

SOCIO-ECONOMIC DETERMINANTS OF AGE AT FIRST MARRIAGE AMONG WOMEN AND EARLY MARRIAGE WOMAN IN WEST SUMATERA

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Abstract

The purposes of this study is to analyze the determinants of age of first marriage of women and determinants of early marriage in West Sumatera by using Data SUSENAS 2014. This research use multiple linear regression analysis to analyze the effect of vector characteristics of individuals and households to the age of the first marriage of women in West Sumatera and logistic regression analysis to analyze the individual characteristics and the characteristics of the parents as a determinant of early marriage in West Sumatra. The study found that women's education, women working status, region of residence, household welfare level views of the use of fuel for cooking, and poverty have significantly influence the age of first marriage in West Sumatera. The decision to get early marriage influenced by individual characteristics, parents and household. This research found that the region of residence, education of head of household and the number of household members partially have significantly influence to the decision early marriage girls aged 15-20 years in West Sumatera , while the level of education of girls aged 15-20 years, the ratio of food expenditure, the work of parents, parental employment and home ownership status had no significantly effect on the decision to get Marriage early of women aged 15-20 years in West Sumatera.

Keywords: *age at first marriage, women, early marriage*

I. Introduction

Population is the central point in the process of sustainable development because of population is an actor and also get benefit of development. This concept is translated further into the concept of " development pertaining to the population". Development pertaining to the population (people-centered development), is a planned development to the conditions and population dynamics. All planning must be 'population responsive', ie pay attention and consider the data and information of the complete population, ranging from the number, growth, age structure, distribution, and quality of the population. On the other hand, the government must also be able to formulate population policies in order to achieve the management of demographic situation that expected (population-Influencing policies).

Age of first marriage is one of the indicators to describe the level of fertility, because the younger have more long-mating reproductive years, so the greater the chances of giving birth more children. Thus the number of children born to women in rural areas will be greater than the number of children born to women in urban areas.

Age at marriage is of particular interest because it marks the beginning of regular exposure to the risks of pregnancy and childbearing hence affecting fertility levels and population growth especially in countries with low contraceptive rate. Marriage forms the basis of family formation and, as such, is an important determinant of fertility by increasing or decreasing duration of exposure to the risk of childbearing. Women who marry early will have, on average; a longer period of exposure to the risk of pregnancy, often leading to higher completed fertility. Variation in age of entry into marriage helps explain differences in fertility across populations and also helps explain trends in fertility

within individual populations over time. Therefore, age at first marriage has a direct bearing on fertility behavior (Agaba 2007).

Agaba (2007) in western Uganda found that the median age at marriage was 17.4. Women's age at marriage varied by education level, occupation, ethnicity, age, district of residence and religion. Girls access to education and information on reproductive health should be emphasizes and providing them with basic life skills to enable them to avoid early marriage.

Sarkar (2009) in Bangladesh find that women in Bangladesh engage in sexual activities at an early age before 20 years. Early marriage has a significant effect on divorce and remarriage and late marriage is also, associated with a significant increase in female schooling, adult literacy and quality of marital life. Islam religion has a more tendency to early marry. Findings need to be scientifically used in suitable programs addressing the case of fertility control in the developing countries as well as in Bangladesh.

While in Indonesia, many people get Marriage at an early age and the people who delay marriage or not marry. There are problems that cause early marriage and postpone of marriage. For example, early marriage often reflect matrimonial match or the result of unplanned teenage pregnancy, and the couple in marriage is most likely immature. Postponement of marriage has not been received well by the people of Indonesia, the unmarried women in their 30s face negative stereotype and social stigma, although men do not have similar difficulties. Some studies identify factors that influence the age at first marriage (Jones 2008) are a region of residence, education, work participation, religion, socio-economic status, parental education, occupation and income elderly parents.

Early marriage is very influential on the health condition of the mother and baby. Early marriage increases the risk of maternal and infant mortality. West Sumatra conditions showed that an increase in infant and child mortality rates in the last five years. Significant improvement occurred in the death of infants aged 0-7 months and the deaths of children aged 1-5 years. In addition, for the area in West Sumatra infant and child mortality in the District is higher than in the city. This indicates that the decline in child and maternal health as well as the gaps between districts and cities in West Sumatra. This phenomenon is also supported by research from Dewi Putri Zaini et al (2014) who found that the age of first marriage have a significant negative effect on the demand for children in West Sumatra, which means that the smaller the age of the first marriage, the higher the demand for children. This condition states that if a lot of early marriage occurs mean the greater birth rate and an increase in population.

