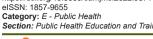
Scientific Foundation SPIROSKI, Skopje, Republic of Macedonia Open Access Macedonian Journal of Medical Sciences. 2022 Jul 07; 10(E):1364-1368. https://doi.org/10.3889/oamjms.2022.9871

OPEN ACCESS

Section: Public Health Education and Training





Health, Psychology and Economic Status: Impact of Early Marriage

Hery Ernawati^{1,2}, Anni Fithriyatul Mas'udah¹, Fery Setiawan³, Laily Isroin¹

¹Department of Nursing, Faculty of Health Science, Universitas Muhammadiyah Ponorogo, Jawa Timur, Indonesia; ²Doctoral Program, Faculty of Medicine, Public Health and Nursing, Universitas Gajah Mada, Yogyakarta, Indonesia; 3Department of Management, Faculty of Economic, Universitas Muhammadiyah Ponorogo, Jawa Timur, Indonesia

Abstract

Edited by: Ana Vucurevic Citation: Ernawati H, Mas'udah AF, Setiawan F, Isroin L. Heaith, Psychology and Economic Status: Impact of Early Marriage, Open Access Maced J Med Sci. 2022 Jul 07; 10(E):1364-1368.https://doi.org/10.3889/oamjms.2022.9871 Keywords: Early married; Health; Psychology; Economic *Correspondence: Anni Fithriyatul Mas'uda, Faculty of Health Science, Universitas Muhammadiyah Ponorogo

iversitas Muhammadiyah Ponorogo, Jawa Timur 63471, Indonesia. E-mail: anni.fithriyatul@umpo.ac.id **Received:** 10-May-2022 Revised: 20-Jun-2022 Accepted: 28-Jun-2022

Accepted: 28-Jun-2022
Copyright: © 2022 Hey Ernawat;
Anni Fithriyatul Mas'udah, Fery Setiawan, Laily Isroin
Funding: This study was supported by the Ministry
of Research and Technology/National Research and
Innovation Agency Competing Interests: The authors have declared that no

competing interests exist Open Access: This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0) BACKGROUND: Early marriage is a global problem that harms teenagers. The occurrence of early marriage in rural areas is a common practice

AIM: This study aims to determine the impact of early marriage on aspects of health, psychology, and economic status comprehensively based on the causes of early marriage in rural area.

METHODS: This study used a cross-sectional study design. The sampling unit of this study was early marriage families from three sub-districts in the Ponorogo district, namely Sawoo, Ngrayun, and Pulung. The number of samples used as many as 75 families. The variables in this study consisted of health, husband's psychology, wife's psychology, and economic status. The statistical test used polychoric Principle Component Analysis (PCA) analysis to obtain health, psychological and economic status variables derived from several indicators

RESULTS: The results of this study indicate that in the healthcare variable, it appears that most of the respondents do not experience bleeding, do not have abdominal pain, and do not hurt on contact. Based on the emotion variable, the wife is more emotional than the husband. The results of polychoric PCA are based on scores that are divided into two categories. The results of the polychoric PCA analysis show that most of the early married couples have worse health and economic conditions, namely, 55% and 65%, respectively. Meanwhile, in the psychological condition of husband and wife, most of them have good conditions, namely, 75% and 83%.

CONCLUSION: The impact of early marriage which shows poor results is on the health and economic aspects.

Introduction

Early marriage is a global problem that has a negative impact on adolescents [1], [2], [3]. Based on law number 16 of 2019, it is stated that early marriage is a marriage that occurs before the age of 16 for women and before 19 years for men [4].

The prevalence of early marriage in the world reaches 12 million per year [5]. Data in Indonesia show that in the past 10 years, early marriage in Indonesia has decreased by 3.5%. However, this decline still requires systemic and integrated efforts to achieve the target of 8.74% in 2024 and 6.94 percent in 2030 [6]. East Java is one of the provinces with a high percentage of early marriages in Indonesia. The number of early marriages in Ponorogo Regency has increased by 100% in 2020 [7]. Based on the area of residence, rural (16.87%) has a higher early marriage rate than urban areas (7.15%) [8].

