RURAL ADOLESCENTS' VULNERABILITY TO EARLY MARRIAGE: A Community Nursing Perspective

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ABSTRACT

Early marriage among rural adolescents remains a significant public health issue affecting reproductive health, educational attainment, and the psychosocial well-being of adolescent girls. Rural adolescents' vulnerability to early marriage is influenced by multiple factors, including knowledge level, family economic conditions, cultural values, and social environment. This study aimed to analyze the vulnerability of rural adolescents to early marriage from a community nursing perspective based on knowledge level, family economic status, cultural influences, and peer environment. A comparative quantitative study with a cross-sectional approach was conducted involving 69 respondents who experienced early marriage in rural areas. The sampling technique used was total sampling, and data were collected using structured questionnaires. Data analysis was performed using univariate and bivariate analyses with the Chi-square test at a significance level of $p<0.05$. The results revealed significant differences in knowledge level ($p=0.012$), cultural influence ($p=0.018$), and peer environment ($p=0.021$) based on family economic status. Adolescents from low-income families tended to have lower levels of knowledge, were more strongly influenced by cultural norms supporting early marriage, and experienced more negative peer environments. The findings indicate that early marriage among rural adolescents is a multidimensional phenomenon requiring comprehensive community nursing interventions through reproductive health education, family empowerment, culturally sensitive approaches, and strengthening peer education programs to prevent early marriage among adolescents.

Keywords: Early Marriage, Rural Adolescents, Community Nursing, Culture, Peer Influence.

INTRODUCTION

Adolescence is a developmental transition period characterized by physical, psychological, social, and reproductive changes that require special attention in public health efforts. During this stage, adolescents are vulnerable to various health and social problems, one of which is early marriage. Early marriage remains a global public health issue because it affects reproductive health, educational attainment, psychological well-being, and the overall quality of life of adolescent girls. According to the World Health Organization, approximately 12 million girls worldwide marry before the age of 18 each year, and adolescent pregnancy remains one of the leading causes of death among females aged 15–19 years in developing countries (World Health Organization [WHO], 2023). In addition to increasing the risk of obstetric complications and maternal-infant mortality, early marriage is also associated with higher school dropout rates, lower economic productivity, and limited opportunities for adolescent girls to achieve personal development.

In Indonesia, early marriage continues to be a serious challenge in public health development. Data from Badan Pusat Statistik indicated that the prevalence of child marriage among women aged 20–24 years who married before the age of 18 was still 8.06% in 2023.

The prevalence was higher in rural areas compared to urban areas (Badan Pusat Statistik [BPS], 2023). Furthermore, the United Nations Children's Fund reported that Indonesia remains one of the countries with the highest number of child marriages in Southeast Asia (UNICEF, 2023). These conditions suggest that rural adolescents are more vulnerable to early marriage due to limited access to education, health information, and socioeconomic resources.

Rural communities possess distinct sociocultural characteristics compared to urban areas. Lower educational attainment, limited access to reproductive health services, and strong adherence to traditional customs contribute to the acceptance of early marriage practices within rural societies. In several communities, marriage at a young age is still perceived as a form of compliance with family and social norms. Additionally, some families consider marriage as a strategy to reduce household economic burdens. Djamilah and Kartikawati (2014) stated that patriarchal culture and social pressure are major factors sustaining child marriage practices in Indonesia.

From a community nursing perspective, early marriage is considered a public health problem requiring promotive and preventive community-based approaches. Community nursing plays a crucial role in improving reproductive health literacy, strengthening family resilience, and empowering communities to prevent early marriage practices. According to the social determinants of health theory proposed by Michael Marmot, socioeconomic conditions, education, and social environments are important factors influencing public health status (Marmot, 2005). In rural communities, limited access to education and health information increases adolescents' vulnerability to making decisions regarding marriage at an early age.

Several studies have shown that low reproductive health knowledge among rural adolescents is associated with a higher risk of early marriage. Adolescents with limited understanding of the health and social consequences of early marriage tend to perceive the practice as socially acceptable within their environment (Nurhidayah et al., 2022). A study published in *BMC Public Health* also found that adolescent girls from low-income families were more likely to experience early marriage due to limited access to education and health information (Yaya et al., 2019). Moreover, peer influence and sociocultural norms supporting marriage at a young age further reinforce early marriage practices. Raj et al. (2010) explained that social pressure and patriarchal cultural values significantly contribute to child marriage practices in developing countries.

