

Early-Age Marriage and the Impact of Health Reproduction Women

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Abstract: Early-age marriage is one of the factors affecting women reproductive health such as bleeding, low birth weight, premature, miscarriage and unwanted pregnancies. The purpose of this study was to determine the differences of social demographic characteristics of early-age marriage with early unmarried, the impact of early-age marriage on women's reproductive health and realations between early-age marriage with women's reproductive health. The study conducted in the work area of the Tinggede Community Health Centers (CHC) in three villages namely: Sunju, Tinggede and Tinggede Selatan. Research target was all pregnant mothers and have children under 2 years of age with number 180 people. The survey used data collection techniques, interviews, observations and Focus Group Discussion (FGD). Data analysis used Chi-square. The result showed that 106 respondents 58.8% married early (≤ 20 years) and did not married early (≥ 21 years) as many as 41.2%. Respondents who married early on average had a low educational level only up to junior high school (42.6%), most of respondents were housewives 84.9%, respondents who had children ≥ 3 (60.3%). In addition, respondents who not married early had high school education 48.6, work 37.9% and had an average of ≤ 2 children 83.8%. Early marriage affects women's reproductive health disorders such as infection, bleeding, LBW, prematurity, fever/seizures, miscarriage, no contraception and unwanted pregnancies. These impacts are at risk for maternal and infant deaths directly. A significant relationship of early marriage with reproductive health disorder of woman with value $p = 0.001$. The conclusion was early-age marriage had an impact on reproductive health disorder which resulted in increasing maternal and infant mortality, especially in Tinggede Village, Sigi Regency, Central Sulawesi Province. Socialization of the importance of ideal marriage age and women reproductive health needed.

Key words: Early-age marriage, women's reproductive health, determine, marriage, reproductive, relationship

INTRODUCTION

Early-age marriage or child marriage is a very young age marriage, i.e., ≤ 20 years for women and < 25 years of age for men (Ernawati *et al.*, 2014). Based on the rules issued by the National Family Planning Coordinating Board Indonesia that the ideal marriage age for women is 21-35 and 25-40 years for men (Anonymous, 2010).

Central Sulawesi Province is one of the provinces in Indonesia with a high percentage of early-age marriage.

Central Sulawesi Province ranked first for women who married before the age of 15 years as many as 4% while for women who had married before the age of 16 years with a percentage of 9.7% and the third highest province after West Sulawesi 13.3 and Papua 11.8% for women who had married before the age of 18 years with the third highest percentage of 34.9% after Central Kalimantan 36.3% and Papua 33.6% (Anonymous, 2016).

Early-age marriage cases in Central Sulawesi are the largest early marriage cases on Sulawesi Island for the 15-19 years age group with a percentage of 46.3% and

the second highest in Sulawesi for the 10-14 years age group of 4.1% after South Sulawesi with 4.3% (Anonymous, 2012).

Data on the number of reproductive-age couples based on the age group of wives from the Central Sulawesi family data collection in 2015 mentioned that 2.32% of them is under 20 years of age. Sigi Regency is one of the regencies with high percentage of early-age marriage in Central Sulawesi, evidenced by the percentage of reproductive-age couples under 20 years as many as 2.79% of 40,216 couples (Utami, 2017).

The reasons for the occurrence of early-age marriage depend on the condition and social life of the community. First, early-age marriage as a strategy to survive economically (Pandey, 2017). Poverty is one of the main factors that pivot the foundation of early-age marriage. Early-age marriage increases when poverty levels also increase. The second is to protect their daughter (Pradhan *et al.*, 2015). Marriage is one way ensure their daughters protected as wives, giving birth legitimate children in the eyes of the law and it would be safer to have a husband who can keep them regularly (Desiyanti, 2015; Anonymous, 2010).

Early-age marriage adversely affects health, both in the mother from pregnancy to childbirth and infant. Reproductive health affects the quality of the fetus that produced and also affects the level of maternal health that implicates the maternal mortality rate (Efevbera *et al.*, 2017). Early-age marriage at risk for various diseases such as cervical cancer, breast cancer, bleeding, miscarriage, easy infection, anemia, risk of developing preeclampsia, prolonged and difficult labor. Meanwhile, the impact of early-age marriage in infants, the possibility of birth is not old enough, LBW, congenital defects to infant mortality (Pandey, 2017; Prakash *et al.*, 2011). This research was important to see the differences of demographic social characteristics that married early and not married early, the impact for women's reproductive health and relations between the two variables.