The occurrence of early marriage in rural areas is a common practice. This is the influence low educational conditions and community traditions [9]. Society considers early marriage does not have a significant effect on their lives. Based on research that has been carried out, the impact of early marriage includes the nutritional status of infants. early pregnancy, school dropouts, and economic welfare [10], [11], [12]. The research complements previous research, related to the impact of early marriage on aspects of adolescent women's physical health and psychology of early marriage partners. This study aims to determine the impact of early marriage on aspects of health, psychology, and economic status comprehensively based on the causes of early marriage in rural area.

The previous studies looked at the impact of early marriage partially. This study looks at the impact of health, psychology, and economics comprehensively. This can be used as a basis for making policies to improve the quality of early marriage families.

Methods

This study uses a cross-sectional study design, with the sampling unit being early marriage families, who are married in 2019-2021.

Collecting data using probability sampling technique, namely, using cluster random sampling in each sub-district.

The measurement variable used a questionnaire. The variables in this study consisted of health, husband's psychology, wife's psychology, and economic status. The health variable comes from five indicators, namely, the smoothness of menstruation, pain in the genitals, abdominal pain, and bleeding [13]. The psychological variables of husband and wife each come from indicators of confidence, emotion, stress, shame, and regret [14]. The economic status variable consists of four indicators, namely, employment status, the main source of income, parental assistance, and saving [15], [16].

This study uses polychoric Principle Component Analysis (PCA) to obtain health, psychology, and economic status variables derived from several indicators.

This research has passed the ethical test from the Ethics Committee of the Faculty of Health Sciences, Universitas Muhammadiyah Ponorogo with the number 99/ER/KEPK/2021 on June 18, 2021.

Results

Characteristics of respondents based on the variables that make up the impact of early marriage are shown in Table 1.

Table 1: Frequency distribution characteristics of respondent

Variable	Category	n	%	
Health				
Menstruation	Not smooth	32	42.67	
	Smooth	43	57.33	
Pain in the genitals	Sick	7	9.33	
	Painless	68	90.67	
Abdominal pain	Painful	11	14.67	
	No pain	64	85.33	
Bleeding	Bleeding occurs	2	2.67	
	No bleeding	73	97.33	
husband psychology	-			
self-confident	Not confident	5	6.67	
	Self-confident	70	93.33	
Emotion	Emotion	15	20.00	
	No emotion	60	80.00	
Stress	Stress	6	8.00	
	No Stress	69	92.00	
Embarrassed	Embarrassed	5	6.67	
	Not Embarrassed	70	93.33	
Regret	Regret	5	6.67	
9	No regret	70	93.33	
wife psychology	· ·			
self-confident	Not confident	6	8.00	
	Self-confident	69	92.00	
Emotion	Emotion	37	49.33	
	No emotion	38	50.67	
Stress	Stress	5	6.67	
	No Stress	70	93.33	
Embarrassed	Embarrassed	4	5.33	
	Not embarrassed	71	94.67	
Regret	Regret	4	5.33	
	No regret	71	94.67	
Economic Status	ğ			
Working Status	Not Working	6	8.00	
3	Working	69	92.00	
Main income source	Husband/wife	9	12.00	
Main moonie douloe	Parents	42	56.00	
	Family	8	10.67	
	Other	16	21.33	
Parental help	Helped by parents	22	29.33	
	No helped by parents	53	70.67	
saving ability	Not saving	66	88.00	
caring ability	Saving	9	12.00	

Table 2: Polychoric PCA analysis

Variable	Category	Polychoric PCA	Polychoric PCA	
		Eigenvalue (λ)	CE	
Health	Menstruation	2716	0679	
	Pain in the genitals	1520	1059	
	Abdominal pain	0488	1181	
	Bleeding	-0.725	1.000	
husband psychology	self-confident	3.827	0.765	
	Emotion	0.501	0.865	
	Stress	0.453	0.956	
	Embarrassed	0.174	0.991	
	Regret	0.043	1.000	
wife psychology	self-confident	2.711	0.542	
	Emotion	1.366	0.815	
	Stress	0.474	0.910	
	Embarrassed	0.379	0.986	
	Regret	0.067	1.000	
Economic Status	Working Status	2.225	0.556	
	Main income source	0.945	0.792	
	Parental help	0.767	0.984	
	Saving ability	0.062	1.000	

PCA: Principle Component Analysis.

Based on the constituent variables of health, it can be seen that most of the respondents did not experience bleeding, no abdominal pain, and no pain in the genitals. Meanwhile, the variable of menstrual fluency is almost the same between smooth and non-fluent.