Although many studies on early marriage have been conducted, most research has primarily focused on individual factors such as education and economic status without specifically examining rural adolescents as a vulnerable group from a community nursing perspective. Studies integrating knowledge, cultural influences, family economic conditions, and social environment among rural adolescents remain limited. However, a community-based approach is essential to comprehensively understand rural adolescents' vulnerability to early marriage.

This study is important because it provides an overview of rural adolescents' vulnerability to early marriage from a community nursing perspective. The findings are expected to serve as a basis for developing community nursing interventions through reproductive health education, family empowerment, strengthening adolescent social environments, and culturally sensitive approaches to prevent early marriage in rural communities. In addition, this study is expected to strengthen the role of community nurses in promotive and preventive efforts addressing adolescent reproductive health problems in rural areas.

The purpose of this study was to analyze rural adolescents' vulnerability to early marriage based on knowledge level, family economic conditions, cultural influences, and peer environment from a community nursing perspective. The study hypothesized that rural

adolescents with low economic status, limited knowledge, strong cultural influences, and negative peer environments have a higher vulnerability to early marriage practices.

METHODS

Participants and Research Design

This study employed a comparative quantitative design with a cross-sectional approach. The study aimed to analyze rural adolescents' vulnerability to early marriage from a community nursing perspective based on knowledge level, family economic conditions, cultural influences, and peer environment. The cross-sectional approach was used to identify differences in research variables measured at the same point in time.

The participants were adolescent girls living in rural areas who had experienced early marriage. The inclusion criteria were: (1) females who married before the age of 19 years, (2) residing in rural areas, (3) willing to participate as respondents, and (4) able to complete the questionnaire independently. The exclusion criteria included respondents who did not complete the questionnaire or withdrew during the study process. Demographic characteristics assessed in this study included age, educational level, age at marriage, and family income.

Sampling Procedures

The sampling technique used was total sampling, in which all respondents who met the study criteria were included as research participants. A total of 69 adolescent girls who experienced early marriage in rural areas participated in this study. Data collection was conducted in 2025 using structured questionnaires administered directly to respondents.

Before data collection, researchers explained the objectives, benefits, procedures, and participants' rights during the study. All respondents who agreed to participate signed an informed consent form. Ethical approval for this study was obtained from the institutional health research ethics committee. Confidentiality, anonymity, and voluntary participation were maintained throughout the research process. Participants did not receive financial compensation for their participation.

Sample Size, Power, and Precision

The sample size was determined based on the number of adolescent girls who met the inclusion criteria in the study area. The final sample consisted of 69 respondents, and all collected data were eligible for analysis. Respondents were categorized into two groups based on family economic status: low-income and high-income groups.

This study did not conduct a formal statistical power analysis; however, the sample size was considered adequate for comparative analysis using categorical statistical tests. No stopping rules were applied because the entire data collection process was completed according to the predetermined research schedule.

The research instrument consisted of a structured questionnaire developed based on theoretical frameworks and previous studies related to factors associated with early marriage. The questionnaire included respondent characteristics, knowledge regarding early marriage, family economic condition, cultural influence, and peer environment. The knowledge instrument was developed based on adolescent reproductive health concepts from the World Health Organization and previous studies by Nurhidayah et al. (2022). Prior to use, the instrument underwent validity and reliability testing on respondents with similar characteristics outside the study area. The results showed that all questionnaire items were valid, and the reliability test demonstrated a Cronbach's Alpha value greater than 0.70, indicating that the instrument was reliable.

Measurements and Covariates

The independent variable in this study was family economic condition, while the dependent variables included knowledge level, cultural influence, and peer environment related to early marriage. Family economic condition was measured based on monthly family income and categorized into low income (<Rp2,500,000) and high income (≥Rp2,500,000).

Knowledge level was measured using multiple-choice questions regarding the reproductive health, psychological, and social consequences of early marriage. Knowledge scores were categorized as good, moderate, and poor. Cultural influence was assessed through questions related to cultural norms and family traditions concerning marriage age. Peer environment was measured based on respondents' perceptions of peer influence on decisions related to early marriage.

To improve measurement quality, researchers provided standardized instructions regarding questionnaire completion before data collection. In addition, all questionnaires were rechecked to ensure completeness of respondents' answers.

