

ORIGINAL ARTICLE

Child Marriage in High-risk Rural Areas: Exploring Risk Factors and Implications for Adolescent Reproductive Health

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ABSTRACT

Introduction: Child marriage is a significant problem in high-risk rural communities, driven by social pressures, cultural norms, and restricted educational opportunities. This study investigates the risk factors that contribute to child marriage and examines its impact on the reproductive health of adolescents. The research underscores the critical need for focused interventions to address these issues and improve the well-being of adolescents in vulnerable communities. **Materials and methods:** By analyzing recent data and conducting interviews with affected individuals, the study provides a comprehensive understanding of the underlying factors and their consequences. The study focused on 608 youths from Tambakrejo District, Bojonegoro, who were married as minors in 2022. Using a simple random selection method, a sample of 86 participants was chosen, comprising 40 cases and 46 controls. The data were analyzed using chi-square tests and multiple logistic regression to identify significant risk factors. **Results:** This revealed that parental wishes, self-desire, school dropout, parental income, and social pressures play a crucial role in influencing child marriage. These findings highlight the complex interplay of individual, familial, and societal factors in perpetuating this practice. **Conclusion:** The study concludes with recommendations for preventive health promotion initiatives, emphasizing the importance of education and counselling. These initiatives should focus on providing parents and families with in-depth education about the detrimental effects of child marriage and the risks associated with adolescent pregnancy. Such efforts are essential to curbing the prevalence of child marriage and protecting the reproductive health of adolescents in high-risk rural areas.

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INTRODUCTION

Child marriage in Indonesia has become a national phenomenon; culture is a significant influencing factor in the pattern of life in public. It is closely related to violations of children's rights, including the right to grow, develop, and receive protection from violence and discrimination. Practice marriage with this child allegedly violates the rights of the essential child, limits choice and opportunity, and makes risk prone to violence, exploitation, and abuse (1). Child marriage is a social problem. Child marriage has an impact not only on health but also on sustainability. The house ladder is formed through the union of a child. It can happen because, in part, significant marriages of children do not

occur based on thorough preparation and often even happen without the couple realizing they married early (2). The ideal marriage age for women is at least 20 years. Psychologically, it is already stable in responding to many matters that influence marriage. Women who still have not had enough for 20 years tend not to be ready because most of them think more about how to get an education, which is good, and have fun. A man should have a minimum of 25 years because the man at that age, his psychological and physical condition is extreme, so he can support family life and protect Good in psychic, emotional, economic, and social (3). Concern the public about the practice of marriage is related to the fact that marriage child violates the rights of the child, limits choice and opportunities, and makes them vulnerable to violence, exploitation, and abuse (4). Factors that influence the marriage of a child's birth education, the need economy, cultural aspects of young marriage, arranged marriages, and free sex among teenagers (5), (6). The phenomenon in Tambakrejo

District, Bojonegoro Regency. Many teenagers who have weddings are found (7).

Globally, the practice of child marriage continues to decline in various countries in the world. UNICEF in 2018 estimated that around 21 percent of women (aged 20 to 24 years) carry out marriage to children. The number of people with this experience declined compared to ten years ago when the numbers reached 25 percent. Subtraction also marks an acceleration trend in many countries during the final decade. It is estimated that as many as 25 million child marriages can be prevented through various practical efforts, even though there are around 650 million women and children whose lives day carry out marriage before their 18th birthday. The most significant number is in South Asian countries, followed by Sub-Saharan Africa, of the nine girls married in Indonesia. Women aged 20-24 years who married before they were 18 years old in 2018 are estimated to reach around 1,220,900; this figure places Indonesia in the ten countries with the highest absolute rate of child marriage in the world (4). Indonesia's ranking for the ASEAN region is second, with a child marriage rate of 27.6 percent, or around 23 million children married in Indonesia. According to data from court religion, the number of married children in Java East in 2020 was as much as 9,453 weddings in lower ages. The number is equivalent to 4.97 percent of the total 197,068 marriages. By percentage, it indeed increased compared to 2019, which was only 3.6 percent; however, according to quantity, it went down. In the year, the number of married children was 19,211 cases from 340,613 marriages. In the year 2022 currently, the number of marriage dispensation (Diska) case filings in Bojonegoro as of December 24 has reached 608 points. There are 608 children aged 18 years, 295 children are 17 years old, 181 children are 16 years old, 91 children are 15 years old, 30 children are 14 years old, and eight children. Moreover, most critically, some are 13 years old or at least three children. In the year 2022 in Subdistrict Tambakrejo Regency Bojonegoro, 21 children were present, and in the year 2022, 40, 19 children (47.5%) were present from the year 2022 (7).

