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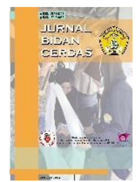

Marriage Readiness Cards and Adolescent Knowledge: Addressing Child Marriage

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ABSTRACT

Introduction: Child marriage is a concerning issue associated with various health and social problems, including stress, suicide, despair, low self-esteem, family and social difficulties, limited job choices, financial dependence, and school dropout. **Objectives:** This study determined the relationship between marriage readiness cards and the improvement of adolescent knowledge in unraveling child marriages. **Methods:** The research utilized a cross-sectional design conducted at the adolescent health post within the Pantoloan Community Health Center's working area in July 2023. Purposive sampling involved 36 respondents, and data collection utilized a 10-question questionnaire. Univariate and bivariate analyses (Wilcoxon) were applied to the collected data, presented through tables and narrative descriptions. **Results:** The research findings indicated a significant improvement in adolescent knowledge after the intervention, as evidenced by a negative rank of 0 and a positive rank of 5, with a statistically significant p-value of 0.000. **In conclusion,** engaging educational media, such as marriage readiness cards, proved effective in enhancing respondents' knowledge. This study recommends community health centers to adopt educational media that capture adolescents' attention for more impactful health promotion initiatives.

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INTRODUCTION

Adolescence is a transitional period from childhood to adulthood, during which adolescents begin to focus on behaviors associated with adulthood, such as sexual needs (Fatmawaty, 2017). Therefore, issues such as premarital sex often arise during adolescence, which could increase the risk of sexually transmitted infections (Majumdar, 2018) and unwanted pregnancies that lead to abortions or child marriages (Zenebe & Haukanes, 2019). Anticipating such situations, and providing accurate information is crucial to ensure that adolescents do not misinterpret their adulthood (Fatmawaty, 2017). The prevalence of child marriage in Indonesia was approximately 1,220,900 in 2018. This placed Indonesia among the top 10 countries with the highest absolute number of child marriages worldwide. The Indonesian government's target was to reduce the percentage of child marriages to 8.74% by 2024 and 6.94% by 2030.

Child marriage was associated with an increase in difficulties performing daily activities, giving birth at a young age, experiencing stress (de Groot, Kuunyem, & Palermo, 2018), Experiencing mental and physical health issues such as suicide,

despair, and low self-esteem (Aggarwal, Francis, Dashti, & Patton, 2023; Burgess, Jeffery, Odero, Rose-Clarke, & Devakumar, 2022), Family and social difficulties, limited job choices, financial dependence, and dropping out of school, as well as the risk of social isolation and higher stress related to parental responsibilities and marriage (Nabila, Roswiyani, & Satyadi, 2022; Yoosefi Lebni, Solhi, Ebadi Fard Azar, Khalajabadi Farahani, & Irandoost, 2023).

Provinces with the highest prevalence of child marriage were Central Sulawesi, West Sulawesi, and Southeast Sulawesi (Badan Pusat Statistik, 2020). The government's strategy to reduce the prevalence of child marriage included increasing children's knowledge, creating environments supportive of preventing child marriage, enhancing flexibility and expanding services, strengthening regulations and institutions, and improving coordination (Kementerian PPN/ Bappenas, 2020). Pantoloan Community Health Center, one of the health centers in the city of Palu, had the highest rate of child marriage in Palu. Data obtained from the annual report of Pantoloan Community Health Center indicated that the number of child marriages in 2020 was 40 individuals, in 2021 it was 30 individuals, while in 2022, there were 32 individuals who experienced child marriage.

Aligned with the theories and strategies implemented by the government, this research provided Health Education using a card-based medium called the "marriage readiness card." The marriage readiness card was created inspired by a card game found on the computer called "spider solitaire" and then modified to suit the research needs. The marriage readiness card contains information about preparations before marriage, particularly related to reproductive health. The content on the marriage readiness card includes information about the ideal age for marriage for both females and males, recommended health check-ups before marriage, decision-making about marriage, the ideal age for having the first child for both females and males, decision-making regarding the number of children, and the spacing between two pregnancies. The card is designed attractively using color gradients, animated images, and engaging fonts for the provided information. Each complete set of information shares the same color design. This card is still in the initial design stage, and its use is manual. Based on this, the research aimed to determine the impact of the marriage readiness card on the improvement of adolescent knowledge to prevent child marriages.

METHODS

This research employed a cross-sectional design conducted at the adolescent health post in the working area of Pantoloan Community Health Center in July 2023. The population for this study comprised all adolescents in the working area of Pantoloan Community Health Center, and the sample was selected using purposive sampling. Using a formula for an unknown population, the sample size was calculated to be 32.5, and with a 10% dropout anticipation, the total sample size obtained was 36 samples. The inclusion criteria for this study were adolescents who were unmarried and within a certain age range. The exclusion criteria were adolescents who had been pregnant before. Data were collected using a questionnaire adopted from the 2017 Indonesia Demographic and Health Survey (IDHS) questionnaire, specifically Part 14 regarding marriage and children. The questions were closed-ended, with two answer options (incorrect and correct). Each incorrect answer was coded as "0," and each correct answer was coded as "1," using a nominal measurement scale. The variables in this study were divided into two categories: the independent variable was the respondents' level of knowledge, and the dependent variable was the marriage readiness card.