Data Analysis

Data were analyzed using statistical software. Univariate analysis was conducted to describe the frequency distribution and percentages of respondent characteristics and study variables. Bivariate analysis was performed using the Chi-square test to determine differences in knowledge level, cultural influence, and peer environment based on family economic status, with a significance level of $p<0.05$. The results were presented in the form of frequency distribution tables, cross-tabulations, and narrative interpretations.

RESULTS AND DISCUSSION

Descriptive Statistics of Respondents

Table 1

Characteristics of Study Respondents

Characteristics	Frequency (n)	Percentage (%)
Educational Level		
Elementary School	13	18.8
Junior High School/Equivalent	22	31.9
Senior High School/Equivalent	23	33.3
Higher Education	11	15.9
Family Income		
< Rp2,500,000	39	56.5
≥ Rp2,500,000	30	43.5
Knowledge Level		
Poor	37	53.6
Moderate	22	31.9
Good	10	14.5
Cultural Influence		
Influenced	35	50.7
Not Influenced	34	49.3
Peer Environment		
Negative	23	33.3
Positive	46	66.7

Based on Table 1, most respondents had a senior high school/equivalent educational background (33.3%) and came from families with monthly incomes below Rp2,500,000 (56.5%). The majority of respondents also had poor knowledge regarding early marriage (53.6%). Furthermore, 50.7% of respondents stated that cultural traditions influenced early marriage practices, while 33.3% reported having negative peer environments.

Assumption Testing

Prior to bivariate analysis, all data were checked for completeness and consistency. Since the study variables were categorical, the analysis employed the Chi-square test. The assumption test indicated that all contingency table cells met the analytical requirements, with expected counts greater than 5 in most cells, indicating that the data were appropriate for hypothesis testing using the Chi-square test.

Hypothesis Testing

Table 2
Differences in Knowledge Level Based on Family Economic Status

Knowledge Level	Low Economic Status n (%)	High Economic Status n (%)	p-value
Poor	27 (69.2)	10 (33.3)	
Moderate	9 (23.1)	13 (43.3)	0.012
Good	3 (7.7)	7 (23.4)	

The analysis showed significant differences in knowledge levels based on family economic status (p=0.012). Respondents from low-income families were more likely to have poor knowledge levels compared to those from high-income families.

Table 3
Differences in Cultural Influence Based on Family Economic Status

Cultural Influence	Low Economic Status n (%)	High Economic Status n (%)	p-value
Influenced	25 (64.1)	10 (33.3)	0.018
Not Influenced	14 (35.9)	20 (66.7)	

Table 3 indicates significant differences in cultural influence based on family economic status (p=0.018). Adolescents from low-income families were more influenced by cultural values and traditions supporting early marriage compared to those from high-income families.

Table 4
Differences in Peer Environment Based on Family Economic Status

Peer Environment	Low Economic Status n (%)	High Economic Status n (%)	p-value
Negative	18 (46.2)	5 (16.7)	0.021
Positive	21 (53.8)	25 (83.3)	

The findings demonstrated significant differences in peer environment based on family economic status (p=0.021). Respondents from low-income families tended to experience more negative peer influences compared to respondents from high-income families.

Discussion

Rural Adolescents' Vulnerability to Early Marriage Based on Knowledge Level

This study revealed that rural adolescents from low-income families tended to have lower levels of knowledge regarding early marriage compared to adolescents from higher economic groups. These findings indicate that economic limitations influence adolescents' access to education and reproductive health information, thereby increasing their vulnerability to early marriage practices.

According to the social determinants of health theory proposed by Michael Marmot, socioeconomic conditions affect individuals' ability to obtain education, health information, and healthcare services (Marmot, 2005). In rural communities, limited access to education and inadequate reproductive health information sources result in adolescents having insufficient understanding of the health, psychological, and social consequences of early marriage.

The findings of this study are consistent with Nurhidayah et al. (2022), who reported that low reproductive health knowledge is associated with increased early marriage practices among adolescent girls. Another study published in ***BMC Public Health*** also demonstrated that adolescent girls from low-income families have a higher risk of experiencing early marriage due to limited access to education and health information (Yaya et al., 2019).

From a community nursing perspective, these findings highlight the importance of strengthening community-based reproductive health education through the role of community nurses. Continuous educational interventions may improve rural adolescents' health literacy and promote healthier behaviors regarding marriage readiness.

Rural Adolescents' Vulnerability to Early Marriage Based on Cultural Influence

The results showed that rural adolescents from low-income groups were more strongly influenced by cultural values and traditions supporting early marriage compared to adolescents from higher economic groups. This finding indicates that cultural norms remain a dominant factor increasing adolescents' vulnerability to marriage at a young age.

