

The Effect of Married Age on the Health of Mother and Baby in Campalagian District

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Abstract

The determinants of child marriage are triggered by complex social, economic, cultural, political and legal disparities. This research method used a cross sectional study. The research sample was 162 women who were married in 2018-2019 in the Campalagian District. This study aims to determine the effect of the age of marriage on the health of ibn and infants in the District of Campalagian. Chi-square test was used to analyze data. The results of the bivariate analysis showed that the age of marriage had an effect on the health of the newborn (p value = 0.003). However, the age of marriage on maternal health during pregnancy, maternal health at delivery, use of contraceptive methods, service standards for birth weight, and support from husbands do not have a significant effect. After conducting bivariate analysis using moderator variables, the results showed that. There is an effect of the age of marriage based on the age of the husband (p value = 0.017) and the husband's education (p value = 0.024) on maternal health at delivery. There is an effect of the age at marriage based on the husband's age (p value = 0.023), the wife's education (p = 0.008), and the husband's education (p = 0.009), on the health of the newborn. It can be concluded that the age of marriage has an effect on the health of the mother and baby and/or if it includes the age and education factors of both the respondent and the partner.

Keywords: Child Marriage, Maternal Health, Infant Health

Introduction

Nine out of ten mothers giving birth between the ages of 15-19 are women who are child marriage (UNFPA, 2015). The highest number of child marriages was in South Asia, namely 285 million (44%). High prevalence rates combined with large populations place India, Nigeria and Brazil among the countries with the highest number of child marriages in the world (WHO, 2018). In developing countries, about 16 million girls are married between the ages of 15 and 19 and 2.5 million girls are under the age of 16 (WHO, 2018). The trend of female child marriage in Indonesia, whether they had their first marriage before the age of 18 years or 15 years, showed a decline in the period from 2008 to 2018. In 2018 in Susenas, the province with the highest prevalence of child marriage was West Sulawesi.

The determinants of child marriage are triggered by complex social, economic, cultural, political and legal disparities. In addition, the lack of children's access to sexual education also affects the dissemination of information on the impact of child marriage. Child birth not only has a bad

impact on the health of the mother, but also affects the birth weight of the baby. (de Groot et al., 2018; Kawakita, et al. 2016). Women who are married at child age are prone to experience domestic violence and divorce due to a lack of maturity to think and the ability to determine attitudes (Alfa, 2019; Yount, et al. 2016; Azevedo, et al. 2015; Tenkorang et al., 2019).

Health problems in adolescence are one of the important problems in the life cycle (Sari et al., 2019). Changes that affect the appearance of confusing conditions, doubts, fears, and anxiety (Sukardi et al., 2020). The dispensation data from the court was then recorded in the KUA Polewali Mandar Regency, where in 2018 there were 747 cases with an average score of 41.5 spread across 18 districts. Meanwhile in 2019 there was only a slight decrease of 669 cases with an average score of 37.1 in the Ministry of Religion of the Polewali Mandar Regency in 2019. In 2018 and 2019, the number of child marriages in Campalagian District totaled 183, placing the sub-district at number one. -2 all districts. This study examines the effect of the age of marriage on the health of mothers and babies in the District of Campalagian.

Methods

This type of research is a quantitative study with a cross sectional study design. This research will be conducted in Campalagian District. All data collected is recorded in a special form or indole table and processed using statistics in accordance with the measurement scale and research objectives. The entire data collected is then verified and completed according to the actual situation. The basis for decision making is based on probability. If the probability > 0.05 then Ho is rejected, this means that the two variables have no effect.

Results and Discussion

Univariate Analysis

Table 1. Frequency of the distribution of respondents based on age at marriage, age of husband, wife's education, husband's education, in the Campalagian district in 2020

Respondent Characteristic	Amount (n)	Percentage (%)
Age of Marriage		
Child Age (12-18 years)	66	40,7
Healthy reproductive age (19-49 years)	96	59,3
Husband Age		
> Mean (> 25 years)	60	37
≤ Mean (≤ 25 years)	102	63
Wife Education		
Enough (High School-Higher Education)	63	38,9
Less (Not Graduated – Junior School)	99	61,1
Husband Education		
Enough (High School-Higher Education)	82	50,6
Less (Not Graduated – Junior School)	80	49,4

Source: Primary data, 2020

Table 1 shows the distribution of respondents that based on the age of marriage, the number of respondents who are married at a healthy reproductive age (59.3%) is more than the age of the child (40.7%). Based on the husband's age, respondents with scores below or equal to the average were more (63.0%) than those with values above the average (37.0%). Based on the

wife's education, the low education category (61.1%) was more than the moderate education category (38.9%). Based on the husband's education, the moderate education category (50.6%) was more than the low education category (49.4%).