The age of young marriage is marriage done when a man and woman are underage, which is determined in the act of marriage. In the year 2019, marriage is only permitted if the man and woman have reached the age of 19 years (7). Factors that influence the occurrence of child marriage are low education and need factors, economics, cultural factors of young marriage, arranged marriages, and free sex among teenagers. Child marriage is often caused by factors such as the individual's self, family, society, and the environment in which the individual is located. In general, factors that influence child marriage include individual factors such as free sex in adolescents, family factors such as economic needs and arranged marriages, and factors such as the environment where place stay, for example, the culture

of marrying young (5). A married child can have severe and long-lasting adverse effects. When a teenage girl gets pregnant, this can have a significant impact on education, health (due to complications from labor), and chance work, which influence life and income on the period front. The child was also born had a risky death during infancy due to stunting and low birth weight. Another problem experienced by young married couples is the vulnerable practice of violence on the housing ladder (domestic violence) because they are not yet capable of managing emotions. Child marriage gives rise to new problems for the family because many people are forced to help take care of their grandchildren. In the case of a married child with a partner who is not yet ready financially, it will be a burden on the family (8).

Efforts for lower marriage to form a family must be mature, and couples who will create a family must be biologically and spiritually pedagogical or responsible adults. Men must be ready to assume responsibility as head of the family so that obliged members can live together as a member family. A woman must already be prepared to become a mother on the housing ladder and be on duty to control the housing ladder, give birth, educate, and nurture the child (9). Supervision and attention to school are needed. Thinking forward and understanding is crucial to success. For guards, increase students' awareness so that no carryout weddings are carried out at an early age school's service guidance counseling. The wrong one service can be used by supervising teachers to increase students' awareness at school by implementing group guidance services. Group guidance can take the form of conveying information or activity group discussing problems that impact the wedding age (2). Role officer health is very needed for reducing risk, which happens to pregnant teenagers. The Officer Health as an educator plays a role in carrying out guidance or counseling and educating clients, families, public, and power health, including student midwives/nurses, about long-term health problems related to health reproduction regarding age teenagers. In the frame of improving child protection, fulfilling children's rights, controlling the quantity and improving the quality of population as well as improving the quality of children's health needs to prevent marriage child, Governor Java East made a letter circular on the year 2021, which containing between other facilitate and provide infrastructure for the establishment of a family learning centre (PUSPAGA) or the like to provide family counseling services and assistance to obtain the fulfilment of the right to education, health, and skills which for some reason are forced to enter into child marriage. Facilitate and push the implementation of school candidate brides for teenagers who will carry out weddings to gain skills and knowledge to prepare for married life and encourage people to report actively. To prevent child marriage in the administrator environment, it continued in a structured way that ranked the government taller. This study describes risk factors (self-desires, parents,

pregnancy before marriage, dropping out of school, relationships, knowledge, attitudes, culture, education, community environment, and income person marriage child in Subdistrict Tambakrejo Regency Bojonegoro.

MATERIALS AND METHODS

This study utilized an analytic descriptive approach with a cross-sectional design (11). Data collection was conducted in February 2023 in Tambakrejo District, Bojonegoro Regency. The study population included all adolescents who entered child marriages in 2022 within the district, which is 608. A total sample of 86 respondents was divided into 40 cases (adolescents who were married) and 46 controls (adolescents who were not married), selected using a simple random sampling technique (12).

The validity and reliability of the instruments were tested using Cronbach's alpha to ensure the internal consistency of the questionnaire (13), (14). The questionnaire covered various aspects, including socioeconomic background, educational status, parental influence, and attitudes toward marriage. The data were then analyzed using chi-square tests to identify significant associations between variables. Multiple logistic regression analysis was employed to determine the most influential factors contributing to child marriage.

Ethical Consideration

This Study was approved by Research Ethics, LPPM STIKES Rajekwesi Bojonegoro No. 025b/LPPM. STIKES.R/XII/2022

RESULTS

The result presents the distribution of risk factors between child marriage and non-child marriage groups. The variables analyzed include self-desire, parents' wishes, pregnancy before marriage, school dropout, community environment, community culture, and parents' income level.