The marriage readiness card contains explanations about the ideal age for marriage for both females and males, recommended health check-ups before marriage, decision-making about marriage, the appropriate age for having the first child, and the spacing between two children. The method of using the marriage readiness card involves dividing adolescents into small groups of 2 to 4 individuals per group. Each person is given four cards, and the game begins by mentioning a keyword. The participants then complete the mentioned keyword using the pieces found on each card until it forms complete information. The adolescent who finishes first by collecting all the information pieces becomes the winner. The design of this card can be viewed at the following link https://drive.google.com/file/d/13Ye6ipkCdu2qXTEkefgN6bgPLnC5cEXG/view?usp=sharing.

Data collection was conducted at three adolescent health posts in the working area of Pantoloan Community Health Center, and the respondents were adolescents aged 10 to 17 years. Questionnaires were distributed before the marriage readiness card game (pre-test). Afterward, the game lasted for 20 minutes, followed by a 10-minute break. Subsequently, the same questionnaire was redistributed (post-test). Both variables were tested univariately and bivariately, and the statistical relationship between the two variables was examined using the Wilcoxon test. The research results were presented in table form and described narratively. This study adhered to the ethical code issued by the research ethics commission of Poltekkes Kemenkes Palu with the number 0035/KEPK-KPK/III/2023.

RESULTS

Data collection was conducted in the working area of Pantoloan Community Health Center, integrated with three adolescent health posts, namely Baiya, Pantoloan Boya, and Lelea, in July. The sample size consisted of 36 adolescents, both males and females. The research findings, after data processing and analysis, revealed the characteristics of the respondents in terms of age and gender.

Table 1 Distribution of Respondent Characteristics Based on Age and gender

Variables	n	%
Age		
Early adolescence (10–12 years)	26	72.2
Mid-adolescence (13–17 years)	10	27.8
Gender		
Male	8	22.2
Female	28	77.8

The results of univariate analysis of respondent frequencies based on age showed that 26 respondents (72.2%) were early adolescents with an age range of 14–17 years. The remaining 10 respondents (27.8%) were mid-adolescents with an age range of 13–17 years. Regarding the frequency distribution based on gender, there were 8 male respondents (22.2%) and the remaining 28 respondents (77.8%) were female.

The following presents the results of data processing in the form of an overview of respondents' knowledge before and after the intervention through health education about marriage preparation using promotional media (marriage readiness cards). The results of the frequency distribution of respondents' knowledge before and after the intervention are as follows:

Table 2. Frequency distribution of respondents before the intervention

Question	Pre - Test		Post - test	
	n	%	n	%
The appropriate age for planning marriage				
a. ge of females < 21 years or ≥ 35 years; age of males < 25 years	33	91.7	4	11.1
b. Age of females 21–26 years; age of males ≥ 25 years	3	8.3	32	88.9
The appropriate age for females to get married				
a. < 21 years or ≥ 35 years	30	83.3	13	36.1
b. 21 – 26 years	6	16.7	23	63.9
The appropriate age for males to get married				
a. < 25 years	33	91.7	10	27.8
b. ≥ 25 years	3	8.3	26	72.2
Necessary to undergo a premarital check-up:				
a. No	17	47.2	3	8.3
b. Yes	19	52.8	33	91.7
Examinations that had to be done before marriage:				
a. not undergoing an examination or undergoing an incomplete examination	36	100.0	12	33.3
b. undergoing a complete examination (physical, blood, and urine)	0	0.0	24	66.7
Who determined the decision to get married?				
a. Marriage decision, decided by oneself, parents, or other family members	33	91.7	8	22.2
b. The decision to get married was made together	3	8.3	28	77.8
Who determined the number of children?				
a. Decided by the husband or wife alone	22	61.1	5	13.9
b. Decided together (husband and wife)	14	38.9	31	86.1
Ideal age for women to have their first child				
a. < 26 years atau ≥ 35 years	35	97.2	8	22.2
b. 26 – 35 years	1	2.8	28	77.8
Ideal age for men to have their first child				
a. < 35 years	36	100	13	36.1
b. ≥ 35 years	0	0	23	63.9
Ideal spacing between two briths				
a. < 2 years	35	97.2	16	44.4
b. ≥ 2 years	1	2.8	20	55.6

Namely questions 1, 4, and 7. Question 1, which asked about the appropriate age for planning marriage, saw an increase in knowledge from 3 respondents (8.3%) to 32 respondents (88.9%) who answered the age for females 21–26 years and males ≥ 25 years. Question 4, which inquired about the need for a premarital check-up, showed an increase in knowledge from 19 respondents (52.8%) to 33 respondents (91.7%) who chose the answer yes. Question 7, which asked who determined the number of children, showed an increase in knowledge from 14 respondents (38.9%) to 31 respondents (86.1%) who chose the answer decided together (husband and wife). The presented results demonstrate the relationship between the marriage readiness card and the change in the knowledge level of respondents before and after

the intervention. Below are the results obtained after bivariate data processing using Wilcoxon.

