed no change. The p-value for differences in knowledge before and after leaflet media education was also $p=0.000$, which is <0.05 .

Additionally, among the 33 respondents, a positive rank was observed, indicating an increase in attitudes after being given the booklet media education. The p-value in the analysis of differences in adolescent attitudes before and after booklet media education was $p=0.000$, which is <0.05 . Specifically, it was found that 20 respondents showed a positive rank, while 16 respondents did not show a significant increase. The p-value for differences in adolescent attitudes before and after leaflet media education was 0.555, which is > 0.05 .

The results also showed that there was no significant relationship between the booklet media treatment group and the leaflet media control group in terms of attitudes and knowledge regarding the risks of early marriage, with a p-value of 0.557, which is > 0.05 .

DISCUSSION

The level of knowledge of adolescents in the treatment group before being given the booklet media education increased significantly. The percentage of adolescents in the good category increased from 11.8% to 97.1%, while the moderate (sufficient) category decreased from 55.9% to 0.0%, and the poor category decreased from 32.4% to 2.9%. In the control group, the good category increased from 25.0% to 50.0%, the moderate (sufficient) category decreased from 58.3% to 41.7%, and the poor category decreased from 16.7% to 8.3%.

Based on the results of the pretest frequency distribution, 32.4% of adolescents in the treatment group had poor knowledge about the risks of early marriage. Judging from the analysis of the knowledge questionnaire in the treatment group, 11 respondents were in the poor knowledge category, and 19 respondents were in the sufficient category. After the intervention, all 19 respondents' knowledge increased to the good category. Most of these respondents were aged 16 years and in grade 11. The analysis suggests that age is positively correlated with adolescents' knowledge about the risks of early marriage. As adolescents grow older, they gain more experience and information. The more experience and information they obtain will increase their understanding of the importance of preventing the risks of early marriage (Prasetio, 2020). At 16 years, a period of significant curiosity, adolescents actively seek information, impacting their knowledge through a trial-and-error approach. This is in line with study results stating that older individuals tend to make more mature decisions in thinking and working (Saputra & Murniati, 2021)

Overall, the knowledge analysis showed that before being given the booklet media education, most adolescents' knowledge was at the understanding stage, indicating they had not yet reached the analysis stage. This suggests that adolescents had not fully described, differentiated, separated, or grouped the material they received. The questionnaire analysis revealed that most answers fell into the knowing and comprehension categories, indicating a low knowledge level. Without advancing beyond this level, it is challenging for individuals to reach higher levels of application and analysis.

Based on post-test analysis of the frequency distribution of adolescents' knowledge about the risks of early marriage, most knowledge was found to be in the good category, namely (97.1%). The results indicated that adolescents' knowledge increased in the cognitive category (knowing) and the analysis category. This shows that adolescents have reached the stage of being able to describe material or an object

so that if their knowledge has reached this stage, they will be able to differentiate, describe, or separate the material provided (Notoatmodjo, 2019).

Adolescents' knowledge in the treatment group before being given the leaflet media education was in the good category (25%). After being given the leaflet media education, the good category increased to (50%). In the sufficient category, before being given the leaflet media education, it was (58.3%), and after being given the leaflet media education, it became (41.7%). In the poor category, before being given the booklet media education, it was (16.7%), and after being given the leaflet media education, it became (8.3%).

Based on frequency distribution analysis, if you relate age to knowledge, the older you get, the more experience and knowledge you gain (Turangan Samuel et al., 2020). In the control group, before being given the booklet media education, adolescents' knowledge was in the sufficient category (58.3%) and the poor category (16.7%). After being given the booklet media education, adolescents' knowledge in the good category in the control group did not increase significantly, remaining at (58.3%). External factors theory from Brofenbrenner, with an environmental paradigm, explain that the behavior of a child who is lazy about learning is not isolated but is the result of the interaction between the individual and their external environment (Maulidia, 2020). Knowledge is defined as awareness of facts or practical skills and can also refer to familiarity with an object or situation. Knowledge can be produced in various ways. The most important source is perception, which involves the use of the five senses. Many theorists also include introspection as a source of knowledge, not of external physical objects, but of one's mental states (Purba et al., 2022).

