

## ORIGINAL RESEARCH ARTICLE

# Does good knowledge affect the disapproving attitudes of female adolescents regarding early marriage? A cross-sectional study

DOI: 10.29063/ajrh2024/v28i10s.7

Erni Gustina<sup>1</sup>, Elicia M. Sylvie<sup>2</sup> and Mohammad Z. Fatah<sup>3</sup>

Doctoral Program in Public Health, Faculty of Public Health, Universitas Airlangga, Surabaya, 60115, Indonesia<sup>1</sup>; Faculty of Public Health, Universitas Ahmad Dahlan, Yogyakarta, Indonesia<sup>2</sup>; Faculty of Public Health, Universitas Airlangga, Surabaya, 60115, Indonesia<sup>3</sup>

\*For Correspondence: Email: [erni.gustina-2022@fkm.unair.ac.id](mailto:erni.gustina-2022@fkm.unair.ac.id); Phone: +6285729620155

## Abstract

Early marriage is a severe public health problem issue. This study aimed to analyze the knowledge and attitudes of female adolescents regarding early marriage. A cross-sectional design was used and included 245 female adolescents. Data was collected using a structured questionnaire. Multivariable logistic regression was used to analyze the relationship between knowledge and attitudes regarding early marriage. Most of the respondents disagree with early marriage. Female adolescents with good knowledge were 0.51 times more likely to disagree with early marriage than those with less knowledge. Female adolescents with higher mothers' education were 0.66 times more likely to disagree with early marriage than female adolescents with lower mothers' education. Good female adolescents' knowledge and mother's education support female adolescents' disapproval of early marriage. We conclude that the better the understanding of female adolescents about early marriage, the less they agree with early marriage. (*Afr J Reprod Health* 2024; 28 [10s]: 61-68).

---

**Keywords:** Female adolescents; attitude; early marriage; knowledge

---

## Résumé

Le mariage précoce constitue un grave problème de santé publique. Cette étude visait à analyser les connaissances et les attitudes des adolescentes concernant le mariage précoce. Une conception transversale a été utilisée et a inclus 245 adolescentes. Les données ont été collectées à l'aide d'un questionnaire structuré. La régression logistique multivariée a été utilisée pour analyser la relation entre les connaissances et les attitudes concernant le mariage précoce. La plupart des personnes interrogées ne sont pas d'accord avec le mariage précoce. Les adolescentes ayant de bonnes connaissances étaient 0,51 fois plus susceptibles d'être en désaccord avec le mariage précoce que celles ayant moins de connaissances. Les adolescentes dont la mère avait un niveau d'éducation plus élevé étaient 0,66 fois plus susceptibles d'être en désaccord avec le mariage précoce que les adolescentes dont la mère avait un niveau d'éducation moins élevé. Les bonnes connaissances des adolescentes et l'éducation de leur mère soutiennent leur désapprobation à l'égard du mariage précoce. Nous concluons que plus les adolescentes comprennent le mariage précoce, moins elles sont d'accord avec le mariage précoce. (*Afr J Reprod Health* 2024; 28 [10s]: 61-68).

---

**Mots-clés:** Adolescentes ; attitude; mariage précoce; connaissance

---

## Introduction

Early marriage is a breach of human rights since it deprives people of many options, including the right to health, safety, and education. Early marriage is a severe public health issue that hurts children, particularly girls, and future offspring and can result in an intergenerational cycle of adversity. Early marriage, a legal or informal partnership formed before age 18, involves one or both people under

18<sup>1</sup>. An estimated 650 million females get married before turning 18 worldwide. At least 12 million females get married before turning 18 each year. Currently, 16% of Indonesian females are married before turning 18, while 2% get married before turning 15. One in every nine women aged 20 to 24 are married before 18. In Indonesia, over 1.2 million women aged 20 to 24 were married before 18<sup>1</sup>. In 2021, there were 218 cases of early marriage in Gunung Kidul based on applications for marriage

dispensation. Available evidence indicates that 54% of applications for marriage dispensation are made because of unwanted pregnancy.

