

# Increasing young women's knowledge of early marriage issues through audiovisual media intervention

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## Abstract

Each year, approximately 12 million girls worldwide enter into marriage before reaching the age of 18. In East Kalimantan Province, data from the 2020 National Socio-Economic Survey revealed that 11.54% of women aged 20-24 had experienced early marriage, surpassing Indonesia's average. This study aimed to assess the efficacy of audiovisual and printed health education media in enhancing the knowledge of young women about early marriage. A quasi-experimental approach was adopted, involving 32 young women aged 15-18 from a public high school in Borneo. The study measured the knowledge change in young women and their parents through questionnaires. Data analysis consisted of descriptive and inferential procedures, including normality tests, homogeneity tests, paired t tests, and analysis of variance tests. The findings demonstrated that audiovisual media significantly improved young women's awareness of early marriage ( $p < 0.005$ ). The study encourages midwives and healthcare professionals to employ effective health education media, particularly audiovisual tools, in educational settings to combat early marriage practices.

## Introduction

The United Nations Children's Fund (UNICEF) reports that every year, as many as 12 million girls worldwide marry before the age of 18. This alarming statistic breaks down to 23 girls marrying every minute, with nearly 1 girl marrying every 3 seconds. Shockingly, approximately 650 million women currently alive became brides before the age of 18, with some even getting married before the age of 10. Globally, 1 in 5 girls is married before reaching the age of 18.<sup>1</sup> In the Indonesian Child Profile data from 2020, it was revealed that 1 out of 9 girls was married in 2018. It's estimated that in 2018, 1,220,900 women aged 20-24 were married before the age of 18 in Indonesia, ranking the country among the top 10 with the highest number of child marriages globally.<sup>2</sup> The National Socio-Economic Survey in 2020 highlighted that the East Kalimantan Province still had a concerning percentage of women aged 20-24 who experienced their first marriage before the age of 18, standing at 11.54%. This figure surpasses the national average for early marriages in Indonesia, which is 11.21%.<sup>1</sup>

Early marriage leads to early pregnancy and childbirth, resulting in elevated mortality rates and adverse conditions for both the child and mother due to the girl's body not being fully mature for childbirth.<sup>3</sup> They have less voice in household decisions and are less able to advocate for themselves or their children. They are also less able to earn income and contribute financially to the family. These things can increase the poverty rate. Marriage at a young age burdens girls with the responsibilities of being a wife, sex partner, and mother, roles that should be played by adults, for which girls are not ready to take on. This marriage also creates a

great psychological and emotional burden for them.<sup>1</sup>

Studies by Hotchkiss *et al.* (2016)<sup>4</sup> identified risk factors contributing to early marriages, including the place of residence (urban or rural), religion, economic status, education level, age at first marriage, and tolerance for domestic violence. Other research by Windiarti and Besral (2018)<sup>5</sup> explored various determinants of early marriage in Indonesia, such as unwanted pregnancies, peer influence, parental roles, education level, reproductive health knowledge, family economic status, culture, media exposure, rural residence, religion, and ethnicity.<sup>6,7</sup> According to UNICEF in 2015,<sup>1</sup> the determinants of child marriage in Indonesia are influenced by individual, household, and community factors. UNICEF highlighted a positive correlation between child marriage and internet use via mobile phones, the age of the head of the household, and the number of children in the family attending primary school. The research revealed that adolescents who understood the potential for pregnancy during sexual intercourse were 0.9 times less likely to engage in premarital sexual behavior.<sup>8</sup>

Knowledge can be enhanced through health education, which is a dynamic process of behavioral change. This transformation is not merely a matter of transferring information or theory from one person to another, but it occurs when individuals, groups, and society become more aware of certain issues.<sup>9,10</sup> Health education relies on media to maximize the information delivered to the recipients. Media has the capacity to convey messages and stimulate individuals' thoughts, feelings, and abilities, thereby fostering the learning process. Creative media can help audiences learn more effectively and enhance their performance in line with their objectives.<sup>11,12</sup>