MATERIALS AND METHODS

This type of research is analytic survey, research located in the working area of Tinggede Community Health Center covers Sunju, Tinggede and South Tinggede areas. The study took place February-June 2018. The target in this study were all pregnant women, mothers who had children under the age of 2 years of 180 people. Total sample is a sample

determination technique in this study. Data collection was carried out by interview using questionnaires, observation and focus group discussion. Variable indicators were early marriage (≤ 20 years) and not early marriage (≥ 21 years). The level of education used indicators, not school-elementary school, junior high school, senior high school and college. The employment status used indicators does not works (housewife) and work. Number of respondent's children (child(s)) used indicators of few children (≤ 2 child(s)) and many children (≥ 3 childs). Reproductive health disorders used indicators of mothers who have been or are experiencing miscarriage, pregnancy complications, fever/seizure, infection, premature birth, bleeding, low birth weight, maternal and infant mortality.

Interviews was conducted when pregnant women visit in Tinggede Community Health Center, Sunju Sub Community Health Center and South Tinggede sub Community Health Center during the hours of Community Health Center service was Monday-Friday. Observations and interviews were also carried out at the mother's homes with early agreements through the help of their respective village cadres/midwives. In addition, a focus group discussion was held for community leaders, women leaders, health workers, parents and pregnant women with early marriage to determine the impact of early marriage on women's

Secondary data such as personal identity, frequency and regularity of Antenatal Care (ANC), immunization, high risk detection, number of abortions in past activities during antenatal care and their impact on women's reproductive health were obtained in the Tinggede Community Health Center, Sunju Sub Community Health Center and and South Tinggede Sub Community Health Center. Furthermore, the data was analyzed by statistical analysis using chi square performed.

RESULTS AND DISCUSSION

The characteristics of social demographic which include the level of education, employment status and number of children will illustrate the distribution of these variables to mothers who early marriage by not early marriage. These characteristics can be seen in Table 1.

Table 1 shows the highest percentage of respondents who married early was 42.6% had junior secondary education level while the highest percentage of unmarried respondents was 48.6% having high school education level. Respondents who married early had a higher percentage 46.8% than respondents who not married early 5.4%.

Table 1: Characteristics of social demography of respondents married early and not married early

	Married early		Not married early		Total	
	n	Percentage	n	Percentage	n	Percentage
Education level						
Not school-elementary school	17	16.8	4	005.4	21	11.7
Junior high school	45	42.6	6	008.1	51	28.3
Senior high school	44	41.6	36	048.6	80	44.4
College	0	0.0	28	032.4	28	15.6
Employment status						
Does not work (housewife)	90	84.9	46	062.1	136	75.6
Work	16	15.1	28	037.9	44	24.4
Number of respondent's children (child(s))						
Few children (≤ 2 child(s))	42	39.6	62	083.8	104	57.8
Many children (≥ 3 child(s))	64	60.4	12	016.2	76	42.2
Total	106	100.0	74	100.0	180	100.0

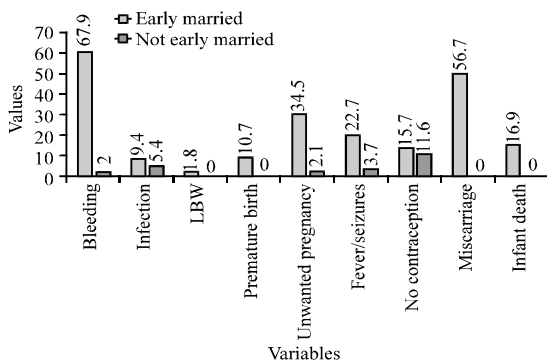


Fig. 1: Types of reproductive health disorders

It appears that in Table 1 respondents who married early the majority did not work (housewife) which reached 84.9% and who worked only 15.1%. Likewise not married early respondents who did not work as many as 62.1% and who worked reached 37.9%.

When judging from the number of children, the respondents who married early and had many children have a high percentage of 60.4% and who had few children only 39.6%. Then compared between the not married early then that had many children only 16.2% and have few children reached 83.8%.

Impact of early-age marriage on women’s reproductive health: Reproductive health disorder as a result of early marriage obtained in the field include bleeding, infection, low birth weight, premature birth, unwanted pregnancy, fever/seizure no use of contraceptives, miscarriages and infant mortality. The percentage distribution of reproductive health impacts is show in Fig. 1.

Figure 1 shows that the types of reproductive health problems experienced by early married respondents were bleeding, infection, LBW, premature birth, unwanted pregnancy, fever/seizures, no contraception, miscarriage and infant death. The highest percentage of reproductive health disorder experienced by the respondents was bleeding 67.9, miscarriage 56.7 and unwanted pregnancy

34.5%. When compared with not married early respondents only experienced bleeding, infection, unwanted pregnancy, fever/seizures and no use of contraceptives, reproductive health disorder is the most common was not using contraceptives by 11.6% and infection as many as 5.4%.