Based on population census data estimated the age of the first marriage of women in West Sumatra shows that the age of first marriage rural areas is lower than in urban areas. However, there are fluctuations in the age of first marriage is based on the population census in 1990, 2000 and 2010. Based on the population census of 2010 saw the first marriage age faster when compared with the 2000 census is 23.7 years for women in urban areas and 22.2 years for women countryside. This is influenced by the level of education of women. The higher the level of education of women it will be the old age of the first marriage.

The results of the population census of 2000 and 2010 generally level of education a woman affect the average age of first Marriage. This results show that women who are educated elementary and junior high have lower age at first marriage than women who had high school and college. While the women were college educated on average marry at age of 25 years. It can be said that the higher the level of education a woman then the higher the age of first marriage.

Moreover, it also can be seen from the number of births by mother and total birth rate showed that a decline in the birth rate per 1,000 women for women aged 15 -19 years.

This means that the birth rate in the increasingly early marriage can be suppressed. In addition, the highest birth rate per 1,000 women are maternal age range 25-29 years. The birth rate in mothers aged 15-29 years increased but when the mother's age at the age of 30-49 years the birth rate has declined. Besides individual characteristics, the characteristics of the parents and households will also greatly influence the age of first marriage of women.

II. Teoritical Framework

A Simple Model of the Marriage Market

Consider a society in which there is an equal number of men and women and all individuals are ex ante identical and live for two periods. Alone, each person consumes his or her own income Y . If Marriage, the partners share consumption, and each consumes $2Y$. In addition, marriage entails a nonmonetary return that both partners enjoy. This “quality of match” is randomly distributed, and different couples draw different values of θ at the time of marriage. However, the future quality of match is uncertain.

Meetings are random. At the beginning of each period, each person randomly meets a person of the opposite sex of his or her age group in a given cohort. We assume that marriage binds for at least one period. At the end of the first period, divorce can occur, but remarriage is possible only with unattached individuals who never Marriage before or have divorced. In the first period, one meets an eligible partner with certainty. The probability of each individual meeting a single person of the opposite sex in their second period of life equals the proportion in the population of unattached individuals of the opposite sex, divorced or never Marriage. This assumption is crucial for our analysis and implies an “increasing returns meeting technology,” whereby the more singles are around, the easier it is for each single person to find a match. The logic behind this assumption is that meetings often occur at work or school and are “wasted” if the person you meet is already Marriage.

Marriage also provides the partners with the option to produce (exactly) two children (there is no out-of-wedlock birth). The production of children entails a cost c to the parents in the first period and a benefit that both parents enjoy in the subsequent period. The utility of a child depends on the proximity to the natural parents. It equals q^* if the children live with both natural parents and q_0 if they live with only one of the parents or in a stepfamily; we assume $q^* > c > q_0$. Both parents treat the utility of the child as a public good, and it enters additively into their preferences. Partners with children find divorce more costly because the welfare of the children is higher if children are raised with their natural parents.

On meeting, the quality of match θ is revealed, and the matched partners decide whether to marry or not. If they choose to marry, they can further decide whether they wish to have children. Because of the delayed benefits, the production of children is a relevant option only for partners in the first period of their life. During each period, there is a shock θ to the quality of match that is revealed at the end of the period. Having observed the shock at the end of the first period, the partners decide whether to divorce or not. The random variables θ and θ' are assumed to be independent across couples. In particular, for each reMarriage person, the values of θ in the first and second marriages are independent. We denote the distributions of θ and θ' by $G(\cdot)$ and $F(\cdot)$ with densities $g(\cdot)$ and $f(\cdot)$ respectively. We assume that these distributions have zero mean and are symmetrical around their mean.

We assume that all goods in the household, consumption, match quality, and children are public and that both partners enjoy them equally. Hence, by assumption, men and women benefit equally from marriage or divorce. The assumptions of public goods and

equal numbers of men and women generate perfect symmetry between genders that allows us to set aside, in this chapter, conflict and bargaining between the partners.