Other reasons for child marriages in Gunung Kidul DIY include unwanted pregnancies, fear of sinning, having had sex, and the bride and groom having given birth. According to previous studies, the primary reasons for early marriage are pregnancy, love, and freedom from parental influence<sup>2,3</sup>. Poor socio-economic status is another leading cause of early marriage<sup>4-7</sup>, such as incentives to marry off daughters to reduce household financial burdens. The educational level of teenagers and their parents, monthly family income, place of residence, literacy level, and knowledge of marriage law are critical factors in early marriage<sup>2,8-10</sup>. The low level of education and understanding of adolescents, especially those related to reproductive health, sexuality, and interpersonal relationships, have strong relationships with the tendency of early marriage<sup>11,12</sup>. Likewise, parents' understanding regarding reproductive health issues and parental education play critical roles in decision-making for children because family environment is the child's first and foremost education<sup>13</sup>.

Early marriage is connected with the health, social, and physical challenges of girls and is frequent in many developing countries. Girls experience health disadvantages in reproductive and sexual health, such as early pregnancy, risk of death during childbirth, and exposure to sexually transmitted diseases<sup>4,14,15</sup>. Similarly, the effects on children include increasing the likelihood of child death<sup>15,16</sup>, inadequate parenting, wrong role models, and victims of violence<sup>17,18</sup>. Available reports indicate that women aged 15 to 24 years experience restriction and violence by partners of all kinds, including emotional and severe physical violence<sup>14,19,20</sup>. Early marriage causes mental health disadvantages and poor psychosocial well-being in women<sup>14</sup>. For example, depression is also associated as an outcome of young marriages undertaken by adolescents, lack of self-confidence in teenagers themselves, and unhealthy interpersonal relationships<sup>17,21-23</sup>.

Early marriage is a focus of the Ministry of Women's Empowerment and Child Protection in Indonesia. The Sustainable Development Goals (SDGs) also mention that dangerous practices such as child marriage, early marriage, and forced

marriage must be eliminated. Early marriage has various detrimental impacts, including physical, reproductive and sexual health, mental health, and has adverse socio-economic consequences. However, the causes of early marriage in both adolescents and families, including knowledge and attitudes towards child marriage, are not yet well understood. Attention to global and national government warnings has become a concern for researchers, planners, and policymakers in Indonesia, especially in Gunungkidul District, DI. Yogyakarta. This study was carried out in Gunungkidul DI, Yogyakarta, to identify the determinants of teenage knowledge and parental social demographics (father's education, mother's education, father's occupation, mother's occupation, and family income) with adolescents' attitudes regarding early marriage.

## Methods

### *Design and study sample*

This was a cross-sectional study conducted in Gunungkidul District, Yogyakarta, Indonesia. One of the areas with a high prevalence of early marriage in Yogyakarta, Indonesia. The location of this study was one of the senior high schools. This location was chosen because it could provide a comprehensive picture of the factors that influence adolescents' attitudes, especially sociodemographic factors. Sociodemographic factors, such as family education and economic conditions, were considered in this study. This study focused on adolescent girls, a population that is particularly vulnerable to the consequences of early marriage. A sample size of 245 teenage girls was determined based on the restricted population proportion formula. A simple random sampling technique was used to select participants. Inclusion criteria were adolescent girls aged 15 to 18 years. The exclusion criteria were married adolescents. Participation was voluntary and anonymous.

### *Research variable*

The study involved independent and dependent variables. The independent variables in this research were female adolescents' knowledge about early marriage, fathers' education, mothers' education, fathers' employment, mothers' employment, and

family income. By contrast, the dependent variable was female adolescents' attitudes regarding early marriage.