Overall, the knowledge analysis showed that before being given the booklet media education, most adolescents' knowledge was at the understanding stage, indicating they had not yet reached the analysis stage. This suggests that adolescents had not fully described, differentiated, separated, or grouped the material they received. The questionnaire analysis revealed that most answers fell into the knowing and comprehension categories, indicating a low knowledge level. Without advancing beyond this level, it is challenging for individuals to reach higher levels of application and analysis.

Knowledge is the result of knowing and occurs when one senses a particular object. It is obtained through sensing via the senses of sight, hearing, smell, taste, and touch (Darsini et al., 2019). When someone receives information, it is analyzed, processed, and placed in its proper context, leading to the emergence of knowledge. Consequently, the researchers implemented a learning process aimed at increasing knowledge among adolescents through the learning media "Healthy Marriage Booklet."

The results of this study showed that all respondents in the treatment group experienced a significant increase in knowledge regarding the risks of early marriage, with a p-value of $0.000 < 0.05$. This is attributed to the use of animated pictures, explanatory material, and the inclusion of games during each evaluation meeting to minimize boredom during the learning process. This study is in line with a study by Lendra et al. (2018), which demonstrated that providing the Energy Sufficiency Media Booklet effectively increased the knowledge of adolescents at SMAN 1 Pontianak. The study showed that the adolescents' knowledge score increased from 11.70% before the intervention to 16.23% after, with a p-value of $0.000 < 0.05$, and is further

supported by Insana Maria (2019). The knowledge gained can increase adolescents' self-confidence to recognize existing problems and find solutions (Insana Maria., 2019)

In the control group, 23 respondents showed a positive rank, indicating an increase in knowledge after being given the leaflet media education, while 11 respondents showed no change in scores before and after the intervention. The analysis showed a significant increase in knowledge with a p-value of $0.000 < 0.05$. The learning process in this group also used leaflet media with animated images and explanatory material. This study is in line with a study by Pusparina et al. (2019), which demonstrated that knowledge increased after the introduction of leaflet media, with a p-value of $0.000 < 0.05$, showing the effect of leaflet media on adolescents' knowledge about drugs at SMPN 5 Banjar Baru. The effect of leaflet media on the knowledge of PHBS cadres was also supported by Saleh & Kunoli (2019), although some cadres still had low level of knowledge.

The results of the pretest frequency distribution analysis of the treatment group, based on adolescents' attitudes about the risk of early marriage, showed that 14.7% were in the non-supporting category, while most respondents had a neutral attitude (82.45%). This is in line with a study by Cumayunaro et al. (2020), which revealed that the pretest attitude score of respondents was still low (45%). Similarly, a study by Saputri et al. (2021) revealed that the pretest attitude score was still not good.

The results of the pretest analysis on booklet media education about the risks of early marriage in the control group showed that 8.3% were in the non-supporting category, and most respondents were neutral (77.8%). This is in line with Rachmat et al. (2013), who stated that negative or positive attitudes depend on the individual's understanding of a matter. Therefore, the subsequent attitude will encourage the individual to engage in certain behaviors when needed. However, if the attitude is negative, it will actually deter the individual from engaging in that behavior, according to Indah (2020).

Attitude is a person's readiness or willingness to behave or respond to something, whether it is positive or negative stimulation from a stimulus object. Attitudes are influenced by knowledge. Good knowledge will encourage someone to display attitudes that are consistent with the knowledge they have obtained. Attitude, in general, is often interpreted as an action taken by an individual to respond to something (Septiani & Widda Djuhan, 2021).