The Marriage Model

Let us define an equitable marriage as one in which sexual behavior and the allocation of household time and income are determined completely by comparative advantage and each individual's preferences. A marriage is equitable even if the wife does the bulk of household services as long as this allocation reflected genuine altruism or an acceptable compensation for services rendered. The actual services provided by each spouse in the typical marriage can deviate from those that should be provided in equitable marriages. The marriage price is defined as the dollar measure of the lost welfare of wives due to their provision of services beyond those that should be provided in an equitable marriage. These excess services may include ceding control of an excessive share of household income to the other spouse, requiring the dominated spouse to do an excessive share of household production, and/or ceding to the dominating spouse excessive influence over the choice and frequency of sexual activities.

Once the marriage price is defined, I use marriage offer curves to analyze the marriage decision. For each gender, the marriage offer curve is the relationship between the marriage price and the quantity willingness to marry. Marriage offer curves are culturally specific, and we would expect to find considerable variation in them across countries.

A number of factors other than the marriage price influence female and male marriage decisions. The male marriage offer curve is influenced by male preferences and the number of men available. In addition, some studies (Frances Goldscheider and Linda Waite 1986) indicate that marriage is a normal good for men so that they will be more willing to marry as their earnings increase.

Female marriage offer curves are influenced by the income of men. If male income declines, men may be perceived as less valuable so that fewer women seek marriage (Valerie Oppenheimer 1988; Francine Blau et al. 2000). Becker suggests that the female–male earnings ratio also influences female marriage offer curves. He (1981: 248) contends that an increase in the female–male earnings ratio reduces the gains from the sexual divisions of labor so that the value of marriage to husbands is reduced.

Female marriage offer curves are also influenced by female income potentials. Independent of male incomes, as female earnings rise, fewer women may seek marriage. Blau et al. (2000) find that as women's earnings increase, marriage rates decline. McCrate (1987) finds that her measure of female economic independence is inversely related to marriage rates.

Female marriage offer curves are influenced by the viability of alternatives to marriage available to women. By living alone, many gains from joint production and joint consumption are lost. If, however, some of these losses are compensated for by society – such as through the provision of childcare services – alternatives to marriage become more viable. Joint production, joint consumption, and sexual intimacy can also be provided by alternatives to marriage, including other forms of collective living arrangements among unmarried adults. As the price and access to these alternatives vary, the female marriage offer curves will shift. Finally, since childrearing responsibilities limit many women's ability to function independently, changes in the preference for children also influences female marriage offer curves.

Let us begin by assuming that in the absence of patriarchal policies, F_0 and M in figure 1 reflect the initial female and male marriage offer curves respectively. At a very high marriage price, p_2 , the quantity of men willing to marry equals s_2 , while at p_1 , the

quantity of women willing to marry equals s_1 . The male marriage offer curve is positively related to the marriage price. As the marriage price declines *ceteris paribus*, a smaller quantity of men are willing to marry. The female marriage offer curve is inversely related to the marriage price. As the unequal services provided by women declines, the quantity of women willing to marry rises.

At negative prices, the quantity of females willing to marry is greater than the quantity of males willing to marry so that the marriage price rises. At positive prices, the quantity of females willing to marry is less than the quantity of males willing to marry so that the marriage price declines. Let us assume that the marriage market is efficient so that its price adjusts until equilibrium is established.⁵ These initial offer curves are drawn so that the marriage price equals zero; no excess services would be paid to either spouse.

Now let us introduce patriarchal policies that limit women's alternatives to heterosexual marriages and/or lower their earnings potential. Since at each marriage price more women would be willing to marry, these policies would shift the female offer curve to F_1 . Now when the marriage price equals zero, the quantity of women willing to marry is greater than the quantity of men willing to marry. In this case, the marriage price rises until a new equilibrium price is attained at p^* , reflecting excessive services provided to husbands in the typical marriage.

This outcome reflects the price paid by women in the typical marriage. The actual marriage price will deviate around this market-determined price according to the bargaining power of individual women.⁶ This mirrors the pattern in labor markets where the wage paid to individual workers deviates around the market-determined wage according to their bargaining power.