### **Data collection**

The data was collected directly from respondents using a questionnaire. The study questionnaire contained questions about the knowledge and attitudes of female adolescents regarding the young age of marriage as well as sociodemographic variables such as father's education, mother's education, father's employment, mother's employment, and family income. The knowledge part of the questionnaire contained 18 question items consisting of the definition of early marriage, reasons for early marriage, the impact of early marriage on the themes of reproductive and sexual health, and the impact on the economy. Multiple choice questions (four options; one correct and three wrong answers) were used for the 18 items for knowledge. A correct answer was assigned the score of '1' while any of the three wrong answers were assigned '0'. Thus, the possible scores ranged between 0–18. Additionally, the items for attitude about early marriage (20 items) were measured using the 5-point Likert scale. The scale for attitude was thus: 5: Strongly Agree; 4: Agree; 3: Neutral; 2: Disagree; and 1: Strongly Disagree.

### **Data analysis**

The data were analyzed using univariate, bivariate, and multivariate analysis. Univariate analysis identified the frequency distribution of the independent and dependent variables. Bivariate and multivariate analyses were carried out to analyze the relationship between the independent and dependent variables and to see the size of the association between variables at a significance level of 5%. Bivariate analysis involving a Chi-square. The variables that showed a significant association in bivariate analysis with  $p < 0.05$  were used for multivariate logistic regression. The odds ratio with a 95% confidence interval and statistical significance at  $P < 0.05$  was used to measure the strength and relationships between independent and dependent variables.

### **Ethical consideration**

Data obtained from participants will be kept confidential, and participants' identities will be anonymized to protect their privacy. Before participating in this study, adolescents are given an easy-to-understand explanation of the purpose of the study, possible benefits, procedures, and possible risks, as well as obtaining written consent from their parents. Adolescents can withdraw from the study at any time without consequences. Thus, this study is expected to provide valid and reliable data to support efforts to prevent child marriage.

### **Results**

The results of the univariate analysis are presented in Table 1.

**Table 1:** Frequency distribution socio-demographic characteristics of participants and their relationship to female adolescents' knowledge and attitudes about early marriage (n=245)

<b>Variable</b>	<b>Category</b>	<b>Number (%)</b>
Age	16	81 (33.1)
	17	133 (54.3)
	18	31 (12.6)
Father's education	Primary School	89 (36.3)
	Secondary School	78 (31.8)
	Senior High School	70 (28.6)
	College	8 (3.3)
Mother's education	Primary School	80 (32.6)
	Secondary School	46 (18.8)
	Senior High School	106 (43.3)
	College	13 (5.3)
Father's employment	Farmer	122 (49.8)
	Self-employed	88 (35.9)
	Private Employees	26 (10.6)
	Civil Servants	9 (3.7)
Mother's employment	Housewives	143 (58.4)
	Farmer	62 (25.3)
	Self-employed	32 (13.1)
	Private Employees	5 (2.0)
	Civil Servants	3 (1.2)
Family income	Low	132 (53.9)
	High	113 (46.1)
Knowledge regarding early marriage	Poor	118 (48.2)
	Good	127 (51.8)
Attitudes regarding early marriage	Agree	112 (45.7)
	Disagree	133 (54.3)

**Table 2:** The relationship of knowledge and sociodemographic characteristics with female adolescents' attitudes about early marriage based on Chi-Square analysis

Variable	Attitudes regarding early marriage			p-value
	Agree n (%)	Disagree n (%)	Total	
<b>Knowledge regarding early marriage</b>				
Good	67 (52.8)	60 (47.2)	127	0.02
Poor	45 (38.1)	73 (61.9)	118	
<b>Mother's education</b>				
High	67 (56.3)	52 (43.7)	119	0.001
Basic	45 (35.7)	81 (64.3)	126	
<b>Father's education</b>				
High	32 (41.0)	46 (59.0)	78	0.314
Basic	80 (47.9)	87 (52.1)	167	
<b>Mother's employee</b>				
Does not work	62 (43.4)	81 (56.6)	143	0.38
Work	50 (49.0)	52 (51.0)	102	
<b>Family income</b>				
High	55 (48.7)	58 (51.3)	113	0.39
Low	57 (43.2)	75 (56.8)	132	