The study's findings show the distribution of several risk variables between groups of people who underwent child marriage and those who did not. Table I informs that the critical variables examined were self-desire, parental influence, pregnancy before marriage, school dropout, community environment, cultural factors, and parental income levels.

Table I Distribution of Risk Factors (Self Desires, Parent's Whishes, Pregnant Before Marriage, Dropped Out Of School, Community Environment, Community Culture and Parents' Income Level)

No	Variable		Child Marriage		Not Child Marriage	
			Fre-quency	Per-centage	Fre-quency	Percent-age
1	Self desire	Yes	32	80	40	87
		No	8	20	6	13
		Total	40	100	46	100
2	Parents' wishes	Yes	30	75	16	34,8
		No	10	25	30	65,2
		Total	40	100	46	100
3	Pregnant Be-fore Marriage	Yes	3	7,5	0	0
		No	37	92,5	46	100
		Total	40	100	46	100
4	Dropped Out of School	Yes	34	85	10	21,7
		No	6	15	36	78,3
		Total	40	100	46	100
5	Community Environment	Yes	26	65	10	21,7
		No	14	35	36	78,3
		Total	40	100	46	100
6	Community Culture	Yes	27	67,5	25	54,3
		No	13	32,5	21	45,7
		Total	40	100	46	100
7	Parents' In-come Level	Yes	30	75	15	32,6
		No	10	25	31	67,4
		Total	40	100	46	100

In Table I, 80% of respondents in the child marriage group stated their desires as the cause, compared to only 13% in the non-child marriage group. The data demonstrated that self-desire was a key component in child marriage. Table II highlights the significant relationship between self-desire and child marriage, highlighted by the statistically significant ($p=0.010<0,05$) association and the odds ratio of 15.364, with a confidence range spanning from 1.9 to 123.1.

The parents' wishes also significantly influenced the child, with 75% of those in the child in Table I. The study's findings show the distribution of several risk variables between groups of people who underwent child marriage and those who did not. The essential variables examined were self-desire, parental influence, pregnancy before marriage, school dropout, community environment, cultural factors, and parental income levels.

Table I states that significant influence was also given to the parent's wishes, with 75% of those in the child

marriage group. Compared to 34.8% in the non-child marriage group, the marriage group attributes their circumstances to parental influence. In Table II, with an odds ratio of 2.591 and a confidence range of 1.29 to 7.14, this was statistically significant ($p=0.016$), suggesting a considerable risk.

In Table I, 7.5% of the child marriage group reported being pregnant before being married, but the non-child marriage group did not exhibit this behavior. The lack of an odds ratio or confidence interval (the p -value of $0.999 > \alpha 0.05$) indicates that this factor did not substantially separate the two groups in Table II.

Table II: Risk Factor Child Marriage

No	Variable	P-value	Odds ratio	Confident Interval
1	Self-desire	0,010	15,364	(1,9 – 123,1)
2	Parent's wishes	0,016	2,591	(1,29 – 7,14)
3	Dropped Out of School	0,000	9,143	(3,37 – 24,787)
4	Community Culture	0,003	4,101	(1,599 – 10,518_
5	Parent's Income Level	0,000	8,744	(3,278 – 23,324_
6	Pregnant Before Marriage	0,999	-	-
7	Community Environment	0,582	1.273	(0.539 – 3.006)

Table I shows that Eighty-five (85%) of those in the child marriage group had dropped out of school, and 21.7% of those in the non-child marriage group had not. School dropout was a strong predictor of child marriage. Table II, this distinction was important ($p=0.000<0.05$), with an odds ratio of 9.143 and a confidence interval of 3.37 to 24.787, reflecting a robust association.

Whereas only 21.7% of the group that did not experience early marriage mentioned it, 65% of the early marriage group considered the community environment as a relevant factor, as shown in Table I. The analysis in Table II shows that the odds ratio of 1.273 with a confidence interval of 0.539 to 3.006 indicates a less clear relationship between the community environment and early marriage even though the value ($p 0.582>0.05$).