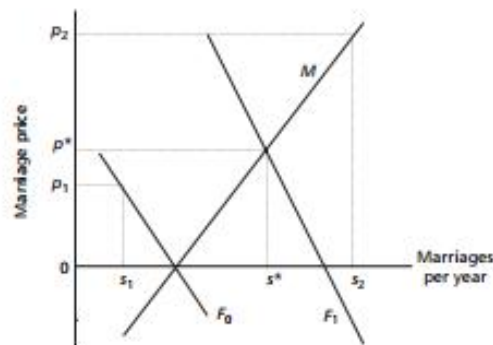


Figure 1. Marriage Market

Hypotheses Development

- Hypothesis 1** : Individual Characteristics has significant effect to age at first marriage.
- Hypothesis 2** : Household Characteristics has significant effect to age at first marriage.
- Hypothesis 3** : Individual Characteristics has significant effect to early marriage decision.
- Hypothesis 4** : Parents Characteristics has significant effect to to early marriage decision.

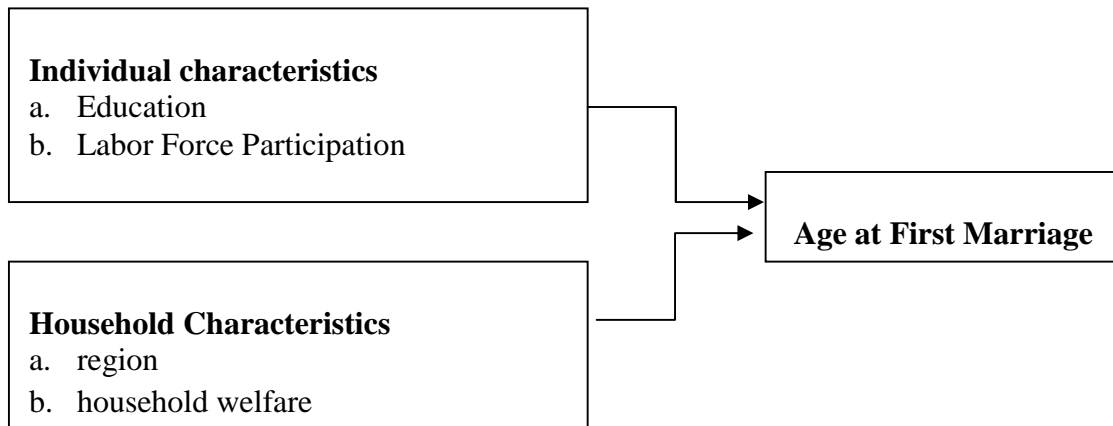


Figure 2. Research Framework Of Age at First Marriage

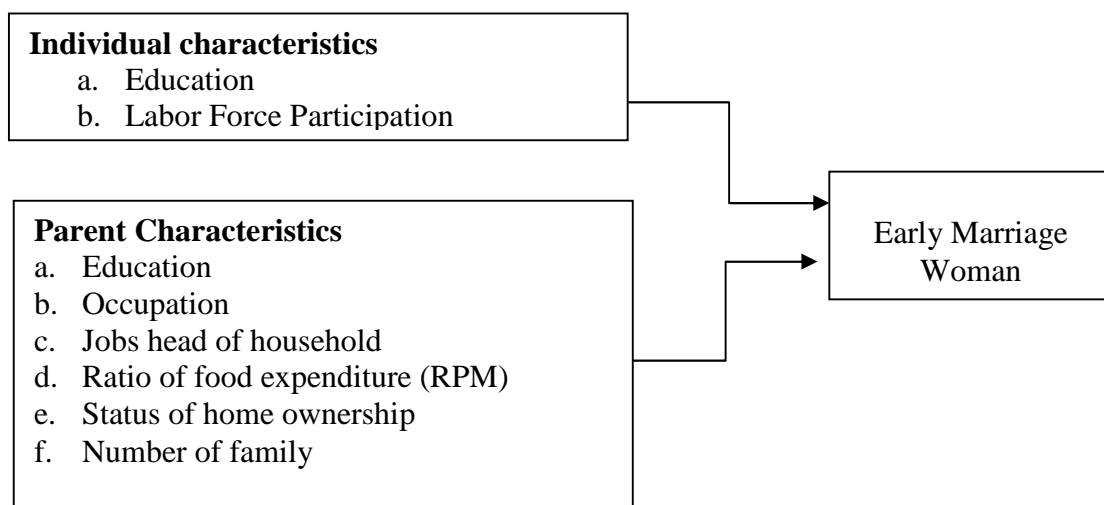


Figure 3. Research Framework Of Decision for Early Marriage

III. Research Methods

Data Source and Methodology

The data used in this study has been taken from Socio Economic (SUSENAS) in West Sumatera 2014. This study used two models with two different subsamples. In general, the unit of analysis in this research is at an individual level. Analysis of the first model aims to determine the determinant of the first marriage age of women in West Sumatra. The unit of analysis in the first model is the population aged 15-49 years and people when surveyed were Marriage. While the second model is a determinant of early marriage on women in West Sumatra. The unit of analysis in this model are women aged 15-20 years.