The relationship of early-age marriage with reproductive health disorders: Table 2 revealed that respondents whose first marriage age was early-age or ≤ 20 years had reproductive health problems of 67.9% while those who did not experienced only 32.1%. When compared with respondents whose age of first marriage ideal age or ≥ 21 years who had less reproductive health problems was only 43.2% and which did not reach 56.8%.

The result showed that the education level of the respondents who married early dominated by junior high school 42.6% while the respondents who not married early mostly senior high school 48.6%. The low level of education of mothers who married early not expected to know the various negative effects of early-age marriage. Thus, they married without having enough knowledge on the impact of early marriage on their reproductive health. This is in line with the finding by Agustina *et al.* (2015) and Nasrullah *et al.* (2014) that early-age marriage occurs because teenagers do not have formal education and live in rural areas.

Low juvenile knowledge can lead a tendency to marriage at an early age because individual education will gain knowledge that will shape their attitude in making decisions (Desiyanti, 2015). Early marriage offenders who finish primary school will have a lower mindset than those who highly educated. Insights or knowledge about the impact of early-age marriage is also low, so, they tend to think that marriage can reduce the burden of both parents without thinking of other impacts that will generated (Sari *et al.*, 2015).

Another thing allegedly because the age of a early marriage gives the opportunity of adolescent girl drop out of school. Women after marriage will be hostage issues of

Table 2: Differences in reproductive health disorders by age of first marriage

Reproductive health disorders	Age of first marriage						p-value
	Early age (≤ 20 years)		Ideal age (≤ 21 years)		Total		
	n	Percentage	n	Percentage	n	Percentage	
Experienced	72	067.9	32	043.2	104	057.8	0.001*
Not experienced	34	032.1	42	056.8	76	042.1	
Total	106	100.0	74	100.0	180	100.0	

*Significant in $p < 0.05$

reproductive health that is pregnant, give birth and childbirth (Nur, 2015), so, the average can not continue their education. In addition, parents tend not to pay school fees or living expenses if their children married because the role has transferred to their husbands. These results are in line with the study (Pradhan *et al.*, 2015) early marriage leads to low education, inadequate socioeconomic conditions, inadequate access, early sexual initiation and low access to knowledge information, especially, members of certain ethnic or religious groups.

Table 1 shows the respondents who married early dominated by did not work (housewives) which reached 84.9% and percentage the respondents who not married early and not work, smaller which amounted to 62.1%. This type of work regarded as a prestigious, unappreciated and low-status job in Sunju, Tinggede and Tinggede Selatan Communities as it considered not generating huge revenues. Jobs considered to have high prestige are office work such as civil servants or teachers. Thus, the view of data in Table 2 increasingly confirmed that the respondents who married early most of the low economic status. The characteristics of respondents are consistent with finding of mothers who marry early generally do not have a regular job and low income (Islam *et al.*, 2015). This is because the job market requires certain levels of education and skills.

Meanwhile, mothers who do not married early are many who work because with a high educational status at least often make contact or extensive interaction outside the home. Mothers who have a broader association may have more experience and critical thinking skills than unemployed mothers or more mothers at home (Nur and Mallongi, 2016). Different horizons allow them to delay the age of marriage and have a chance to get a higher education, so that, they get a job that suits their skills (Akeo *et al.*, 2008).

The results in Table 1 shows that the number of respondent's children who married early was predominantly had a child ≥ 3 children of 60.4%. When compared with the respondents who not married early, the majority had few children (≤ 2 children) reaching 83.8%. This is because early marriage put bad risks in the long run whereas with long reproductive age ranges (generally

up to 49 years), married and pregnant women in their teens will have an opportunity to have large numbers of children by the end of their reproductive years. This finding is consistent with that early-age marriage is likely to give birth to children with large numbers will be at risk of higher maternal mortality.

Early marriage also causes high fertility (possibly to give birth 3-4 times), rapid rebirth, termination of pregnancy (stillbirth, miscarriage and abortion), unwanted pregnancies (cultural factors due to the desire of the husband to have many children or the desire to have child of male sex) (Nasrullah *et al.*, 2014). Adolescents who perform early marriage are generally adolescents who come from low economic status, inadequate education, have a bad knowledge about contraception and after marriage do not use contraception (Suwal, 2012).

