

The Effectiveness of Cakram Media on Increasing Marriage Age Maturity Knowledge in Young Women

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ABSTRACT

Child marriage aged 7-15 years in Bengkulu province is 8.81%. The study aimed to determine the effectiveness of Cakram media on increasing knowledge of maturing marriage age. This research was quantitative, with a pre-experimental design with two pre-test and post-test groups. The study population was all Bengkulu City Senior High School students, with a sample of 60 people. The intervention was carried out three times for six weeks. Data were analysed using the Mann-Whitney test. The results showed a significant difference between Cakram media and PowerPoint media on increasing knowledge of maturing marriage age with p -value < 0.0001 , $\alpha = 0.05$ ($p < \alpha$). It is concluded that the use of cakram media is effective in increasing student knowledge about marriage-age maturity.

Pernikahan usia 7-15 tahun di provinsi Bengkulu sebanyak 8.81%. Tujuan penelitian untuk mengetahui efektifitas media cakram terhadap peningkatan pengetahuan pendewasaan usia perkawinan. Jenis penelitian kuantitatif dengan desain pre-experimental dengan dua grup pre tes dan post tes. Populasi penelitian adalah seluruh siswa di SMA Kota Bengkulu, dengan sampel sebanyak 60 orang. Intervensi dilakukan sebanyak 3 kali selama 6 minggu. Data dianalisis menggunakan uji Mann-Whitney. Hasil penelitian menunjukkan ada perbedaan signifikan media cakram dan media power point terhadap peningkatan pengetahuan pendewasaan usia perkawinan (p value $< 0,0001$, $\alpha = 0,05$ ($p < \alpha$). Dapat disimpulkan bahwa penggunaan media cakram efektif dalam meningkatkan pengetahuan siswa tentang pendewasaan usia perkawinan.

Introduction

The trend of child marriage is still common in the world. More than 12 million girls are married at the age of less than 18 years each year, which is around 21% globally (Subramanee et al., 2022). In Sub Sahara, child marriage occurs as much as 37%, and in South Asia, 30% of the events experienced by around 650 million children girls under 18 years old. In the country with the highest percentage of child marriage, the West African Region, around 76% of women are married before the age of 18 (Siddiqi & Greene, 2022).

The number of child marriages in Indonesia in 2021 was 65 thousand cases; in 2022, it will decrease to 55 thousand. This figure is still very worrying, considering that child marriage violates the basic rights of children and the many risks and impacts on the health of adolescents who engage in child marriage (Handayani & Rofii, 2023). Data on child marriage in Bengkulu province found that 8.81% of women in Bengkulu Province were married at 7-15 years (Kusnandar, 2021).

The impact of child marriage does not only have a physical and psychological impact on the children, but it can also increase poverty rates, drop out of school, divorce, domestic violence, stunting and the threat of cervical cancer (Sekarayu, 2021). The cause of the high number of child marriages is influenced by various factors, including the prevailing culture in society, economic needs, low education, social environment, and free sex among adolescents, which causes unwanted pregnancies and a lack of knowledge (Rahman, 2022).

Efforts made to reduce the number of child marriages include socialization of laws related to child marriage, counselling programs, and procurement of modules to help increase youth knowledge about the effects of child marriage. Good knowledge will influence adolescents in their mindset and decision-making. Increasing adolescents' knowledge needs to make breakthroughs to increase the interest and understanding of adolescents. This study used Cakram media to convey material about child marriage. Cakram media is flat media made of attractive colored paper, making it easier for teenagers to understand the material. Research conducted by Sulviani et al. (2022) showed an effect of nutrition Cakram media interventions on adolescent knowledge and behavior of fruit and vegetable consumption. Research conducted by Rahayu et al. (2022) shows that Cakram media affects cadres' knowledge and skills in assessing nutritional status.

Based on the results of an initial survey of 10 high school teenagers in Bengkulu in March 2022, it was found that 60% of teenagers did not know about the impact of child marriage, the recommended age for marriage and laws related to child marriage. Based on this, the authors are interested in researching media's influence. This study aimed to find out the effectiveness of Cakram media on increasing student knowledge about marriage-age maturity.