The results of this study showed significant differences in attitudes in the booklet media treatment group, with a p-value of $0.000 < 0.05$, showing an increase. In the control group, leaflet media had a p-value of $0.555 > 0.05$, showing no significant change in the level of students' attitudes. Despite the lack of significant effect, univariate analysis revealed that the percentage of students with a supportive attitude increased from 13.9% in the pretest to 17%. These results are in line with Herman et al. (2020), who reported no effect of leaflets on attitudes and consumption patterns of vegetables and fruit among adolescents at SMAN 10 Makassar. However, it contrasts with Mutmainah (2023), whose statistical tests showed differences in attitudes with a p-value of 0.001 before and after the leaflet intervention regarding premarital sex at SMKS Mutiara Bangsa Purwakarta. Learning that provides good knowledge does not necessarily result in good changes in attitudes and behavior (Patimah et al., 2021)

The difference in adolescents' knowledge with a mean rank of 49.10 for booklet media and 22.65 for leaflet media resulted in a p-value of $0.000 < 0.05$, showing a significant

difference in knowledge between the two groups. This suggests that booklet media significantly increases knowledge about early marriage among students at SMAN 18 Luwu Regency.

Similarly, the difference in adolescents' attitudes with a mean rank of 49.66 for booklet media and 22.13 for leaflet media resulted in a p-value of $0.000 < 0.05$, showing a significant improvement in attitudes towards early marriage risks among students at SMAN 18 Luwu Regency. This study is in line with Sari (2019), who found that booklet media is more effective than leaflet media in increasing adolescents' knowledge about the effect of teenage pregnancy at Pertiwi Private High School, Jambi.

Additionally, Muwakhidah et al. (2021) reported that booklets are more effective than poster media, leaflet media, and no media in increasing knowledge about anemia in adolescent girls. Booklets are a medium for conveying messages in book form, incorporating both writing and images. They are chosen as an alternative medium because they provide clear, detailed, and engaging information, balanced with illustrations. In this context, the use of booklet media is expected to increase knowledge about stunting among high school students in Probolinggo Regency (Hasanah & Permadi, 2020).

The material design and animated images contained in the booklet provide entertainment for students, as the contents are tailored to an age-appropriate level for them. The advantages of booklet media are their concise and clear language, which is easy to understand in a short time. Additionally, booklets are attractively packaged, printed on practical paper, and easy to carry anywhere (Chitra Dewi Yulia Christie & Lestari, 2019). Booklets as teaching media are an effective solution for developing learning materials that increase readers' interest and understanding. According to previous study by Amalia & Sudarwanto (2021), the development of hybrid learning-based booklet media in basic competency marketing subjects shows that booklet media can include ideal problem-solving strategies.

The results of the chi-square test showed that in the booklet media treatment group and the leaflet media control group, there was no significant relationship between adolescents' knowledge and attitudes towards social media, with a p-value of 0.887, which is greater than 0.05. This shows that social media platforms such as Facebook, Instagram, TikTok, and YouTube have no significant effect on the knowledge and attitudes of students at SMAN 18 Luwu Regency and SMAN 14 Luwu Regency.

Social media is an internet medium that allows users to represent themselves, interact, collaborate, share, and communicate with other users to form virtual social bonds. In social media, there are three forms that refer to the meaning of being social: recognition, communication, and cooperation. It is undeniable that social media has become a new way for people to communicate (Afandi, 2019). If, during development, a child receives negative influences, whether in the form of words or content, their development will also be negatively affected (Raina & Kartini, 2021).

According to LW Green's theory, in health education, a person's knowledge can be influenced by enabling factors such as the use of media in health education or training. Increasing adolescents' knowledge cannot be separated from the role of problem card media, which has several advantages, including increasing motivation among respondents because problem cards contain actual problems worth discussing (Fitriani et al., 2016).