Among various media types, audiovisual media stands out. It combines sound and visual elements, making it particularly effective in conveying information. Audiovisual media serves as a tool for learning, assisting in the transmission of knowledge, attitudes, and ideas through both auditory (hearing) and visual (seeing) channels.<sup>13,14</sup> For instance, audiovisual tools, such as film information shows, can effectively convey information about understanding early marriage.<sup>15</sup> Research conducted by Nanlohy, Asrina, and Kurnaesih in 2021<sup>16</sup> has shown that audiovisual or video media has a significant impact on increasing adolescents' knowledge about the risks of early marriage. Similarly, research by Dewi *et al.* in 2017<sup>17</sup> has demonstrated that print media, such as leaflets, effectively enhances knowledge about early marriage before and after providing treatment through printed materials. Given this background, it is evident that a research gap exists, as some studies suggest that health education using audiovisual and print methods may have limited effects on adolescent knowledge. Therefore, researchers intend to determine which health education methods

are most suitable for increasing adolescent knowledge. The purpose of this research is to analyze the effectiveness of health education media, including audiovisual and print components, in enhancing young women's knowledge about early marriage.

## Materials and Methods

This research employed a quasi-experimental design with a Time Series approach, utilizing pretests and posttests to measure knowledge before and after providing health education through audio-visual media and print media (leaflets). The study was conducted in June 2022. The sampling technique used was purposive sampling, giving every individual in the population an equal chance to be selected. The study population consisted of 121 girls aged 15 to 18 in a public high school in Borneo. Following the inclusion criteria and taking into account the population size, 32 girls were selected and divided into two groups. Inclusion criteria encompassed physically and mentally healthy respondents, young women aged 15-18, and those willing to participate. Exclusion criteria included physical or mental illness and unwillingness to participate. The dependent variable measured was the knowledge of young women, and the independent variable was the health education media, which included audiovisuals and leaflets. A questionnaire was used to assess changes in knowledge, and the questionnaire underwent Validity and Reliability Tests. Data were processed using descriptive and inferential analysis techniques, such as Normality Test, Homogeneity Test, Paired T-Test, and Analysis of Variance Test. Ethical approval was granted by the Ethics Committee at Politeknik Kesehatan Kementerian Kesehatan Kalimantan Timur, with the reference number No. DP.04.03/7.1/07745/2022.

## Results

This research, conducted in June 2022 at a public high school in Borneo, aimed to assess the effectiveness of health education using audiovisual and print media in enhancing knowledge among young women. A total of 32 research samples were included in the study. Based on Table 1, it is evident that in the group of young women who received health education through audiovisual media, the majority were aged 14-16 years (68.75%), their parents' education was primarily at the high school level (50%), and their parents were mainly self-employed (81.25%). In the group of young women who received health education through print media, most were aged 14-16 years (62.5%), their parents' education was large-

**Table 1.** Characteristics of young women (n=32).

Characteristics	Characteristics of respondents	Audiovisual media		Print media	
		Frequency	(%)	Frequency	(%)
Age (years)	Middle adolescence (14-16 years)	11	68.75	10	62.5
	Late adolescence (17 years)	5	31.25	6	37.5
Parent education	Elementary School	1	6.25	1	6.25
	Junior High School	5	31.25	6	37.5
	Senior High School	8	50	7	43.75
	College	1	6.25	1	6.25
	No School	1	6.25	1	6.25
Parent job	Government employees	2	12.5	1	6.25
	Private employees	1	6.25	14	87.5
	Self employed	13	81.25	1	6.25

ly at the high school level (43.75%), and their parents were predominantly private employees (87.5%). From the results of the data analysis in Table 2, it is evident that providing audiovisual health education had a significant effect on adolescent knowledge, with a p-value of 0.0000. Additionally, providing health education through print media also had an effect on adolescent knowledge, with a p-value of 0.0130.

The results from data analysis in Table 3 reveal a significant effect of providing audiovisual health education, compared to leaflets, on adolescent knowledge, with a p-value of 0.0000.