Method

This research was a pre-experimental study with two group pre-test dan post-test designs. This study was conducted at Senior High School in Bengkulu City in April-Agustus 2023. The population in this study involved adolescents at SMA in Bengkulu, with a total sample of 60 respondents, with the inclusion criteria respondents aged 15-18 years old. The samples were taken by purposive sampling using the Lemeshow formula. The researcher divided participants into two groups, intervention and control group. The number of participants group is 30. The intervention group received cakram media, and the control group used PowerPoint. The intervention was given by the researcher 3 times for 6 weeks. Before giving the treatment, the researcher distributed a pre-test questionnaire about early marriage. The groups then were given the intervention using the PowerPoint and the Cakram media that were made by the researcher. The respondents can spin the Cakram to uncover the material about marriage-age maturity. Then, on treatment 3, the researcher distributed a post-test questionnaire that included the identity of the respondents and questions about marriage age maturity, including definition, purpose, advantage and impact for the second time. Data were analyzed using the Wilcoxon sign rank and Mann-Whitney. Statistical tests were conducted using SPSS. This study was approved by the ethics committee of Poltekkes Kemenkes Bengkulu, Indonesia (Number KEPK.BKL/164/04/2023)



Figure 1. Cakram media

Results

Table 1. Respondent Characteristics

Respondent Characteristics	Frequency (n=60)	Percentage
Gender		
Male	24	40
Female	36	60
Age (year)		
15	16	26.7
16	32	53.3
17	9	15.0
18	3	5.0

Based on table 1 shows that most of the respondents are girls (60%), and more than half of the respondents are 16 years old.

The results of this study consist of univariate and bivariate data. Univariate data present data on the distribution of knowledge of marriage age maturity before and after the intervention. More details are presented in Table 2 below:

Table 2. Distributions of Knowledge of Marriage-age Maturity Before and After Intervention

Knowledge	Min	Max	Mean±SD	P-Value
Cakram media group				
Before	1	5	2.70±1.17	0.000
After	7	10	8.97±0.92	
Powerpoint group				
Before	1	6	3.63±1.09	0.000
After	6	10	8.00±0.87	

Based on Table 2, it can be observed that after the implementation of Cakram, the media had a minimum score of 7 and a maximum score of 10. The mean knowledge score experienced after the implementation of Cakram media was 8.97, with a decrease of 6.27 from the mean knowledge before the implementation of Cakram media. Meanwhile, after the implementation of the PowerPoint group, a minimum score of 6 and a maximum score of 10. The mean knowledge experienced after the PowerPoint technique was 8.00, with a decrease of 5.63 from the PowerPoint score before the PowerPoint implementation.

The Mann-Whitney statistical test aims to determine the difference in the effectiveness of Cakram media and PowerPoint technique on the knowledge of marriage age maturity. More details are presented in Table 3:

Table 3. The Effectiveness of Cakram Media and PowerPoint in Increasing Knowledge

Variable	Sum of Ranks	P-Value
Cakram media group	41.25	0.00
Powerpoint group	19.75	
* Mann-Whitney test		
* Significant		

The results of data analysis using the Mann-Whitney test obtained p-values of $0.000 \leq 0.05$. The findings indicated a significant difference in the effectiveness of Cakram media and PowerPoint techniques on the knowledge of marriage-age maturity.

Discussion

The results showed that there was a difference in the average knowledge before and after the intervention. Based on the results of the questionnaire, it was known that the respondents did not know about the health risks of child marriage, the health impacts on babies born to mothers aged less than 20 years, the age of marriage according to statutory provisions, and the purpose of marriage. After the intervention, there was an increase in adolescent knowledge, with an average value of 8.97. This study is in line with the study of Sariyani (2020) that there is an increase in knowledge after counselling about marriage-age maturity. Knowledge about marriage-age maturity needs to be given to adolescents to change adolescent perceptions and reduce child marriage rates (Khairani et al., 2023).