**Table 3:** The relationship of knowledge and sociodemographic characteristics with female adolescents' attitudes about early marriage based on the Multivariate logistic regression model

Variable	Attitudes regarding early marriage		Total	Odd Ratio (95% CI)	
	%	%		Unadjusted	Adjusted
<b>Knowledge regarding early marriage</b>					
Good	52.8	47.2	127	1	1
Poor	38.1	61.9	118	0.55* (0.32 – 0.95)	0.49* (0.29 – 0.83)
<b>Mother's education</b>					
High	56.3	43.7	119	1	1
Basic	35.7	64.3	126	0.43* (0.25- 0.74)	0.34** (0.19 – 0.59)
<b>Father's education</b>					
High	41.0	59.0	78	1	1
Basic	47.9	52.1	167	1.32 (0.74 – 2.37)	1.89* (1.04 – 3.44)
<b>Mother's employee</b>					
Does not work	43.4	56.6	143	1	1
Work	49.0	51.0	102	0.79 (0.46 – 1.37)	0.87 (0.49-1.51)
<b>Family income</b>					
High	48.7	51.3	113	1	1
Low	43.2	56.8	132	0.80 (0.47 – 1.37)	0.82 ( 0.48 – 1.39)

CI 95%: Confidence Interval 95%; \*p < 0.05; \*\*p < 0.001

The descriptive analysis of the characteristics of the participants (Table 1) indicates that more than half of the female adolescents were aged 17 years (54.3%). Father's education was the most frequent was at the primary school (36.3%). By contrast, the most frequent maternal education was at the senior high school level (43.3%). Concerning father's employment, almost half of the fathers worked as farmers (49.8%), while the mothers' employment showed that more than half were housewives

(58.4%). More than half of the respondents were from low-income families (53.9%). Half of the female adolescents (51.8%) knew about early marriage, and most of the girls (54.3%) disapproved of early marriage.

Based on the Chi-Square analysis results, it is known that female adolescents' attitudes about early marriage are related to female adolescents' knowledge about early marriage and their mothers' education (Table 2). In contrast, other socio-

demographics such as father's education, mother's employment, and family income had no relationship with female adolescents' attitudes in rejecting early marriage.

The multivariable analysis of regression logistics shows that the variables of female adolescents' knowledge, maternal education, and father's education had a significant influence on female adolescents' attitudes about early marriage (Table 3). The variables of maternal employment and family income have no statistical influence on adolescent girls' attitudes regarding early marriage. Female adolescents with good knowledge were 0.51 times more likely to disagree about early marriage than female adolescents with less knowledge. In the maternal education variable, female adolescents with higher education mothers were 0.66 times more likely to disagree with early marriage than adolescent girls with primary education mothers. Adolescent girls with primarily educated fathers were 1.89 times more likely to agree to early marriage than female adolescents with highly educated fathers.

## Discussion

Early marriage is among the most dangerous practices that girls and women face worldwide. Point 5.3 of the 2030 Agenda for Sustainable Development explicitly requires the end of harmful practices that girls and women around the world have undergone, such as child, early, and forced marriage<sup>24</sup>. The results of this study show that good knowledge of female adolescents can encourage adolescents to have disapproval attitudes towards early marriage. Adolescents' knowledge about early marriage includes their understanding of the definition, causes, impacts, and health consequences, especially reproductive health, of marriage at a relatively young age. Adolescents who have comprehensive knowledge about reproductive health and early marriage tend to be aware of the negative consequences and understand their rights, such as the right to pursue education, as well as the right to decide when they are ready to enter into marriage. Adolescents educated about early marriage can form a more rational and wiser attitude regarding early marriage.

Previous studies have reported that female adolescents who do not agree with early marriage have much higher knowledge than female

adolescents who agree with early marriage<sup>25</sup>. Their knowledge must include a thorough awareness of the effects of early marriage<sup>26</sup>. With a better understanding of the risks and effects of early marriage, it is expected that teenagers will develop attitudes that will make them refuse to marry at such a young age. Those with a positive attitude are more likely to reject early marriage. Better adolescent knowledge can help adolescents understand early marriage's physical, psychological, and social risks, thereby encouraging a more careful attitude toward it<sup>27,28</sup>.

