Original Article

Determinant Model Of Early Marriage On The Promotion Of Reproductive Health In Adolescents In Mandala Village

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ABSTRACT

***Background*:** Early marriage is a problem at the national level and in East Java because the number is still high and continues to grow, and the impact poses a health risk to adolescents. Sumenep Regency is a district in Madura that has a high rate of early marriage and is ranked second from East Java, and Mandala Village, Rubaru sub-district, is the place with the most land for early marriage rates

***Methods*:** This research method is a survey with a cross-sectional design. The sample of this research is 80 married teenagers in Mandala Village, for the data collection tool uses a questionnaire, and the sample collection technique is multistage proportional random sampling and then analyzed using univariate, bivariate, and multivariate methods. Then a model is created

***Results*:** Based on the results of the calculation of Nagekerke R Square on the dominant variable, the value of r2 = 0.135, which means that respondents who promote adolescent reproductive health can be affected by knowledge of 5.749 times greater than respondents who promote adolescent reproductive health, with a 13.5% chance of being unaffected.

***Conclusion*:** Based on the results of the research and discussion that have been described in the previous chapter, it can be concluded that several vital things in this research are as follows, There is an influence of knowledge, attitude, the effect of Parenting, and culture on efforts to promote adolescent reproductive health in Mandala Village in 2022.

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Introduction

Adolescent sexual activity in Indonesia is increasing, especially in East Java; 23.9% of underage marriages occur among women in Indonesia. Data from the BKKBN shows that East Java has a higher number of women married at an early age than at the national level, with women married at the age of 16-18 years with a percentage of 38.65% and women who are married at the age of 19-24 years the

percentage is 37.78% and women who married at the age of fewer than 16 years were 12.78%. One of the areas in East Java with a relatively high incidence of early marriage is in Rubaru District, Sumenep Regency, with a total of 123 cases in January-September 2019. Mandala Village has the highest number of early marriage cases in Rubaru District, totaling 23 cases. This number can increase because teenagers still do not register their marriages with the KUA or village office (KUA Sumenep District, 2019). Early marriage can pose health risks to adolescents, such as teenage pregnancy, repeated pregnancies in adolescence, morbidity, and mortality due to pregnancy and childbirth in adolescents (Agus Wahyudin, 2016). Teenage pregnant women are also at high risk for pre-eclampsia and eclampsia, as well as giving birth to babies with low weight, premature babies or born prematurely, and babies dying at the age of fewer than 28 days (Nur Hamida, 2019; Permatasari & Suprayitno, 2021)

Based on data from East Java, married girls are 53 per 1000 marriages, while the national average is only 48 per 1000. In 2019, data were obtained from women's empowerment in East Java which stated that several districts in East Java had a high early marriage rate of more than 50% of the total marriages in their area, one of which was Sumenep district with a percentage of (60%) (Eny Retna Ambarwati , 2016). The determinant of high number of cases of underage marriage in Sumenep Regency continues to increase every year. According to data from the Sumenep Regency Religious Court, the number of early marriages increases yearly. Various problems regarding underage marriages later impact their reproductive health and dangerous diseases that can lead to death. From this problem, it must be followed up immediately so that reproductive health in adolescents can be of quality and the mortality rate due to childbirth and pregnancy at an early age can also be reduced (Liang et al., 2019; Melesse et al., 2020; Nurseha Nurseha, 2019).

One of the sub-districts in Sumenep Regency that contributes to the high number of child marriage cases is Mandala Village, a wetland for the rise of early marriage. The results of a preliminary study on early marriage by interviewing ten mothers in Mandala Village, it is known that 7 of them have shared knowledge about safe reproductive health, while the other 3 have pretty good knowledge but are still influenced by cultural factors. Of the ten mothers, it is known that six people have low socioeconomic status and four people have high socioeconomic status, with an education level of 7 people who are elementary school graduates. In addition, regarding early marriage, out of 10 mothers, it is known that eight mothers have the attitude and intention to marry off their children at a young age or marry early (Mehra et al., 2018; Oktavia et al., 2018; Sezgin & Punamäki, 2020).