Statistical test data also found that the intervention and control group's test results were significant. Still, the mean post-test knowledge score in the intervention group was higher than the control group. The study results showed a significant difference in the intervention using Cakram media and PowerPoint. This condition happens because Cakram media is media on colored paper and attractive image designs on each part to increase respondent interest in reading. Cakram media contains material about maturing at the age of marriage that can be carried, which is written in an attractive way using language that respondents easily understand. In the control group, the media used was usually given to respondents, namely power points about maturing the age of marriage. The intervention results found that both groups experienced increased knowledge after the intervention because there is no difference between the Cakram and PowerPoint media material.

Cakram media are designed to suit the needs of respondents, and the material to be delivered is made using attractive media. The media presented included understanding factors that influence early marriage, laws related to marriage age, health impacts on pregnant women at the age of less than 20 years and health risks to babies. Submitting material using interesting writing and pictures can increase interest in reading it. The information obtained by adolescents will increase their knowledge about marriage-age maturity and will also affect their attitude in making decisions (Maryani & Anggraeni, 2022). The efforts to increase knowledge about marriage-age maturity become a focus on adolescents to avoid the impact of child marriage (Rahmawati et al., 2022). The marriage age maturity program is

implemented with health promotion using an interesting method as an example event to give such visualization so that the adolescents understand the problems that occur when child marriage happens (Apriani et al., 2022)

The results of this study following research conducted by Yusriyanti et al. (2019) with the results showing the snowball throwing model assisted by the Kariku Cakram media with statistically significant test results for thematic learning outcomes in sub-theme 2 in class IV students of SD Negeri 02 Kemijen Semarang. Good learning outcomes are also influenced by factors from educators, namely the need to stimulate students to learn more optimally, one of which is by making learning media that attracts respondents' interest. The results of this study are reinforced by research conducted by Yulyana et al. (2023), who found that adolescent knowledge about maturing at the age of marriage needs to be supported by interesting media to enhance and stimulate adolescents' understanding of the effects of child marriage.

The results of this study were in line with the results of research conducted by Wening et al. (2019) with the results obtained that there were significant differences in mothers' knowledge about complementary breastfeeding before and after counseling interventions using media disc. This study is also the same as that conducted by Oktavianisya & Alifitah (2021), which showed differences in sugar levels before and after treatment using BMI discs in type 2 DM patients. Research conducted by Sharratt et al. (2023) explains that deeper and continuous learning from an intervention requires a concept to process activities that can impact meaningful and sustainable change, and variations are needed in a learning delivery to increase the interest and understanding of respondents.

The learning model with the lecture method verbally explains learning material to a group of listeners to achieve certain learning goals. Variations are needed with other learning methods for maximum results (Arif, 2019). The learning method using Cakram media is one of the innovations to increase respondents' interest, knowledge and understanding of a particular theme. In this study, Cakram media contained material about maturing at the age of marriage. The study results showed that the respondents experienced increased knowledge about maturing the age of marriage after the intervention using Cakram media. Based on the results of this study, Cakram media can be used as a variation in the delivery of a material to increase the interest of the intended target.

The knowledge a person possesses will affect the acceptance of one's perceptions and behavior. The short-term impact of health education delivered can cause changes in the form of increased knowledge, while the long-term impact will impact behavior change (Fatman et al., 2023). This research is expected to reduce child marriage rates.

The knowledge that was obtained can affect the adolescent's attitude based on the knowledge that they have. The attitude that comes from good knowledge will likely last longer than the attitude with no good knowledge base (Hermambang, 2021). Other studies show that girls who do not agree with child marriage have greater knowledge than girls who agree with child marriage. Therefore, good knowledge will correct wrong cultural beliefs and social beliefs to prevent child marriage (Naghizadeh et al., 2021)

The limitation of this study is the difficulty in arranging meeting schedules because the respondents come from all grades and have different study schedules.

Conclusions

The result shows that the use of cakram media is effective in increasing student knowledge about marriage-age maturity. It is hoped that the health services can use the cakram media as media to do counselling about marriage age maturity to decrease the number of child marriages.

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