Teen marriage in addition to reflecting the low status of women is also a social tradition that sustains high levels of fertility (Prakash *et al.*, 2011). This causes the childbearing period faced by adolescent girls is relatively longer in addition to the increased risk of labor because they are not physically ready to give birth (Romuali and Vindari, 2012). Early marriage occurs in addition to self-interest as well because of parents. This is in line with the research undertaken by Sahbani *et al.* (2016) where in developing countries marriage occurs because the wishes of parents and wives have no power to determine when will have children because the decision is in the hands of the husband as the head of the family. With some factors that bind the mother who married early, it is natural that women who married early to more children than women who not married early.

Impact of early marriage on reproductive health of respondents:

Figure 1 shows that the types of reproductive health disorders experienced by early marriage respondents were bleeding, infection, LBW, premature birth, unwanted pregnancy, fever/seizures, no contraception, miscarriage and infant mortality. The highest percentage of disorders experienced was bleeding of 67.9%, miscarriage 56.7% and undesirable pregnancies 34.5%. When compared with respondents who not married early who only bleed, infections, unwanted

pregnancies, fever/seizures and do not use contraception. The most frequent reproductive health disorder that did not use contraception is 11.6%. The number of reproductive health disorders experienced by the respondents who married early suspected in terms of physical teenagers had not been strong, pelvic bone was still too small, so, it can endanger the birth process. The symptoms are same as shown by Susilo (2015) that girls aged 10-14 are more likely to die five times more during pregnancy or childbirth, than women aged 20-25 and girls aged 15-19 are twice as likely. They are not aware of the risks that will occur if they married early, so, they also do not understand about their rights related to reproductive health and do not know how a woman decides when to get pregnant and give birth and how many children they should deliver (Rosmala-Nur, 2016).

Low reproductive health for women who married early than those who not married early also associated with psychological maturity in dealing with and resolving household problems (Rosmala-Nur, 2016). Women who marry early can increase stress and anxiety as well as inadequate nutrition (Sawchuk *et al.*, 1997). This can have an impact on LBW, premature birth and miscarriage. The symptoms are same as the study (Santhya, 2011), the reproductive system is still not maximally, both in terms of anatomy and related hormones, accompanied by emotional instability, early marriage affects unplanned pregnancies, pregnancy-related complications, premature birth, low birth weight, fetal death and marital violence.

Relationship of early marriage and reproductive health of respondents: Based on Table 2, there was a difference between the groups of married early respondents and not married early against reproductive health disorder with $p = 0.001$ ($p < 0.05$). This showed there was a significant relationship between the age of first marriage with reproductive disorders. This was presumably because pregnancy and childbirth for women aged 20 years and under have not matured physically and psychologically, so that, the risk of death was much higher than the age of 21 years and over. Not only mothers, children who born also have a risk of death or high disability (Nurhajati and Wardyaningrum, 2012). This is in line with the research undertaken by Godha *et al.* that there are significant associations of child marriage with fertility control, a history of rapid, recurrent births, no use of contraception before the first delivery, female sterilization, pregnancy termination, unwanted pregnancies and inadequate use of maternal health care in four South Asian countries: India, Bangladesh, Nepal and Pakistan. Furthermore, Godha *et al.* concludes that although the outcomes are

not the same in every country but child marriage adds a layer of vulnerability to women leading to poor fertility control and low maternal health care.

The above conclusions are consistent with the results of the research of Adedokun *et al.* (2016) who found very high reproductive health disorders occurring in married couples at an early age and resulting in maternal and infant deaths. Early marriage has a detrimental effect on women's reproductive health status. Women married at an early age allow for a long reproductive period, unwanted pregnancies and abortions that negatively affect nutritional status (Sawchuk *et al.*, 1997). Children born to mothers with poor reproductive health have a lower likelihood of survival and are likely to experience anthropometric failure (stunting, wasting and underweight) (Prakash *et al.*, 2011).

CONCLUSION

There were differences in social demographic characteristics (education level, employment status and number of children) between early-age marriage and not early-age marriage respondents. Respondents who married early on average have a low education namely junior high school, the majority do not work (housewife), number of children ≥ 3 children. While respondents who not married early have high school education, the majority work with an average of ≤ 2 children. Early marriage affects reproductive health problems of infections, bleeding, LBW, premature, fever/seizures, miscarriage, no contraception and unwanted pregnancies. There was a significant relationship of early marriage with reproductive health problem of respondent with $p < 0.05$. High education, access to income-generating jobs, family support, adult marriage, promotion of sexual and reproductive health rights for women are essential to reduce maternal and child mortality and improve female reproductive health.

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