TABLES AND GRAPHICS

Table 1: Characteristics of Respondents who were Educated using Booklet and Leaflet Media

	Characteristics	Frequency (n)	Percentage (%)
Gender	Male	26	37.1
	Female	44	62.9
	Total	70	100
Grade	10	25	35.7
	11	21	30.0
	12	24	34.3
	Total	70	100
Age	15	16	22.9
	16	25	35.7
	17	22	31.4
	18	7	10
	Total	70	100
Social media	Facebook	13	18.6
	Instagram	30	42.9
	TikTok	19	27.1
	YouTube	8	11.4
	Total	70	100

Primary Data Sources 2024

Table 2: Knowledge Level of the Intervention Group and Control Group before and after Being Given Education

Variable	Treatment				Control			
	Pre		Post		Pre		Post	
	n	%	n	%	n	%	n	%
Good	4	11.8	33	97.1	9	25	18	50
Sufficient	19	55.9	0	0	21	58.3	15	41.7
Poor	6	32.4	1	2.9	6	16.7	3	8.3

Table 3: Attitude in the treatment and control groups before and after being given booklet and leaflet media education

Variable	Treatment				Control			
	Pre		Post		Pre		Post	
	n	%	n	%	n	%	n	%
Supportive	1	2.8	27	79	5	13.9	6	17
Neutral	28	82.4	7	21	28	77.8	28	78
Not Supportive	5	14.7	0	0	3	8.3	2	6

Wilcoxon signed ranks test

Table 4: Differences in Knowledge in the Intervention Group and Control Groups before and After Education

Group		n	Mean Rank	Sum of Ranks	P-Value
Knowledge Post – Knowledge Pre Booklet media	Negative Ranks	1 ^a	10	10	
	Positive Ranks	33 ^b	17.73	585	0,000
	Ties	0 ^c			
Total		34			
Knowledge Post – Knowledge Pre Leaflet media	Negative Ranks	2 ^a	5.5	11	
	Positive Ranks	23 ^b	13.65	314	0,000
	Ties	11 ^c			
Total		36			

Wilcoxon signed Ranks Test

Table 5: The influence of the Attitudes of the intervention group and the control group before and after being educated

		n	Mean Rank	Sum of Ranks	P-Value
Attitude Post – Attitude Pre	Negative Ranks	1 ^d	1.5	1.5	0,000
Booklet Media	Positive Ranks	33 ^e	17.98	593.5	
	Ties	0 ^f			
	Total	34			
AttitudePost – AttitudePre	Negative Ranks	16 ^d	18.47	295.5	0.555
Leaflet Media	Positive Ranks	20 ^e	18.53	370.5	
	Ties	0 ^f			
	Total	36			

Table 6: Difference between Intervention Group and Control Group

		Ranks			P-Value
	Group	n	Mean Rank	Sum of Ranks	
Knowledge Post	Booklet	34	49.10	1669.50	0,000
	Leaflet	36	22.65	815.50	
	Total	70			
Attitude Post	Booklet	34	49.66	1688.50	0,000
	Leaflet	36	22.13	796.50	
	Total	70			

Mann Whitney Test

Table 7: Analysis of the Influence of Social Media in the Intervention Group and Control Group on the Risk of Early Marriage

Group		Booklets	Leaflet	Total	P-Value	
Social Media	Facebook	Count	7	6	13	0.557
		% within Klp	20.6%	16.7%	18.6%	
	Instagram	Count	15	15	30	
		% within Klp	44.1%	41.7%	42.9%	
	TikTok	Count	10	9	19	
		% within Klp	29.4%	25.0%	27.1%	
	YouTube	Count	2	6	8	
		% within Klp	5.9%	16.7%	11.4%	
Total	Count	34	36	70		
	% within Klp	100.0%	100.0%	100.0%		

Chi-Square

CONCLUSION

The results of this study indicate that the Healthy Marriage Booklet Education is feasible and valid as an educational medium for increasing knowledge and improving attitudes about the risks of early marriage in adolescents. Booklet education can increase female adolescents' knowledge about the risks of early marriage and improve their attitudes towards these risks. Additionally, leaflet education can increase female adolescents' knowledge about the risks of early marriage. However, there is no significant improvement in their attitudes about the risks of early marriage.

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