Table 3 Distribution of the relationship between marriage readiness cards and the improvement of adolescent knowledge.

	n	*Negative ranks*	*Positif Ranks*	*Ties*	*p-value*
Pre – test	36	0	5	0	<0,001
Post – test	36				

From the results of bivariate analysis, the relationship between the knowledge level of adolescents before and after the intervention (health promotion using the marriage readiness card) obtained a negative rank of 0 and a positive rank of 5, indicating that both groups experienced a change in knowledge level before and after the intervention. Statistically, a p-value of <0.001 was obtained. This indicates the significance of the marriage readiness card educational media in improving adolescent knowledge; thus, the hypothesis is accepted.

DISCUSSION

The research results, through the Wilcoxon test, indicate the influence of health education using the marriage readiness card as a media on improving adolescent knowledge to prevent child marriage. The increase in respondents' knowledge before and after the intervention in this study is evident across all questionnaire items. Furthermore, the analysis results for each questionnaire item show a significant difference between the two groups (pre-test and post-test groups). The knowledge improvement referred to in this study pertains to the respondents' increased awareness regarding marriage readiness, including the ideal age for marriage for both males and females, premarital examinations, decision-making about marriage and having children, the appropriate age for a first child for both males and females, as well as the number of children and the spacing between them. This knowledge is crucial for preventing child marriages.

The findings of this research are consistent with studies stating that adolescents' awareness and perspectives on the age of marriage maturity successfully prevent child marriages (Meilani, Setiyawati, Rofi'ah, & Sukini, 2023). Other studies also indicate that there is a correlation between adolescents' knowledge of the risks of early marriage and their attitudes towards preventing early marriage. The better the level of adolescent knowledge, the more positive their attitudes towards preventing child marriages (Wulandari, Fauziy, & Wardhani, 2023). Similar views were also expressed by those stating that child marriages can be prevented through the increased knowledge of women and families about the dangers of child marriage (Naghizadeh et al., 2021).

A way to improve adolescent knowledge is through health education using engaging educational media, such as artificial intelligence-based modules (Handayani, Nurhayati, & Kamila, 2022), social media platforms such as TikTok, Instagram, Twitter, YouTube, and Facebook (Marlinawati, Rahfiludin, & Mustofa, 2023), and WhatsApp (Yusriani & Acob, 2020). Additionally, the combination of health education and games is more appealing to teenage children as it aligns with their developmental stage. This is supported by several studies indicating that health education based on video games (Havizoh, Widyatuti, & Mulyono, 2022), game-based learning (Lestari & Huriah, 2022),

motoric games and gamification of educational activities (Dos Santos et al., 2023) had positive implications for the improvement of adolescent knowledge.

Child marriage is not caused by a single factor (adolescent knowledge) but can be influenced by other factors such as cultural practices (marriage at a young age), lack of community knowledge related to child marriage, and insufficient access and interest in continuing education. Therefore, preventive efforts involve collaboration among various stakeholders, including parents, village officials, the Office of Religious Affairs, the Ministry of Religious Affairs, the Ministry of Education, and the health department (Latifiani, 2019). Strategies to prevent child marriage emphasize the importance of community involvement, parents, and educational institutions in raising awareness and enhancing knowledge about preventing child marriage (Kementerian PPN/ Bappenas, 2020). Additionally, the role of the government as decision-makers in a country is equally crucial in efforts to prevent child marriage through policy planning and programs at both the national and regional levels (Plesons et al., 2021; Svanemyr, Chandra-Mouli, Raj, Travers, & Sundaram, 2015). Preventing child marriage must be carried out collaboratively through the respective tasks and functions of each party. Increasing knowledge is one form of empowering the community to promote the formation of new behaviors, particularly the behavior of refraining from child marriage, as knowledge plays a crucial role in behavior formation. With the establishment of new behaviors, new habits will develop, eventually leading to the creation of a new culture in society (a culture advocating marriage at the ideal age).

CONCLUSION AND RECOMMENDATIONS

The implementation of educational media in the form of marriage readiness cards significantly improved adolescents' knowledge in preventing child marriage. Health center personnel can effectively apply engaging educational media to help enhance adolescents' understanding of health issues. Further research should explore other aspects of preventing child marriage. Additionally, there is a need for the development of more diverse and varied health education media to determine which educational tools are most effective in improving adolescents' knowledge.

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