According to the social construction theory developed by Peter L. Berger and Thomas Luckmann, individual behavior is shaped through the internalization of social values and norms continuously inherited within society (Berger & Luckmann, 1966). In rural communities, cultural norms that normalize early marriage lead adolescents to perceive the practice as socially acceptable and reasonable.

Additionally, some families consider marriage as a strategy to reduce household economic burdens and preserve family honor. These conditions demonstrate that culture and economic factors interact in maintaining early marriage practices in rural communities.

The findings are in line with Djamilah and Kartikawati (2014), who stated that cultural norms and family traditions significantly contribute to the high prevalence of child marriage in Indonesia. Raj et al. (2010) also explained that patriarchal culture and social pressure are major contributors to child marriage practices in developing countries.

From a community nursing perspective, nurses play an important role in implementing culturally sensitive approaches through community empowerment and the involvement of community leaders and families in preventing early marriage. Community-based interventions are necessary to change public perceptions regarding the normalization of early marriage practices.

Rural Adolescents' Vulnerability to Early Marriage Based on Peer Environment

The findings indicated that rural adolescents from low-income families experienced more negative peer influences compared to those from higher economic groups. Adolescents' social

environments play an important role in shaping behaviors and decision-making related to early marriage.

According to Albert Bandura's ***Social Learning Theory***, individual behavior is influenced by observation and imitation of social environments (Bandura, 1977). Adolescents tend to follow peer group behaviors to gain social acceptance and group identity. When early marriage is normalized within peer groups, adolescents become more vulnerable to engaging in similar behaviors.

In some rural adolescent groups, early marriage is even viewed as a symbol of maturity or social success. Conversely, positive peer environments may serve as protective factors by encouraging educational continuation, motivation to pursue future goals, and reproductive health awareness. These findings are consistent with Wulandari et al. (2020), who reported that peer influence has a significant relationship with adolescent behaviors related to early marriage. Another study published in *The Lancet Child & Adolescent Health* also found that peer pressure strongly influences adolescents' decisions regarding relationships and marriage (Patton et al., 2018).

From a community nursing perspective, the findings emphasize the importance of developing peer education programs as promotive strategies to prevent early marriage. Community nurses may involve adolescent groups as agents of change to improve awareness regarding reproductive health and family life readiness in rural communities.

LIMITATIONS OF THE STUDY

This study has several limitations. The use of a cross-sectional design limits the ability to explain causal relationships among variables in depth. In addition, the relatively limited sample size and the fact that the study was conducted in only one research area may restrict the generalizability of the findings to populations with different sociocultural characteristics. Nevertheless, this study provides valuable insights into factors associated with early marriage practices among adolescent girls.

CONCLUSIONS AND RECOMMENDATIONS

This study concludes that rural adolescents are vulnerable to early marriage practices influenced by family economic conditions, knowledge level, cultural influences, and peer environment. Adolescents from low-income families tend to have lower knowledge regarding the consequences of early marriage, are more strongly influenced by cultural norms supporting marriage at a young age, and are more likely to experience negative peer environments. These findings indicate that early marriage among rural adolescents is a multidimensional phenomenon influenced by the interaction of economic, cultural, educational, and social environmental factors. From a community nursing perspective, efforts to prevent early marriage should be implemented comprehensively through reproductive health education, family empowerment, culturally based community approaches, and strengthening peer education programs.

Future studies are recommended to involve larger sample sizes and broader research areas to improve the representativeness of the findings. Further research may also explore other factors related to early marriage, such as parenting styles, social media use, adolescent mental health, and access to reproductive health services using more comprehensive analytical approaches.

ETHICAL CONSIDERATIONS

This study received ethical approval from the institutional health research ethics committee prior to the data collection process. All respondents were provided with

explanations regarding the objectives, benefits, procedures, and participants' rights in the study. Participation was voluntary, and all respondents signed informed consent forms before participating in the research.

The researchers ensured the confidentiality of respondents' identities by not including names or personal information in the research documents. The collected data were used solely for academic and research purposes. During the research process, the researchers also adhered to ethical principles including ***respect for persons, beneficence, nonmaleficence,*** and ***justice*** to ensure the safety and comfort of all research participants.

Conflict Of Interest Statement

The authors declare that there are no conflicts of interest regarding the publication of this study

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