Adolescents' knowledge is obtained from various sources such as formal education at school, discussions with parents, internet exposure, social media exposure, and peers<sup>29-32</sup>. The chance of early marriage is much higher among teenagers with no formal and primary education than among women with secondary or tertiary education<sup>30,33</sup>. A good education provides a strong foundation for teenagers to understand the implications of early marriage, so they are more likely to reject the option. Comprehensive and integrated education about reproductive health and sexuality, as well as knowledge about rights and responsibilities in marriage, including the dangers of marrying young, can help adolescents make better decisions<sup>32,34</sup>.

This study also shows that parental education (father and mother) contributes to adolescents' knowledge and attitudes in rejecting early marriage. Parental education influences their children's knowledge and understanding and shapes their attitudes. Parents with lower basic educational levels provide opportunities for teenagers to have an attitude of supporting early marriage. Previous research states that parental education contributes to teenagers' attitudes toward disapproving of early marriage. Low levels of parental education are linked to an increased probability of early marriage<sup>3,18,27,30,35-37</sup>.

Adolescents raised by parents with a higher level of education tend to have attitudes that reject early marriage. Especially maternal education has a direct influence as a protective factor against early marriage<sup>36,38</sup>. They better understand the negative consequences of early marriage, such as increased health risks, limitations in personal development, and difficulties in pursuing further education. Parents who do not have educational qualifications or other forms of training are more likely to misinterpret the need for early marriage<sup>39</sup>. Parents

who do not know the legal age of marriage are 1.61 times more likely to have children that support early marriage than parents who do know the legal marriage age<sup>40</sup>.

A qualitative study shows that early marriage is joyous in certain situations. Some parents see early marriage as a way to secure their daughters' future through forming alliances in the face of changing livelihoods and restricted possibilities for young girls. Parents and teenagers who have positive perceptions of the benefits of child marriage tend to agree with child marriage. This shows that social norms that encourage child marriage are still prevalent among this population<sup>41-43</sup>. Girls and their families who have violated norms face enormous pressure to enter into early marriage to reduce the damage to their reputation and that of their families<sup>44</sup>.

## Strengths and limitations

The strength of our study is that it addresses the relevant and crucial topic of early marriage, which is a significant global problem with severe consequences for adolescent girls. This study's findings can contribute to developing effective interventions to address early marriage by highlighting the importance of knowledge and education. Our study has several limitations. First, we gathered data online during COVID-19, with the majority of respondents being young teenage females from one of the senior high schools in Gunungkidul district, Yogyakarta, Indonesia. Therefore, the findings may only be representative of some adolescents due to potential sampling bias. Second, the cross-sectional character of the data gives a picture of the situation at a certain point in time. The research cannot track changes in knowledge or attitudes over time nor examine cause-and-effect correlations between variables.

## Conclusion

Comprehensive knowledge about reproductive health and early marriage plays a vital role in shaping adolescents' attitudes toward these issues. With the proper knowledge, adolescents tend to be against early marriage because they are more aware of the implications and consider broader factors in their lives before making decisions, such as getting

married. This shows the importance of comprehensive education in reducing the rate of early marriage and giving adolescents control over their lives.

## Contribution of authors

Erni Gustina: conceptualized the study, writing manuscript draft, data analysis, interpretations, and discussions

Elicia Marita Sylvie: conceptualized the study, data analysis, interpretations, and discussions

Mohammad Zainal Fatah: supervised this research, review and edit

## Acknowledgements

Researchers thank the teenagers willing to give their time to participate as respondents in this research. We also thank the research team who collected and processed the data.