Bivariate Analysis

Based on Table 2, the results of the chi-square test show that there is no effect of the age of marriage on maternal health during pregnancy, with a p value > 0.05 (p = 0.874).

Table 2. Results of Bivariate Analysis of the Effect of Age at Marriage on Maternal Health during Pregnancy in the Campalagian District in 2020

Age of Marriage	Maternal health during pregnancy				Total		P Value
	Good		Less		n	%	
	n	%	n	%			
Child Age	46	63	27	37	73	100	0,874
Healthy Reproduction Age	55	61,8	34	38,2	89	100	

Source: Primary data, 2020

Table 3. Results of Bivariate Analysis Based on Age of Marriage Based on Husband's Age, Wife's Education, Husband's Education, Against Maternal Health During Pregnancy in Campalagian District, 2020

Moderator Variables		Age Marriage	Maternal health during pregnancy				P Value
			Good		Less		
			%	N	%	N	
Husband Age	> Mean	Child Age	14	55	11	44	0,445
		Healthy reproductive age	23	65,7	12	34,3	
	≤ Mean	Child Age	32	66,7	16	33,3	0,440
		Healthy reproductive age	32	59,3	22	40,7	
Wife Education	Enough	Child Age	6	100	0	0	0,069
		Healthy reproductive age	36	63,2	21	36,8	
	Less	Child Age	40	59,7	27	40,3	0,975
		Healthy reproductive age	19	59,4	13	40,6	
Husband Education	Enough	Child Age	18	69,2	8	30,8	0,553
		Healthy reproductive age	35	62,5	21	37,5	
	Less	Child Age	28	59,6	19	40,4	0,926
		Healthy reproductive age	20	60,6	13	39,4	

Source: Primary data, 2020

Based on table 3, the husband's age > mean obtained p value > 0.05 (p = 0.445) while the ≤ mean value obtained p value > 0.05 (p = 0.440). Based on the wife's education, it is sufficient that the p value is > 0.05 (p = 0.069), while the wife's education is low, the value is p > 0.05 (p = 0.975). Based on the husband's education, the value of p > 0.05 (p = 0.553) is sufficient, while the husband's education is low with the value of p > 0.05 (p = 0.926) so that there is no effect on the age of marriage based on the wife's age, husband's age, wife's education, and husband's education. on maternal health during pregnancy. Table 4 shows the results of the chi-square test, there is no effect of age at delivery on maternal health at delivery p > 0.05 (p = 0.227).

Based on table 4, the husband's age > mean obtained p value <0.05 (p = 0.017) while the ≤ mean value obtained p value > 0.05 (p = 0.837) so that there is an effect of the age of marriage based on the husband's age > mean on maternal health at the time. labor. Based on the wife's education, the value of p > 0.05 (p = 0.282) was obtained, while the wife's education was low, the value of p > 0.05 (p = 0.311) so that there was no effect of the age of marriage based on the wife's education was sufficient and low on maternal health at delivery. Based on the husband's education, it was found that the value of p > 0.05 (p = 0.643) while the wife's education was low, the value was p <0.05 (p = 0.024) so that there was an effect of the low age of marriage based on the husband's education on maternal health during childbirth.

Table 4. The effect of the age of marriage on maternal health at delivery in Campalagian District in 2020

Age of Marriage	Maternal health at delivery				Total		P value
	Good		Less		N	%	
	n	%	n	%			
Child Age	57	78,1	16	21,9	73	100	0,227
Healthy reproductive age	76	85,4	13	14,6	89	100	

Source: Primary data, 2020

Table 5. Bivariate Analysis Results Based on Age of Marriage Based on Husband's Age, Wife's Education, Husband's Education, on Maternal Health at Delivery in Campalagian District, 2020

Moderator Variables		Age of Marriage	Maternal health at Childbirth				P Value
			Good		Less		
			N	%	n	%	
Husband Age	> Mean	Child Age	18	72	7	28	0,017
		Healthy reproductive age	33	94,3	2	5,7	
	≤ Mean	Child Age	39	81,3	9	18,8	0,837
		Healthy reproductive age	43	79,6	11	20,4	
Wife Education	Enough	Child Age	4	66,7	2	33,3	0,282
		Healthy reproductive age	48	84,2	9	15,8	
	Low	Child Age	53	79,1	14	20,9	0,311
		Healthy reproductive age	28	87,5	4	12,5	
Husband Education	Enough	Child Age	22	84,6	4	15,4	0,643
		Healthy reproductive age	45	80,4	11	19,6	
	Low	Child Age	35	74,5	12	25,5	0,024
		Healthy reproductive age	31	93,9	2	6,1	