The impact of early marriage is on physical, mental, and community health. The health impact of early marriage on women is on their reproductive health because, at an early age, they are not ready to be fertilized, and if they are pregnant, they are usually prone to abortion if they are about to give birth, this will also have a significant impact on causing bleeding, if not appropriately handled, death will occur. On mothers and babies. For the physical impact of early marriage, there will be many complaints because of the many activities that have never been done before, and also, there is no readiness to become a mother and father. In contrast, the mental impact of early marriage or adolescence is moral and mental readiness (Kurniasari et al., 2018) in facing married life Still not enough (Mobolaji et al.,

2020; Sychareun et al., 2018; Yaya et al., 2019).

The impact of the community or population aspect, namely early marriage, namely high fertility, as a result of this, the high number of people can lead to a lack of development support in the field of community welfare. Efforts that the government has made to overcome the increasing number of early marriages include passing a bill on marriage. Namely, Bill no. 12 Article 73 paragraph (1) of 2011 stipulates that men and women are married if they are at least 19 years old. Another effort that can be made is to provide health education about marriage and its impact in various aspects, including reproductive health, especially on women (Ahonsi et al., 2019; George et al., 2020; Paul & Chouhan, 2019). This study aims to analyze the most dominant determinant influencing early marriage behavior based on the perspective of reproductive health in Rubaru, Sumenep Regency (agus wahyudin, 2016). From the problems faced in adolescence, it is necessary for the role of the government, parents, and the community to improve adolescent reproductive health; from this, it is hoped that adolescents can have decisions for a better future before engaging in early marriage. From the description of this problem, the author is interested in examining the determinants of early marriage to promote adolescent reproductive health in Mandala Village, Rubaru District, Sumenep Regency.

Methods

This type of research is survey research. The population of this study was all married young women under the age of 20 years, following the limits set by WHO. Young married women in the research population category live in Mandala Village, Rubaru District, still married. Based on secondary data from the KUA of the sub-district in Rubaru, it is known that the number of women who marry at a young age is 100 people. The sampling technique used is multistage proportional random sampling considering that the population is geographically dispersed. . The number of samples (n) is determined by the Slovin formula, with a total sample of 80 respondents. This type of research data consists of primary data and secondary data. Primary data is obtained directly from respondents using a questionnaire instrument that is prepared based on established constructs, variables, and indicators. This method gives freedom for respondents to answer according to their circumstances and knowledge. Structured interviews with selected respondents carried out the implementation of primary data collection. The primary data include (1) knowledge level of risk of early marriage, (2) attitude, (3) parenting style, (4) culture, and (5) reproductive health level (Isnaini & Sari, 2019). Secondary data is data obtained from the recording of available data. Secondary data is obtained by searching existing research results, reviewing relevant literature and recording data collected by competent parties such as BPS (Central Bureau of Statistics), Religious Courts, Office of Religious Affairs, Districts, BKKBN, BKR, and related agencies. After the primary and secondary data are collected, the next step is to analyze the data. The data and all the information obtained were analyzed quantitatively (Nurseha Nurseha, 2019). To describe the research variables used, descriptive statistical analysis. Furthermore,

testing of causal relationships between various selected variables to calculate the magnitude of the influence, either directly or indirectly, using univariate, bivariate, and multivariate analysis, which is then made a model. This research has ethical clearance.

Results

Table 1. Cross Tabulation of Attitude Relationship with Early Marriage in Mandala Village in 2020

No	Knowledge	Frequency (f)	%
1	Not enough	54	67.5
2	Well	26	32.5
	Total	80	100%

Based on table 1, it can be seen that the knowledge factor towards Early marriage in the majority of adolescents is less as much as 54 respondents (67.5%).

Table 2. Distribution of Attitude Frequency in Early Marriage to Efforts to Promote Reproductive Health in Mandala Village in years 2022

No	Attitude	Frequency (f)	%
1	Negative	30	37
2	Positive	50	63
	Total	80	100%

Based on table 2 it can be seen that the attitude towards marriage in the majority of young couples is positive in as many as 50 respondents (63%).