## References

1. Center of Child Protection Wellbeing. *Prevention of Child Marriage: Acceleration That Cannot Wait.*; 2020.
2. Hyseni Duraku Z, Jemini-Gashi L and Toçi E. Perceptions of Early Marriage, Educational Aspirations, and Career Goals among Kosovar Adolescents. *Marriage Fam Rev.* 2020;56(6):513-534. doi:10.1080/01494929.2020.1728006
3. Misunas C, Erulkar A, Apicella L, Ngô T and Psaki S. What Influences Girls' Age at Marriage in Burkina Faso and Tanzania? Exploring the Contribution of Individual, Household, and Community Level Factors. *Journal of Adolescent Health.* 2021;69(6):S46-S56. doi:10.1016/j.jadohealth.2021.09.015
4. Josephine BMB and Goodluck DrA. The Causes of Early Marriage in the Different States of the Niger-Delta Region. *Global Academic Journal of Humanities and Social Sciences.* 2022;4(3):109-108. doi:10.36348/gajhss.2022.v04i03.003
5. Adekoya A and Sokunbi G. Early Marriage as a Determinant of Poverty in Nigeria. Published online 2021. doi:10.36997/IJUEV2021.65.1.102
6. Marphatia AA, Saville NM, Manandhar DS, Cortina-Borja M, Wells JCK and Reid AM. Quantifying the association of natal household wealth with women's early marriage in Nepal. *PeerJ.* 2021;9:1V. doi:10.7717/peerj.12324
7. Beredugo LI, Adeyanju AB, Nkamare MB and Amabebe B. Determinant Factors And Health Implications Of Early Marriage On The Girl Child In Otuan Community Bayelsa State Of Nigeria. *Indian Journal of Health and Wellbeing.* 2020;11(01). doi:10.15614/ijhw.v11i01.19