Models and Methods of Analysis

Multiple linear regression analysis aimed to examine the influence of individual characteristics (age, education, occupation, region of residence) and family characteristics (family economic status, education, occupation, and income of parents) to the age of the first marriage of women in West Sumatra. While the technique of logistic regression analysis will produce a model of the determinants of early marriage.

IV. Result And Discussion

Socio-Economic Differentials of Age at First Marriage

Table 1 shows that of the respondents who use firewood as fuel for cooking has a tendency to marry young (<21 years) in the amount of 33.62 percent. This indicates that the majority of the population who live in rural areas with characteristics using firewood as fuel for cooking. on the other hand if we seen from household poverty by using receiver indicator "Raskin" also seen that 99.27 percent of household respondents did not receive "Raskin" rice. while from the territory of residence is seen that dominant women living rural areas and the population of young Marriage women living in urban areas were Marriage over the age of 21 years. This indicates that the region of live determine the age of women's first marriage. Women who live in urban areas tend to have higher education levels, thus increasing their chances to get a job so that women the time to get Marriage.

Furthermore, the educational level of women in West Sumatra dominant Marriage young by 55.28 percent. Women who never attended school or did not complete primary school education tend to marry young in the amount of 21.81 percent. But the higher the level of education of women will increasingly delay the time to get Marriage.

Table 1. Socio-Economic Differentials of Age at First Marriage

Indicator	D_age of first Marriage		Total	
	>=21 years	<21 years		
firewood	Using firewood	15.73	33.62	49.35
	Do not using firewood	28.99	21.65	50.65
Total		44.72	55.28	100.00
"raskin" Receiver	Raskin receiver	0.15	0.57	0.73
	Do not raskin receiver	44.57	54.70	99.27
Total		44.72	55.28	100.00
Tregion	Urban	23.50	16.35	39.85
	Rural	21.22	38.93	60.15
Total		44.72	55.28	100.00
Education of women	Not school/cot elementary	4.56	21.81	26.37
	Elementary school	5.98	16.17	22.15
	Junior high school	6.73	10.01	16.74
	Senior high school	17.36	6.59	23.95
	Diploma 2	1.48	0.20	1.68
	Diploma 3	2.05	0.13	2.18
	Bachelor (S1)	6.07	0.36	6.42
	Master/Doctor (S2/S3)	0.49	0.02	0.51
Total		44.72	55.28	100.00
Working with get earnings	Working with get earnings	19.00	16.89	35.88
	Others	25.73	38.39	64.12
Total		44.72	55.28	100.00

Source : Data Susenas 2014 and processed 2015

Variable works faster or later will affect a woman to get Marriage. If the woman does not work it more likely to marry young in West Sumatra. As for women who work with an income is one of their reasons for delaying the time to get Marriage.

Socio-Economic Differentials of Early Marriage

Table 2. Socio-Economic Differentials of Early Marriage

	Indicator	Marriage		Total
		Others	Marriage	
Region	Rural	55.50%	2.70%	58.20%
	Urban	41.40%	0.40%	41.80%
Total		97.00%	3.00%	100.00%
Education	No school	2.80%	0.30%	3.00%
	Elementary school	25.70%	0.60%	26.30%
	Junior high school	47.90%	1.20%	49.10%
	Senior high school	20.40%	0.90%	21.30%
	DIPLOMA	0.10%	0.00%	0.10%
	Bachelor	0.20%	0.00%	0.20%
Total		97.00%	3.00%	100.00%
Spending per capita	Others	10.10%	0.20%	10.20%
	Poor	86.90%	2.80%	89.80%
Total		97.00%	3.00%	100.00%
Ratio of food and no food	Under median	49.10%	0.90%	50.00%
	same or above median	47.90%	2.20%	50.00%
Total		97.00%	3.00%	100.00%
Parent's education	No school/do not attended elementary	24.40%	1.70%	26.10%
	Elementary school	25.60%	0.80%	26.40%
	Junior high school	17.30%	0.40%	17.80%
	Senior high school	22.50%	0.10%	22.50%
	Diploma (D2)	0.70%	0.00%	0.70%
	Diploma (D3)	2.00%	0.00%	2.00%
	Bachelor (S1)	3.90%	0.00%	3.90%
	Master/Doctor (S2/S3)	0.60%	0.00%	0.60%
Total		97.00%	3.00%	100.00%
Employment status of household head	Non Formal	73.40%	2.70%	76.00%
	Formal	23.60%	0.40%	24.00%
Total		97.00%	3.00%	100.00%
Home ownership status	No home	20.70%	0.30%	21.00%
	Have home	76.30%	2.70%	79.00%
Total		97.00%	3.00%	100.00%
Number of household members	4	33.50%	0.70%	34.20%
	>4	63.50%	2.30%	65.80%
Total		97.00%	3.00%	100.00%