Compared with 54.3% of the non-child marriage group, 67.5% of those in the child marriage group stated that community cultural elements had an impact, as reported in Table I. The analysis results of Table II show that the odds ratio is 4.101, and the confidence interval is 1.599 to 10.518. This factor is statistically significant ($p=0.003<0.005$), indicating a strong relationship.

Finally, the level of parental income. This proved to be a significant factor, as reported in Table I, that 75% of the child marriage group compared to 32.6%

of the group that did not have child marriage. Table II informs that the odds ratio is 8.744, and the confidence interval ranges from 3.278 to 23.324; the relationship is statistically significant ($p=0.000<0.05$), underlining the strong correlation between low parental income and the risk of child marriage.

DISCUSSION

The study's findings provide a comprehensive analysis of the risk factors associated with child marriage, contrasting the experiences of individuals who underwent child marriage with those who did not. The critical variables examined—self-desire, parental influence, pregnancy before marriage, school dropout, community environment, cultural factors, and parental income levels—highlight the multifaceted nature of child marriage, particularly in rural settings.

Self-Desire and Parental Influence

The significant association between self-desire and child marriage suggests that personal motivations are a crucial factor in the decision to marry early (15). This finding is consistent with other studies that indicate individual choices, driven by emotional and psychological factors, often play a significant role in early marriage decisions, particularly in contexts where young people may see marriage as an escape from poverty or familial pressure (16). Targeted educational programs that provide adolescents with alternative aspirations and opportunities are essential in addressing this issue.

Parental influence was also found to be a significant factor, with many participants in the child marriage group indicating that their parent's wishes were pivotal in their decision to marry early (17). This reflects the strong cultural and familial expectations that often override the individual preferences of adolescents, a pattern observed in other studies as well (18). In many rural communities, parental authority is deeply entrenched, and children may feel compelled to comply with their parent's decisions, even when those decisions may negatively impact their future well-being (19). Addressing this requires culturally sensitive interventions that engage parents and emphasize the long-term consequences of child marriage on their children's health and opportunities.

The study's findings on pregnancy before marriage were somewhat surprising. The low incidence of premarital pregnancy among those who married as minors challenges the common assumption that early marriage is primarily a response to unplanned pregnancies (20). This is consistent with research suggesting that, in many rural communities, child marriage is more often driven by cultural norms and economic pressures than by pregnancy (21). This highlights the need for broader

educational and economic interventions that address these underlying causes rather than focusing solely on pregnancy prevention.

School Dropout

School dropout emerged as a powerful predictor of child marriage, a finding that aligns with numerous studies linking educational attainment to marriage age. Adolescents who leave school prematurely face limited opportunities and may see marriage as their only viable option. This underscores the importance of educational retention programs, particularly for girls, as a critical strategy in preventing child marriage. Providing support for at-risk students and promoting the value of education within these communities can help to break the cycle of early marriage (19).

Community Environment and Cultural Factors

The influence of the community environment and cultural factors on child marriage is well-documented in the literature. In this study, the community environment, while not as strongly associated with other factors, still played a significant role in the perpetuation of child marriage (22).. Cultural norms that view early marriage as a traditional practice are profoundly ingrained and contribute to the persistence of this issue (18), Efforts to address child marriage must, therefore, involve community-wide interventions that challenge and transform these cultural norms, fostering an environment where delaying marriage is both acceptable and encouraged.

Parental Income Levels

Finally, the study highlighted parental income levels as a significant risk factor for child marriage, which aligns with existing research on the economic dimensions of this practice. Families with lower income levels often view marriage as a strategy for securing their children's future or alleviating financial burdens (23), (24), . This economic rationale for child marriage underscores the importance of poverty alleviation programs and economic support for vulnerable families. By improving the economic status of these families, it may be possible to reduce the incidence of child marriage and improve the overall well-being of adolescents (19).

CONCLUSION

The study sheds light on the multifaceted nature of child marriage in rural high-risk areas, identifying critical risk factors such as self-desire, parental influence, school dropout, community environment, cultural norms, and parental income levels. These findings underscore the complexity of child marriage, which is not merely the result of individual or familial decisions but is deeply rooted in broader socioeconomic and cultural contexts (25). Addressing child marriage requires comprehensive interventions that target these multiple dimensions, including educational programs, economic support, and

community engagement. By tackling the root causes, it is possible to reduce the prevalence of child marriage, safeguard adolescent reproductive health, and create opportunities for a better future for young individuals in vulnerable communities (26) .

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