8. Tekile AK, Woya AA and Basha GW. Determinants of early marriage among female children in Amhara region, Ethiopia. *Afr Health Sci.* 2020;20(3):1190-1195. doi:10.4314/ahs.v20i3.22
9. Bolarinwa OA, Ahinkorah BO, Okyere J, Seidu AA and Olagunju OS. A multilevel analysis of prevalence and factors associated with female child marriage in Nigeria using the 2018 Nigeria Demographic and Health Survey data. *BMC Womens Health.* 2022;22(1). doi:10.1186/s12905-022-01733-x
10. Mathabatha SML and Tsawe M. Multilevel modelling of the determinants of early marriage among women aged 20-49 years in South Africa. *Afr J Reprod Health.* 2023;27(8):83-94. doi:10.29063/ajrh2023/v27i8.9
11. Hadiati M, Ismelia M, Rahayu F and Sudiro A. An Empirical Study in Indonesia of Girl Child Marriage Determinants. *J Int Womens Stud.* 2022;24(5):1-12. <https://vc.bridgew.edu/jiws/vol24/iss5/6>
12. Samsi N. *Factors That Influence The Incidence Of Early Marriage In Young Women In The Lembah Melintang Sub District.* Vol 3.; 2020.
13. Melnikas AJ, Saul G, Pandey N, Gueye M, Mkandawire J, Diarra A and Amin S. A conceptual framework for understanding child marriage, marriage markets, and marriageability. *Afr J Reprod Health.* 2022;26(12):78-87. doi:10.29063/ajrh2022/v26i12s.9
14. Efevbera Y and Farmer P. 'It is this which is normal' A qualitative study on girl child marriage and health in conakry, Guinea. *Soc Sci Med.* 2021;273. doi:10.1016/j.socscimed.2021.113762
15. Groot R De, Kuunyem MY and Palermo T. Child marriage and associated outcomes in northern Ghana : a cross-sectional study. 2018;18(285):1-12.
16. Dadras O, Hazratzai M and Dadras F. The association of child marriage with morbidities and mortality among children under 5 years in Afghanistan: findings from a national survey. *BMC Public Health.* 2023;23(1). doi:10.1186/s12889-023-14977-5
17. Manandhar N and Joshi SK. Health co-morbidities and early marriage in women of a rural area of nepal: A descriptive cross-sectional study. *Journal of the Nepal Medical Association.* 2020;58(230):780-783. doi:10.31729/jnma.5205
18. Baysak E, Yorguner N, Kandemir G, Denizman IA and Akvardar Y. Is early marriage practice a problem for women living in Istanbul? A qualitative study. *Arch Womens Ment Health.* 2021;24(2):243-250. doi:10.1007/s00737-020-01067-3
19. Ara F, Sultana MM, Naoshin S, Sultana I, Hoq MN and Hossain ME. Sociodemographic determinants of child mortality based on mothers' attitudes toward partner violence: Evidence from Bangladesh. *Heliyon.* 2023;9(3). doi:10.1016/j.heliyon.2023.e13848
20. Nasrullah M, Zakar R and Zakar MZ. Child marriage and its associations with controlling behaviors and spousal violence against adolescent and young women in Pakistan. *Journal of Adolescent Health.* 2014;55(6):804-809. doi:10.1016/j.jadohealth.2014.06.013
21. Fakhari A, Farahbakhsh M, Azizi H, Davtalab Esmaeili E, Mirzapour M, Asl Rahimi V, Hashemi L and Gaffarifam S. *Early Marriage and Negative Life Events Affect on Depression in Young Adults and Adolescents.* Vol 23.; 2020. [www.aimjournal.ir](http://www.aimjournal.ir)
22. Sezgin AU and Punamäki RL. Impacts of early marriage and adolescent pregnancy on mental and somatic health: the role of partner violence. *Arch Womens Ment Health.* 2020;23(2):155-166. doi:10.1007/s00737-019-00960-w
23. Aggarwal S, Francis KL, Dashti SG and Patton G. Child marriage and the mental health of adolescent girls: a longitudinal cohort study from Uttar Pradesh and Bihar, India. *The Lancet Regional Health - Southeast Asia.* 2023;8. doi:10.1016/j.lansea.2022.100102
24. Kementerian PPN/Bappenas. *Roadmap SDGs Indonesia.*
25. Naghizadeh S, Mirghafourvand M, Mohammadi A, Azizi M, Taghizadeh-Milani S and Ganbari H. Knowledge and viewpoint of adolescent girls regarding child marriage, its causes and consequences. *BMC Womens Health.* 2021;21(1). doi:10.1186/s12905-021-01497-w
26. Elnakib S, El Khoury G, Salameh P, Sacre H, Abirafeh L, Robinson WC and Metzler J. Investigating Incidence, Correlates, and Consequences of Child Marriage Among Syrian Refugees Residing in the South of Lebanon: A Cross-Sectional Study. *Journal of Adolescent Health.* 2022;70(3):S64-S71. doi:10.1016/j.jadohealth.2021.08.022
27. Bhattarai Prakash C., Deepak R. Paudel, Tikaram Poudel, Suresh Gautam, Prakash K. Paudel, Milan Shrestha, Janes I. Ginting, and Dhruva R. Ghimire Prevalence of Early Marriage and Its Underlying Causes in Nepal: A Mixed Methods Study. *Soc Sci.* 2022;11(4). doi:10.3390/socsci11040177
28. Saleh AM, Othman SM, Ismail KH and Shabila NP. Exploring Iraqi people's perception about early marriage: a qualitative study. *BMC Womens Health.* 2022;22(1). doi:10.1186/s12905-022-01980-y
29. Gage AJ. Child marriage prevention in Amhara Region, Ethiopia: Association of communication exposure and social influence with parents/guardians' knowledge and attitudes. *Soc Sci Med.* 2013;97:124-133. doi:10.1016/j.socscimed.2013.08.017
30. Saleheen AAS, Afrin S, Kabir S, Habib MJ, Zinnia MA, Hossain MI, Haq I and Talukder A. Sociodemographic factors and early marriage among women in Bangladesh, Ghana and Iraq: An illustration from Multiple Indicator Cluster Survey. *Heliyon.* 2021;7(5). doi:10.1016/j.heliyon.2021.e07111
31. Zhang S, Wang Q, Xiao Y and Zhang Y. Internet exposure during adolescence and age at first marriage. *J Asian Econ.* 2023;84. doi:10.1016/j.asieco.2022.101569
32. Singh M, Shekhar C and Shri N. Patterns in age at first marriage and its determinants in India: A historical perspective of last 30 years (1992–2021). *SSM Popul Health.* 2023;22. doi:10.1016/j.ssmph.2023.101363
33. Chen Y and Zhao Y. The timing of first marriage and subsequent life outcomes: Evidence from a natural experiment. *J Comp Econ.* 2022;50(3):713-731. doi:10.1016/j.jce.2022.04.005