Table 3. Frequency Distribution of Parenting Parenting in Early Marriage to Efforts to Promote Reproductive Health in Mandala Village in years 2022

No	Pattern foster Person Old	Frequency (f)	%
1	Not enough	60	76
2	Well	20	24
	Total	80	100%

Based on table 3 it can be seen that the parenting pattern of marriage at a young age in the majority of married couples is less than 60 respondents (76%).

The distribution of respondents' answers regarding knowledge can be seen in table below this:

Table 4. Distribution of Cultural Frequency in Early Marriage to Efforts to Promote Reproductive Health in Mandala Village in years 2022

No	Culture	Frequency (f)	%
1	Does not support	16	20.0
2	Support	64	80.0
	Total	80	100.0

Based on table 4., factor culture to The majority of married couples supports young marriages as much as 64 respondents (80.0%).

Table 5. Tabulation Cross Connection Knowledge To Adolescent Reproductive Health Promotion Efforts 2022

Knowledge	Marry Age Young Married AgeVery Young		Marry Age Young		Amount		*p (Sig)*
	f	%	F	%	f	%	
Not enough	11	13.9	44	54.4	54	68.0	0.025
Well	13	15.2	13	16.5	26	32.0	
Total	23	29.1	56	70.9	80	100	

Based on Table 5 show that of the 80 respondent studied, the majority have less

knowledge, as many as 54 respondents (68.0%) getting married at a very young age, as many as 11 respondents (13.9%) and married age young as 44 respondent (54.4). Of 26 respondents (31.7%) who have good knowledge, as many as 13 respondents (15.2%) married at an early age, and 13 respondents (16.5%) married young age. The results of the analysis of the *chi-square statistical test* obtained a *p-value* = 0.025 (p <0.05).There is a connection knowledge to a young marriedhusband and wife in Mandala Village.

Table 6. Tabulation Cross Connection Attitude With Early Marriage in Mandala Village in 2020

Attitude	Marry Age Young				Amount		*p (Sig)*
	Married AgeVery Young		Marry Age Young				
	f	%	F	%	f	%	
Negative	6	6.3	24	30.4	30	37	0.130
Positive	18	22.8	32	40.5	50	63	
Total	23	29.1	56	70.9	80	100	

Based on Table show that of the 80 respondent studied, the majority have a positive attitude. As many as 50 respondents (63.3%) with married at a very young age, as many as 18 respondents (22.8%) and married age as many young as 32 respondents (40.5). Of the 29 respondents (36.7%) who have a negative attitude, as many as five respondents (6.3%) married very young, and 24 respondents (30.4%) married age young. *chi square* statistical test analysis obtained *p value* = 0.130 (p>0.05).With thereby no, there is a connection attitude to efforts to promote adolescent reproductive health in Mandala Village in 2022.

Table 7. Cross Tabulation of Parenting Relationships with Early Marriage in Mandala Village in 2020

Pattern foster	Marry Age Young				Amount		*p (Sig)*
	Married AgeVery Young		Marry Age Young				
	F	%	f	%	f	%	
Not enough	3	16.4	47	59.5	60	75.9	0.021
Well	10	12.7	10	11.4	20	24.1	
Total	23	29.1	56	70.9	80	100	

Based on Table 7 show that of the 79 respondent studied, the majority have less Parenting, with as many as 60 respondents (75.9%) getting married at a very young age, as many as 13 respondents (16.4%) and married age young as 47 respondents (59.5). Of 20 respondents (24.1%) who have good Parenting, as many as ten respondents (12.7%) married ancient age young, and ten respondents (11.4%) married young. *chi square* statistical test analysis obtained *p value* = 0.021 (p <0.05).There is a connection pattern fostered to efforts to promote adolescent reproductive health in Mandala Village in 2022.