Source: Primary data, 2020

Table 6 shows the results of the chi-square test, where there is an effect of age at birth on the health of newborns p <0.05 (p = 0.003). Based on table 6, the husband's age > mean obtained p value <0.05 (p = 0.023) while the ≤ mean value obtained p value > 0.05 (p = 0.051) so there is an effect of the age of marriage based on the age of the husband > mean on the health of the new baby. born. Based on the wife's education, it was found that the value of p > 0.05 (p = 0.263) was

obtained, while the education of the wife was low, the value of $p < 0.05$ ($p = 0.008$) was obtained so that there was an effect of the age of marriage based on the age of the wife's education on the health of the newborn. Based on the husband's education, the value of $p > 0.05$ ($p = 0.445$) is sufficient, while the husband's education is low, the value for the husband is $p < 0.05$ ($p = 0.009$) so that there is an effect of the age of marriage based on the age of the husband's low education on the health of the newborn.

Table 6. The Effect of Age of Marriage on the Health of Newborns in Campalagian District in 2020

Age of Marriage	Newborn health				Total		P Value
	Good		Less		N	%	
	n	%	n	%			
Child Age	47	64,4	26	35,6	73	100	0,003
Healthy reproductive age	75	84,3	14	15,7	89	100	

Source: Primary data, 2020

Table 7. Results of Bivariate Analysis Based on Age of Marriage Based on Husband's Age, Wife's Education, Husband's Education, on the Health of Newborns in the Campalagian district in 2020

Moderator Variables		Age of marriage	Newborn health				P Value
			Good		Less		
			N	%	n	%	
Husband age	> mean	Child Age	15	60	10	40	0,023
		Healthy reproductive age	30	85,7	5	14,3	
	≤ mean	Child Age	32	66,7	16	33,3	0,051
		Healthy reproductive age	45	83,3	9	16,7	
Wife Education	Enough	Child Age	6	100	0	0	0,263
		Healthy reproductive age	47	82,5	10	17,5	
	Low	Child Age	41	61,2	26	38,8	0,008
		Healthy reproductive age	28	75,5	4	12,5	
Husband Education	Enough	Child Age	20	76,9	6	23,1	0,445
		Healthy reproductive age	47	83,9	9	16,1	
	Low	Child Age	27	57,4	20	42,6	0,009
		Healthy reproductive age	28	84,8	5	15,2	

Source: Primary data, 2020

The results of the analysis in this study indicate that there is no effect of the age at marriage on maternal health during pregnancy. The majority of respondents meet the quality of the ANC at least 4 (four) times during pregnancy. Integrated antenatal services are comprehensive and quality health services provided through health services and counseling including stimulation and nutrition to ensure a healthy pregnancy; early detection of problems, diseases and complications of pregnancy; and other childbirth preparations (Moedjiono, 2019). The results of the analysis show that there is no effect of the age of marriage on maternal health at delivery.

This is not in line with the study of Cavazos (2015) which found that young people (≤ 19 years) are more likely to experience complications than those aged 25-29 at the time of delivery.

The older husband's age has a negative risk to the mother's health during childbirth. This is not in line with research by Farida & Juliningrum (2019) where the age of the husband affects the health of the mother during childbirth. The maturity of the husband is able to understand the psychological conditions when the wife is pregnant and facing childbirth. There are several important dimensions of the ideal husband in the context of pregnancy and childbirth, including accessibility, involvement and responsibility. In this case, it can be realized through the presence of the husband during childbirth (Moedijiono, 2017).

The results of the analysis in this study found that the older the husband was, the more vulnerable he was to having a negative effect on the health of the newborn. This is in line with research by Khandwala et al (2018) which revealed that there is a potential epigenetic relationship between the genome of aging fathers and health outcomes in offspring.

The result of the analysis in this study is that there is an effect of children's age based on the low level of education of wives and husbands on newborn health. A person's education is a process of behavior change, the higher a person's education explains that someone is concerned about their health condition (Saputri, 2020). Academic skills and literacy, not only make pregnant women more receptive to health-related information and change risky health behaviors (Fleary et al., 2018). ANC aims to make it easier for mothers to access information from an early age on the signs and dangers of pregnancy that will affect the health of the newborn, but the information obtained does not necessarily change understanding if the mother is low-educated, so she cannot directly apply the information (Rifai, 2019).

Conclusion

The results of the bivariate analysis showed that the age of marriage had an effect on the health of the newborn (p value = 0.003). However, the age of marriage on maternal health at delivery does not have a significant effect. After conducting a bivariate analysis using moderator variables, it was found that there was an effect of the age of marriage based on the age of the husband (p value = 0.017) and the husband's education (p value = 0.024) on the health of the mother during childbirth. There was an effect of the age at marriage based on the husband's age (p value = 0.023), the wife's education (p = 0.008), and the husband's education (p = 0.009), on the health of the newborn. It can be concluded that the age of marriage has an effect on the health of the mother and baby and/or if it includes the age and education factors of both the respondent and the partner. Therefore, it is hoped that adolescents and their families will improve sexual education as part of preventing the practice of child marriage.