In the psychological condition of husband and wife, it can be seen that based on the variables of confidence, stress, shame, and regret, most husbands and wives have good conditions despite having early marriages. Based on the emotion variable, the wife is more emotional than the husband, which is 49.33% and 20%, respectively.

Based on Table 2, the results of polychoric PCA show that the health variable formed can explain 67.9% of the variation of the four constituent variables. In the psychological variables of husband and wife, it can be seen that each of the variables formed can explain 76.5% and 54.2% of the variation of the five constituent indicators. Meanwhile, based on the formed economic status variable, it can explain 55.6% of the variation of the four constituent variables.

The results of polychoric PCA are based on scores that are divided into two categories centered on zero. A positive score indicates a good condition, while a negative score indicates a worse condition [17]. The results in Table 3 show that most of the early married couples have worse health and economic conditions, namely 55% and 65%, respectively. Meanwhile, in the psychological condition of husband and wife, most of them have good conditions, namely, 75% and 83%.

Table 3: PCA polychoric result variable category

Variable	Good		Worse	
	f	р	f	р
Health	34	45%	41	55%
Economic Status	26	35%	49	65%
husband psychology	56	75%	19	25%
wife psychology	62	83%	13	17%

Discussion

Early marriage is often the responsibility of the family, especially the parents of the man (husband).

This condition will take place repeatedly from one generation to the next so that structural poverty will be formed. The economic impacts as above were found in all research sites [18]. Early marriage has an impact on the economic well-being of the family and has implications for other problems such as health, relationship violence, and education [10].

Married young risk being unprepared to take care of children who can endanger the safety of the baby and the mother to death. After getting married, the perpetrators of child marriage are divorced, and then the victim returns to work in illegal prostitution houses. One of the causes of the increase in infant mortality is due to low birth weight due to malnutrition. According to the results of an interview with the Maternal and Child Health Office, in North Sulawesi Province [18].

Child marriage has the potential for domestic violence that causes trauma to death, especially experienced by adolescent girls. Psychological impacts were also found across the study areas where partners were not mentally prepared for role changes. Teenage girls who married young and experienced unwanted pregnancies will tend to be embarrassed. Maybe they do not know how their role changes from a teenager who is still in school to the role of a mother and wife [18].

Many young men hope to find work to have enough money to meet the needs of their new family. However, due to limited education, the opportunity to get a job is also very limited. So this new family becomes the responsibility of the parents of both partners. Even early marriage couples who are still not economically established limit the number of children they plan to have according to their ability to take care of them [19].

Delaying the first birth until the age of 20 appears to benefit both mother and baby. Access to reproductive health services; timely and quality family planning services and administration of Tetanus toxoid and iron/folic acid to married adolescents who are pregnant [20].

Based on the health condition of married adolescents, the prevalence of menstrual disorders is 20.3% and the most common disorder is excessive pain [21]. Gynecological disorders include menstrual irregularities, urinary problems, lower abdominal pain with vaginal discharge, itching and irritation of the vagina, white discharge from the vagina with or without an unpleasant odor, sores in the genital area, and vaginal discharge which are problems in early marriage [22], [23], [24].

About 48% of adolescent women have major problems related to pregnancy compared to 45.3% of adult women. Adolescent female fetuses also have more problems (9.7%) than adult female fetuses during birth [20], [25]. Teenage pregnancies are 1.3 times

more likely to have poorer baby health than adult pregnancies [26].

Psychologically, the wife in the emotional section has a higher incidence than the husband's emotion. This is made possible by the demands of raising children, adjusting to psychological development as a teenager, as well as the complexity of changing roles very quickly and at the same time. It was also added that pregnancies that occur in early marriage couples are mostly unplanned/unwanted pregnancies, while these young women feel economically and materially disadvantaged so that it will lead to depression during pregnancy until the puerperium [27]. The psychological well-being of young women who marry early is worse than that of adult women. The wife's psychological well-being is influenced by her husband's education and type of work. And not influenced by wife's education [27]. Based on the results of the study, the psychological condition of the wife and husband did not show a tendency to have a bad psychological condition. This happens psychologically they are not burdened because it is common in the environment where they live, namely, in the countryside. Environment and family originating from low education and being a supporting factor for early marriage [28].