Table 8. Tabulation Cross Connection Culture To Efforts to Promote Adolescent Reproductive Health in Mandala Village in 2022

Culture	Marry Age Young				Amount		*p (Sig)*
	Married AgeVery Young		Marry Age Young				
	f	%	F	%	f	%	
Does not support	9	11.4	7	7.6	16	19.0	0.006
Support	14	17.7	50	63.3	64	81.0	
Total	23	29.1	56	70.9	80	100	

Based on Table 8 show that of 79 respondent studied, the majority have a supportive culture, with as many as 64 respondents (81.0%) getting married at a very young age, as many as 14 respondents (17.7%) and married young age as many as 50 respondents (63.3%). Of the 16 respondents (19.0%) who have a culture of not supporting as much, nine respondents (11.4%) were married age very young, and seven respondents (7.6%) were married age young. *chi square* statistical test analysis obtained *p value* = 0.006 (p <0.05).Thus there is a cultural relationship to efforts to promote adolescent reproductive health in Mandala Village in 2022. Analysis was conducted multivariate to know factors that affect young wedding age and factor which factor was *confounding* (variable troublemaker). Besides that, the multivariate analysis aims to know the interaction among independent variables.

The type of test used is a logistic regression test because the dependent variable and independent shaped categorical. This study conducted test regression logistics To do selection bivariate whereas on model next used regression logistics double, following this conducted selection bivariate and multivariate modeling.

Table 9. Results Selection Bivariate Variable Independent with Variable Dependent

No	Variable	p-value	Information
1	Knowledge	0.014	Candidate
2	Attitude	0.690	Not Candidate
3	Pattern foster	0.012	Candidate
4	Culture	0.005	Candidate

The results of the bivariate selection in table 4.9 show that the variables of knowledge, Parenting, and culture have *p . values value* < 0.25, so all variables this enter into the multivariate model, whereas attitude is not entered into the multivariate modeling.

All independent variables that are candidates are included in the analysis multivariate. Analysis multivariate aim to get variable independent which most dominant which take effect with the promotion of adolescent reproductive health. In this case, all candidate variables are tested together, and the results are as follows:

Table 10. Modeling Multivariate I

No	Variable	B	p-value	OR	95% CT	
					Lower	Upper
1	Knowledge	-1,379	0.042	0.252	0.066	0.953
2.	Pattern foster	-1,598	0.139	0.202	0.044	0.930
3.	Culture	1,742	0.029	5,711	1,199	27,195

From the analysis results in table 10, in modeling I, it can be seen that there are two variables whose *p-value* is> 0.05, that is, Parenting (0.139), so the subsequent modeling is the most significant variable. The *p-value* is alternately removed from the model, and then each model's changes are seen OR. If there is a change in OR < 10% and a significant value, there is still a value <0.05, and the variable is removed from the model. However, if change OR occurs again > 10%, so variable is returned to the model.

In table 4.9 above, the most significant *p-value variable* is parentingthen. The parenting style is excluded from the model. Multivariate modeling results II next after variable parenting person old issued seen on table 4.9 as follows

Table 11. Modeling Multivariate II

No	Variable	B	p-value	OR	95% CT	
					Lower	Upper
1	Knowledge	-1,365	0.038	0.255	0.070	0.928
2	Culture	1,749	0.025	5,749	1,247	26,496

Table 11. Changes OR When There is Variable Parenting person oldand Not There is Parenting Variables parent

No	Variable	OR There is a Status professional personold	OR None Employment Statusperson old	ChangeOR
1	Knowledge	0.252	0.255	1.1%
2	Culture	5,711	5,749	0.66%

Table 11 shows the results of calculating the OR value. It turns out that the variable knowledge and culture is still below 10%,then modeling III with Secrete score significant big that is religiosity (0.053) modeling multivariate III next after variable religiosity issued seen on a table as follows

Table 12 Modeling Multivariate III

No	Variable	B	p value	OR	95% CT		Change OR
					Lower	Upper	
1	Knowledge	-1.408	0.025	0.245	0.071	0.841	-3.92%
2	Culture	1,740	0.020	5,699	1.323	24,558	-0.86%

Table 12 shows the results of calculating the OR value. It turns out that the variable

knowledge (-3.92%) and culture (- 0.86% because change OR already there is which on <10%, and score significantly all variable in <0.05, so variable previously parenting re-entered into the modeling, and multivariate modeling was carried out the end and the result as follows.