Sumber: Data Susenas 2013 dan processed 2015

The decision of women Marriage early at aged 15-20 years are affected by many factors, including region , level of education, spending per capita, the ratio of food and non-food, as well as characteristics of the parents and the household. Judging from residential areas, women at aged 15-20 years who live in rural areas more early Marriage compared to women aged 15-20 years who live in urban areas. However, overall it appears that only 3 percent of women aged 15-20 years were Marriage early. Next, if we seen the

level of education of women at age 15-20 years who get married early is that dominant in under senior high school.

Moreover, judging from the characteristics of the parents and the household early marriage is also fueled by the ability of the family economy. Based on data from Table 2 shows that the women aged 15-20 years were early marriage are dominant from poor families amount 2.80 percent. Table 2 shows that the majority of women aged 15-20 years were early marriage come from families whose parents have low education. Based on data from Table 2 shows that the education their parents who never attended school / did not complete primary school by 1.7 percent. Also if we see from the work of parents in the non-formal sector is greater to early marriage compared with those masters who work in the formal sector. While the home ownership status of households dominant had home by 2.70 percent than the homeless.

On the other hand, the number of household members also influence early marriage. The greater the number of dependents, the greater the expenditure to be incurred households to finance their children's lives, especially for consumption needs, thus minimizing their chances to be able to send their children to a higher level. Seeing this condition triggers their children to drop out of school, so it will be the trigger to get Marriage at an early age. This is evident from the table 2 which amount 2,30 percent of women at age 15-20 years were Marriage early come from families with number of dependents family more than 4.

Results of Multiple Regression Analysis on Age at First Marriage

Here is an output data processing of age at first marriage women in West Sumatra Province.

Table 3. Regression Analysis of Age at First Marriage Women in West Sumatra.

```
. regress usiapernikahanpertama kayubakar penerimaraskin wilayah edu bekerjadenganpenghasilan, robust
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```
Linear regression                               Number of obs =   11143
                                                F(   5, 11137) =  802.22
                                                Prob > F       =  0.0000
                                                R-squared      =  0.2735
                                                Root MSE      =  3.6587
```

usiapernikahanpertama	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
kayubakar	-.1745896	.079896	-2.19	0.029	-.3311999 - .0179792
penerimaraskin	-.658148	.3733055	-1.76	0.078	-1.389893 .0735968
wilayah	.7502415	.0792038	9.47	0.000	.594988 .905495
edu	.3839994	.0074594	51.48	0.000	.3693776 .3986213
bekerjadenganpenghasilan	.5181105	.0734571	7.05	0.000	.3741216 .6620994
_cons	17.67217	.0936415	188.72	0.000	17.48861 17.85572

Multiple linear regression equation for the age at first marriage as follows:

$$\widehat{UPP} = 17.672 + 0.384 Edu + 0.518 Work + 0.750 Wil - 0.175 KYB - 0.658 Raskin$$

Equation 1 shows that education is positive and significant effect on age at first marriage of women in West Sumatra. This means that the higher the level of education of women then the longer the woman to get Marriage, and vice versa with a regression coefficient 0,384. If the education of women increases by one year the first marriage age will increase by 0,384 years and vice versa.

The results of this study are consistent with many previous studies which state that there is positive and significant correlation between education with age at first marriage of women (Keeley, 1979; Chaudhury, 1984; Saardchome & Lemaire, 2005; Carmichael, 2011). Based on research conducted by international organizations such as UNICEF, the women with basic education are significantly less likely to marry before age 18 years, while secondary education has a greater impact to the age of first marriage (Smith, Batu & Kahando, 2012). Certainly, in countries with women that have higher levels of education, they will enter the labor market than women in countries with lower levels of education.