References

- Alfa, F. R. (2019). pernikahan dini dan perceraian di Indonesia. *Jurnal Ilmiah Ahwal Syakhshiyah (JAS)*, 1(1), 49-56.
- Azevedo, W. F. D., Diniz, M. B., Fonseca, E. S. V. B. D., Azevedo, L. M. R. D., & Evangelista, C. B. (2015). Complications in adolescent pregnancy: systematic review of the literature. *Einstein (São Paulo)*, 13(4), 618-626.
- de Groot, R., Kuunyem, M. Y., & Palermo, T. (2018). Child marriage and associated outcomes in northern Ghana: a cross-sectional study. *BMC Public Health*, 18(1), 1-12.

- Cavazos-Rehg, P. A., Krauss, M. J., Spitznagel, E. L., Bommarito, K., Madden, T., Olsen, M. A., ... & Bierut, L. J. (2015). Maternal age and risk of labor and delivery complications. *Maternal and child health journal*, 19(6), 1202-1211.
- Farida, I. & Juliningrum, P. P. (2019). Hubungan Dukungan Suami dengan Kesiapan Persalinan pada Ibu Hamil Usia Remaja di Sukowono, Jember. *Pustaka Kesehatan*, 7(2), 127-134.
- Fleary, S. A., Joseph, P., & Pappagianopoulos, J. E. (2018). Adolescent health literacy and health behaviors: A systematic review. *Journal of Adolescence*, 62, 116-127.
- Kawakita, T., Kathy W., Katherine L.G., Helain J.L., Chun-Chih H., dan Veronica G.L. (2017). Adverse Maternal and Neonatal Outcomes in Adolescent Pregnancy, *J Pediatr Adolesc Gynecol.*, 29(April 2012), 130–136. doi: 10.1016/j.jpag.2015.08.006.Adverse.
- Khandwala, Y. S., Baker, V. L., Shaw, G. M., Stevenson, D. K., Lu, Y., & Eisenberg, M. L. (2018). Association of paternal age with perinatal outcomes between 2007 and 2016 in the United States: population based cohort study. *bmj*, 363.
- Saputri, E. M. (2020). Warm compresses Against Pain Giving Birth in Practice Independent Midwives HJ. *Zurahmi 2019: Warm compresses Against Pain Giving Birth in Practice Independent Midwives HJ. Zurahmi. Journal of Midwifery and Nursing*, 2(1), 119-122.
- UNFPA (2015) ‘Girlhood, Not Motherhood: Preventing Adolescent Pregnancy’, Published by the United Nations Population Fund UNFPA
- Yount, K. M., Aliceann, C., Yuk, F.C., Theresa, L.O., Lisa, M., Ruchira, T.N., dan Sidney, R.T. (2016). Child Marriage and Intimate Partner Violence in Rural Bangladesh: A Longitudinal Multilevel Analysis, *Physiology & behavior*, 176(1), 139–148.
- WHO. (2018). Adolescent Pregnancy. Available from: <https://www.who.int/en/news-room/fact-sheets/detail/adolescent-pregnancy>.
- Moedjiono, A. I., Kuntoro, K., & Notobroto, H. B. (2017). Indicators of Husband's Role in Pregnancy and Maternity Care. *International Journal of Public Health Science*, 6(2), 192-196.
- Moedjiono, A. I., Awaluddin, H. H., & Abdullah, T. (2019). Prevention of Delay of Decision Making as Efforts to Improve The Mother Health in Polewali Mandar, West Sulawesi Indonesia. *Indian Journal of Public Health Research & Development*, 10(1), 1230-6.
- Sari, U.H.P., Moedjiono, A.I., Bustan, M.N., (2019). Determinants of Premarital Sexual Behavior of Young Men in Indonesia (IDHS Data Analysis 2017. *East African Scholars Journal of Education, Humanities and Literature*, 11(2).
- Rifai, N.A., Abdullah, M.T., Russeng, S.S., Moedjiono, A.I., Seweng, A., Hidayanti, H. (2019) The Influence of Maternal Age, Pregnancy Stress, Nutrition Status and Utilization of Anc against the Incidence of Low Birth Weight Infant In Public Hospital Public, Bantaeng Regency. *EAS Journal of Nursing and Midwifery*, 1(4).
- Sukardi, T.A., Moedjiono, A.I., Seweng, A., Masni, Tamar, M., (2020). The Effect Reproductive Health Education Toward Attitude of Cancer Services in High School Students in West Part Seram Regency. *European Journal and Reflection in Educational Sciences*, 8(7).