Based on research, the biggest impact of early marriage is from an economic perspective. The economic condition of early marriage couples is still a burden for parents. This is evident from 56% of couples whose main income still comes from their parents. The impact of poverty and economic independence is a problem for the rural population. This research only covers rural areas so that further research is needed in urban areas with different sociodemographic conditions.

Conclusion

The results of this study can be concluded that most early marriage couples have worse health and economic conditions, namely, 55% and 65%, respectively. Meanwhile, in the psychological condition of husband and wife, most of them have good conditions, namely, 75% and 83%.

The results of the research are taken into consideration by the regional government and related agencies in unifying psychological changes and development, as well as providing skills and economic development for early marriage couples.

Acknowledgments

The author expresses his gratitude to the Ministry of Research and Technology/National Research and Innovation Agency which has funded research through Contract Number: 97/VI.4/PN/2021 and Universitas Muhammadiyah Ponorogo.

References

- Nasrullah M, Zakar R, Zakar ZM. Child marriage and its associations with controlling behaviors and spousal violence against adolescent and young women in Pakistan. J Adolesc Health. 2014;55(6):804-9. https://doi.org/10.1016/J. JADOHEALTH.2014.06.013
 - PMid:25123525
- Parsons J, Edmeades J, Kes A, Petroni S, Sexton M, Wodon Q. Economic impacts of child marriage: A review of the literature. Rev Faith Int Aff. 2015;13(3):12-22. https://doi.org/10.1080/155 70274.2015.1075757
- Singh PK, Rai RK, Alagarajan M, Singh L. Determinants of maternity care services utilization among married adolescents in rural India. PLoS One. 2012;7(2):e31666. httpS://doi. org/10.1371/JOURNAL.PONE.0031666
 - PMid:22355386
- Undang-Undang Republik Indonesia Nomor 16 Tahun 2019 Tentang Perubahan Atas Undang-Undang Nomor 1 Tahun T974. Tentang Perkawinan; 2019. https://doi.org/10.31219/osf. io/8e6an
- UNICEF. Child Marriage UNICEF DATA. New York: UNICEF;
 2021. Available from: https://www.data.unicef.org/topic/child-protection/child-marriage [Last accessed on 2021 Sep 15].
- UNICEF Indonesia, BPS, PUSKAPA UI. Perkawinan Anak di Indonesia UNICEF Indonesia. New York: UNICEF; 2020. Available from: https://www.unicef.org/indonesia/id/laporan/ perkawinan-anak-di-Indonesia [Last accessed on 2021 Sep 15].
- Pengadilan Agama. Pandemi Covid-19, Pernikahan Dini di Ponorogo Justru Naik 100 Persen. Indonesia: Jatimnow; 2020. Available from: https://www.jatimnow.com/baca-29784pandemi-covid19-pernikahan-dini-di-ponorogo-justru-naik-100persen [Last accessed on 2021 Oct 22].
- UNICEF. Pencegahan Perkawinan Anak. New York: UNICEF; 2020. Available from: https://www.Unicef.Org/Indonesia/ Media/2851/File/Child-Marriage-Report-2020.Pdf [Last accessed on 2021 Oct 12].
- Determinan Sosial Kesehatan dari Pernikahan Usia Dini di Indonesia Analisis Indonesia Family Life Survey Tahun 2000 2007 2014. Available from: https://www.etd.repository.ugm. ac.id/penelitian/detail/170660 [Last accessed on 2021 Oct 22].
- Wodon Q, Sexton M, Edmeades J, Parsons J, Kes A, Petroni S. Economic Impacts of Child Marriage: Global Synthesis Report; 2017. Available from: https://www.costsofchildmarriage.org [Last accessed on 2021 Oct 21].
- Paul P, Chouhan P, Zaveri A. Impact of child marriage on nutritional status and anaemia of children under 5 years of age: Empirical evidence from India. Public Health. 2019;177:95-101. https://doi.org/10.1016/J.PUHE.2019.08.008
 PMid:31561051
- 12. Beattie TS, Bhattacharjee P, Isac S, Davey C, Javalkar P, Nair S, et al. Supporting adolescent girls to stay in school, reduce child marriage and reduce entry into sex work as HIV risk prevention in north Karnataka, India: Protocol for a cluster randomised