## Discussion

Audiovisual health education media proves to be more effective in increasing young women’s knowledge about early marriages compared to print media. Knowledge is closely related to education, where higher education often results in a broader knowledge base.<sup>18</sup> Adolescents who choose to marry at an early age often lack awareness of the negative consequences of early marriage due to ineffective information dissemination.<sup>6,19</sup> The effectiveness of conveying information is greatly influenced by the choice of media. To engage and educate teenagers effectively, it’s crucial to use media that captures their attention and provides an engaging learning atmosphere.<sup>20</sup> Media is instrumental in helping the educational process reach all five senses, as the more senses involved, the clearer the knowledge imparted. Media can be either visual or audiovisual, and multiple studies have demonstrated the effectiveness of audiovisual media in facilitating learning.<sup>21</sup>

Audiovisual media combines sound and visuals, making it highly effective due to its dual auditory and visual elements. It serves as a valuable instructional tool, aiding in the delivery of written and spoken information to transmit knowledge, attitudes, and ideas.<sup>22</sup> Audiovisuals attract attention, enhance motor skills, enable direct observation of phenomena, facilitate interaction analysis, issue resolution, and problem-solving. They can be repeatedly shown, shape attitudes, and foster appreciation.<sup>21</sup>

The advantage of using audiovisual media in educational activities extends beyond being a mere tool; it serves as a conduit for information and messages. When applied to the topic of early marriage, audiovisual media can vividly illustrate the abstract concept

of why it’s crucial for teenagers to postpone marriage, allowing respondents to both hear and see the negative impacts of early marriage clearly.<sup>23</sup> This approach aligns with the learning concept known as the “pyramid of experience,” as proposed by Edgar Dale, which asserts that people learn over 50% from what they see and hear.<sup>23,24</sup> Research conducted by Lestari & Sundayani (2018)<sup>16</sup> indicated that counseling, whether with or without video media, influences adolescents’ knowledge regarding the risks of early marriage. Similarly, another study found significant differences in knowledge levels about early marriage before and after screening a film, demonstrating the impact of audiovisual media. In various community service initiatives, audiovisual media is frequently used. According to a study by Rohmawati, Hidayah, and Marwan (2020),<sup>25</sup> 60 out of 68 participants experienced knowledge improvements regarding early marriage through health counseling involving audiovisual media. Information media and various factors play pivotal roles in influencing knowledge and consequent changes in adolescent behavior, which then impact their reproductive health.<sup>26</sup> Health education using print media (leaflets) aims to raise awareness among young women regarding the consequences of early marriage for adolescents. Leaflets are fundamentally effective in enhancing knowledge, as both health education and the leaflet method are one-way, active methods where the target audience is passive.<sup>27</sup> Nevertheless, leaflet media has certain drawbacks, including the time required for printing, limitations in displaying movement on the page, and the potential to reduce readers’ interest if containing excessive or overly lengthy information.

Adolescents need to receive comprehensive information about the perils of early marriage to make informed decisions and comprehend the associated risks.<sup>28</sup> Inadequate knowledge can lead to risky sexual behavior among adolescents.<sup>29</sup> One’s level of knowledge significantly influences psychosocial maturity and thinking capabilities. Higher knowledge levels facilitate rational thinking, problem description, problem-solving, and decision-making.<sup>28</sup> Researchers assume that the availability of various health education media for adolescents will bolster their knowledge about early marriage. One limitation of this study is the limited use of leaflet media for transferring knowledge to young women. Young women often prefer listening to explanations presented through audiovisual media.

**Table 2.** The effectiveness of audiovisual media on young women's knowledge of early marriage.

	Knowledge of young women regarding early marriage on post test			p
	Well	Enough	Not enough	
Audiovisual Media	12.3%	12.3%	7.9%	0.000*
Print media	4.4%	4.4%	4.4%	0.013

**Table 3.** Comparison of the effectiveness of audiovisual media and print media on young women's knowledge of early marriage on post test.

Knowledge of young women regarding early marriage		Mean differences	std. Error	Sig.
Audiovisual Media	Good knowledge	12.3000	1.2583	0.000
	Enough knowledge	12.3000	1.2583	0.000
	Less knowledge	7.9000	1.2583	0.000
Print media	Good knowledge	4.4000	1.2583	0.013
	Enough knowledge	4.4000	1.2583	0.013
	Less knowledge	4.4000	1.2583	0.013

## Conclusions

This study conclusively demonstrates the potency of audiovisual media in enhancing young women's understanding of early marriage issues. It strongly recommends the integration of audiovisual media into health education, emphasizing its use not only within healthcare facilities but also as part of school curricula. By doing so, we can contribute significantly to reducing early marriages and empowering young women to make informed choices. Young women have responded enthusiastically to audiovisual media, making it a powerful educational tool. However, further research could explore the effectiveness of other methods, ensuring a comprehensive approach to addressing early marriages.

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