Table 12. Modeling Multivariate End

No	Variable	r^2	B	p-value	OR	95% CT	
						Lower	**Upper**
1	Knowledge	0.135	1,749	0.025	5,749	1,247	26,496
2	Pattern foster	0.109	-1,839	0.011	0.159	0.38	0.660
3	Culture	0.106	-1,365	0.038	0.255	0.070	0.928
4	Attitude	0.147	-2.344	0.053	0.096	0.009	1.034
	Constant	0.478	8,698	0.008	5990,786		

From the analysis multivariate on table 12 it turns out that the variable which influences adolescent reproductive health promotion efforts are: knowledge (0.038), Parenting (0.011), and culture (0.025). At the same time, variable attitude (0.053) is *confounding* (variable troublemaker) from the results analysis multivariate show that the variable most dominant in research is knowledge which can be seen from a score OR 5.749, which means that respondents who are affected by knowledge have the opportunity 5,749 times to efforts to promote adolescent reproductive health compared with Parenting (0.159), culture (0.070), and attitude (0.096).

Based on the calculation of the results, *Nagekerke R Square* on variable dominant obtained a score $r^2 = 0.135$, which means respondents promoting adolescent reproductive health can be affected by knowledge 5.749 times greater than respondents who promote adolescent reproductive health, with opportunity no affected as big as 13.5%.

Discussion

The family and the level of family education. Beliefs and customs that apply in the family and the ability of the family to deal with problems. The existence of family support for the continuity of young marriage is inseparable from the level of parental knowledge, which can also be linked to the level of family education. Family education level will affect the family's understanding of family life. Parents who have a common understanding of family life by looking at family life will create a better relationship in the family order, so faster marriage becomes the primary solution for parents. So, parenting patterns affect respondents to marry at a young age—the Influence of Cultural Factors on Young Marriage in Married Couples.(Ilmiah et al., 2022)

Culture has at least three forms, namely first as an idea, ideas, values, norms, rules, and so on, secondly as an activity of patterned behavior from humans in a community, and thirdly objects made by humans (Chandra-Mouli et al., 2019; Dianita wahyusari, 2017; McDougal et al., 2018; Rumble et al., 2018). An expert named Ralph

Linton provides a different definition of culture with the understanding of culture in everyday life: "culture is the whole way of life of the people and not only about some ways of life that are considered higher and more desirable (Parmawati, I., Nisman, W. A., Lismidiati, W., & Mulyani, 2020). According to Puspitasari (2006), the customary factor of early marriage is due to the fear of parents against gossip from close neighbors. Parents are afraid that their child is said to be a spinster. This is because in Pulokulon sub-district, there is no habit of getting married early, but when teenagers are out of school and work, they will eventually get married before they grow up (Isnaini & Sari, 2019). Selection of Dominant Factor Variables Influencing Efforts to Promote Adolescent Reproductive Health in Mandala Village in 2022.

The bivariate selection results in this study showed the variables of knowledge, attitude, Parenting, and culture. In this bivariate selection, those related to early marriage in efforts to promote adolescent reproductive health in Mandala Village, Rubaru District, in 2022 are knowledge, Parenting, and culture with a p-value < 0.25. So that these variables are included in the multivariate modeling. From the results of the analysis of modeling I, there are two variables whose p-value> 0.05, namely, attitude (0.063). In the second model, the variable with the highest p-value is alternately removed from the model, and if there is a change in OR < 10%, the variable is removed from the model. However, if the change in OR occurs > from 10%, the variable is returned to the model. Based on the results of multivariate analysis, shows that the most dominant variable in this study is knowledge which can be seen from the OR value of 5.749, which means that respondents who are affected by the knowledge that supports early marriage have a 5.749 times greater chance of getting married at a very young age, with no chance of getting married—affected by 13.5% and 47.8% affected by young marriages.

Conclusion

Based on the results of the research and discussion above, it can be concluded that knowledge, attitudes, culture, and upbringing influence efforts to promote adolescent reproductive health in Mandala Village in 2022. Based on the results of the final multivariate modeling, the knowledge variable is the dominant factor influencing early marriage to efforts to improve adolescent reproductive health in Mandala Village, Rubaru District in 2022.

Authors Contributions

The author carries out tasks from data collection, data analysis, making discussions to making manuscripts

Conflicts of Interest

There is no conflict of interest

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