34. Tomar S, Johns N, Challa S, Brooks MI, Aliou S, Abdoul-Moumouni N, Raj A and Silverman J. Associations of Age at Marriage With Marital Decision-Making Agency Among Adolescent Wives in Rural Niger. *Journal of Adolescent Health*. 2021;69(6):S74-S80. doi:10.1016/j.jadohealth.2021.08.007
35. Nyangas JA and Aswile T. Early marriages and parental influence: An evidence from Momba District in Tanzania. *International Journal of Sociology and Anthropology*. 2022;14(2):40-46. doi:10.5897/ijasa2022.0947
36. Binu VS, Sridhar V, Subba SH, Prathyusha P V and Sabu KM. Direct and indirect factors associated with child marriage: Evidence from India using NFHS-4 data. *Child Abuse Negl*. 2022;131. doi:10.1016/j.chiabu.2022.105785
37. Lebni JY, Solhi M, Azar FEF and Farahani FK. Qualitative study of social determinants of child marriage in Kurdish regions of Iran: Evidence for health promotion interventions. *J Educ Health Promot*. 2020;9(1). doi:10.4103/jehp.jehp\_332\_20
38. Yüksel F and Koçtürk N. Investigation of Factors Associated with the Child Marriage in Turkey. *J Child Sex Abus*. 2021;30(6):653-666. doi:10.1080/10538712.2021.1956664
39. Mooyaart JE and Liefbroer AC. The Influence of Parental Education on Timing and Type of Union Formation: Changes Over the Life Course and Over Time in the Netherlands. *Demography*. 2016;53(4):885-919. doi:10.1007/s13524-016-0473-y
40. Tekile AK, Woya AA and Basha GW. Determinants of early marriage among female children in Amhara region, Ethiopia. *Afr Health Sci*. 2020;20(3):1190-1195. doi:10.4314/ahs.v20i3.22
41. Wibowo HR, Ratnaningsih M, Goodwin NJ, Ulum DF and Minnick E. One household, two worlds: Differences of perception towards child marriage among adolescent children and adults in Indonesia. *Lancet Reg Health West Pac*. 2021;8. doi:10.1016/j.lanwpc.2021.100103
42. Pacheco-Montoya D, Murphy-Graham E, Valencia López EE and Cohen AK. Gender Norms, Control Over Girls' Sexuality, and Child Marriage: A Honduran Case Study. *Journal of Adolescent Health*. 2022;70(3):S22-S27. doi:10.1016/j.jadohealth.2021.11.007
43. Psaki SR, Melnikas AJ, Haque E, Saul G, Misunas C, Patel SK, Ngo T and Amin S. What Are the Drivers of Child Marriage? A Conceptual Framework to Guide Policies and Programs. *Journal of Adolescent Health*. 2021;69(6):S13-S22. doi:10.1016/j.jadohealth.2021.09.001
44. Naved R, Kalra S, Talukder A, Lattered A, Nunna TT, Parvin K and Al Mamun M. An Exploration of Social Norms That Restrict Girls' Sexuality and Facilitate Child Marriage in Bangladesh to Inform Policies and Programs. *Journal of Adolescent Health*. 2022;70(3):S17-S21. doi:10.1016/j.jadohealth.2021.12.002.