- controlled trial. BMC Public Health. 2015;15(1):292. https://doi.org/10.1186/S12889-015-1623-7
- PMId:25881037
- Ravindra Sarwade R, Hankare J, Chavan T. Issues of reproductive health after child marriage: A study among NT-DNT community in Nashik district of Maharashtra. Panacea J Med Sci. 2019;9(3):1-3. https://doi.org/10.18231/j. pjms.2019.025
- Tirgari B, Rayyani M, Cheraghi MA, Mangeli M. Experiences of Iranian teen mothers with parenting stress: A qualitative study. Compr Child Adolesc Nurs. 2020;43(3):203-16. https://doi.org/1 0.1080/24694193.2019.1651420
 - PMid:31412216
- Ponnet K, Wouters E, Goedemé T, Mortelmans D. Family financial stress, parenting and problem behavior in adolescents: An actor-partner interdependence approach. J Fam Issues. 2016;37(4):574-97. https://doi.org/10.1177/0192513X13514409
- Stronks K, Van de Mheen H, Van den Bos J, Mackenbach JP. The interrelationship between income, health and employment status. Int J Epidemiol. 1997;26(3):592-600. https://doi. org/10.1093/IJE/26.3.592
 PMid:9222785
- 17. Osorio AM, Bolancé C. Measuring intermediary determinants of early childhood health: A composite index comparing Colombian departments. Child Ind Res. 2013;6(2):297-319. https://doi.org/10.1007/s12187-012-9172-4
- Djamilah KR. Impact of Child Marriage in Indonesia. J Stud Pemuda. 2014;3(1):1-16. Available from: https://journal.ugm.ac.id/ jurnalpemuda/article/view/32033 [Last accessed on 2021 Nov 20].
- Mathur S, Higgins JA, Thummalachetty N, Rasmussen M, Kelley L, Nakyanjo N, et al. Fatherhood, marriage, and HIV risk among young men in rural Uganda. Cult Health Sex. 2016;18(5):538-52. https://doi.org/10.1080/13691058.2015.1091508
 PMid:26540470
- Patra S. Motherhood in childhood: Addressing reproductive health hazards among adolescent married women in India. Reprod Health. 2016;13(1):52. https://doi.org/10.1186/ S12978-016-0171-7
 - PMid:27142211

PMid:20353563

- Ahamed F, Lohiya A, Kankaria A, Silan V, Kharya P, Rizwan SA. Menstrual disorders and its determinants among married women of rural Haryana. J Clin Diagn Res. 2015;9(9):LC06-9. https://doi.org/10.7860/JCDR/2015/13101.6441
- Bhattacharyya N, Dasgupta D, Roy S. Concomitants of gynaecological problem: A study on young married women of rural West Bengal. J Anthropol Survey India. 2020;69(3):124-44. https://doi.org/10.1177/2277436X20927252
- Singh N, Singh J. Study of risk factors for infectious vaginitis in reproductive women. Int J Contemp Med Res. 2018;5(12):2393-915. https://doi.org/10.21276/ijcmr.2018.5.12.10
- Verstraelen H, Verhelst R, Vaneechoutte M, Temmerman M. The epidemiology of bacterial vaginosis in relation to sexual behaviour. BMC Infect Dis. 2010;10:81. https://doi. org/10.1186/1471-2334-10-81
- 25. Ernawati H, Verawati M, Kesehatan FI, Ponorogo UM. Mother and Baby Health in Early Marriage. Media Ilmu Kesehat. 2014;3(3).
- Mas' udah AF, Besral B, Djaafara BA. Risk of Adolescent PregnancyToward Maternal and Infant Health, Analisis of IDHS 2012. Kesmas: Jurnal Kesehatan Masyarakat Nasional (National Public Health Journal), 12(3), 120-126.
- 27. Ghosh S, Lahiri S, Datta N. Understanding happiness and

psychological wellbeing among young married women in rural India. J Comp Family Stud. 2017;48(1):113-31. https://doi.org/10.3138/jcfs.48.1.113

28. Ahmadian M, Hamsan HH, Abdullah H, Samah AA, Noor AM.

Risky sexual behavior among rural female adolescents in Malaysia: A limited role of protective factors. Glob J Helath Sci. 2014;6(3):165-74. https://doi.org/10.5539/gjhs.v6n3p165 PMid:24762359