Someone who has a higher level education will provide insight and knowledge to continue their education and seek a better life than before so that it will postpone the decision to get Marriage early. For women with higher education can provide better career opportunities so that one can enter into marriage with better financial condition, mental, knowledge and skills. Education can influence a woman to delay the age of marriage. The longer a woman to attend classes, then theoretically the higher the age of first Marriage. A woman who graduated from junior high school, then at least he was Marriage at the age of 16 years and over, when Marriage at the age of senior means at least 19 years old and then when they follow college education it means they will get Marriage at least aged over 22 years (Hanafi Hartono, 1996 in Utina 2014).

Status of working women has a significant and positive effect on age of first marriage of women in West Sumatra, with a regression coefficient of 0.518. This means that if a woman with the status of work and have an income it will be increase age of her marriage which increased 0.518 years and vice versa. Status of work in a community can demonstrate the economic situation of the community. The ease in obtaining a job opportunity or opening a lot of jobs are the economic indicators of a region or a country. Ownership of work by a woman can bring a decision to delay the age of marriage.

Furthermore, residence area also has positive significant effect to the age of the first marriage of women in West Sumatra. If a women living in the region with the characteristics of the city it will the longer the age of marriage with regression coefficient 0.750, meaning that if the woman lived in the city then first marriage age will increase by 0.750 years. Furthermore Vu (2005) in sociology-related issues with the age of the first marriage with education explained that women who live in urban areas and get a college education and the necessary skills tend to marry at the age more than 23 years. If a women receive higher education and a good job and a decent, women will tend to focus the work compared to getting Marriage, and raising a family. Therefore, some of the leaders of the modernization theory states that education is made of women in urban areas tend to marry later than women in rural areas.

This geographic characteristics can indicate social and economic aspects of society. People living in urban areas or already developing normally have a mindset that is more advanced and want to grow things related to socio-economic costs as well as the perception of the community who have been in urban areas or developed. The demands of life are higher for urban or developed areas will force them to meet the necessary things as competitiveness, such as education, employment, and others. It can be seen from the high social and economic costs on society that are in the area or advanced cities. With the conditions as stated above, the decision to marry would be postponed until some aspects of the above are met.

Other variables that influence the age of first marriage is the level of household welfare. Household welfare level that proxied by of the use of fuel for cooking. The results showed that if households use firewood as fuel for cooking, the age of first marriage will decrease by 0.175 years. Thus, it means that women will soon be getting Marriage.

Another indicator used is the level of household poverty. The poverty rate of households views of whether a household is a household Raskin recipients or not. The results showed that poverty has a significant negative effect on the age of first marriage in West Sumatera with a regression coefficient of -0.658. This means that if a house is the recipient raskin the faster the woman to marry amounted to 0.658 years.

Furthermore, the overall independent variables significantly influence the age of first marriage in West Sumatera. The value of $R^2 = 27.35$ percent means the variable contribution of education, working status, region of residence, households welfare and poverty together against to first marriage age of women in West Sumatera at 27.35 percent, while the remaining 72.65 per cent is determined by other variables outside the research model.

Results of Logistic Regression Analysis on Early Marriage Women

The results of logistic regression Early Decision Marriage Women in West Sumatera is

$$\ln \left[\frac{p}{1-p} \right] = 4,402 + 0,066 \text{ Edu} - 1,286 \text{ WIL} - 0,008 \text{ RPM} - 0,159 \text{ Edu KRT} - 0,051 \text{ SPKRT} + 0,423 \text{ LPKRT} + 0,436 \text{ Home} + 0,247 \text{ Pop} \quad (2)$$

Based on the processed data is seen that education has a positive but not significant effect on the decision early Marriage women in West Sumatera. The odds ratio of 1.068 education means that the higher education of women at aged 15-20 years, the possibility of getting Marriage early age will be even greater. Value marginal effect of education of women aged 15-20 years at 0.0099 means that the education of women increased by 1 year, then the possibility of women aged 15-20 years to get Marriage will increase by 0.0099 points or 0.99 percent.

Residential areas has a significant negative effect on the decision early Marriage women at aged 15-20 years in West Sumatera. If women at aged 15-20 years living in urban areas so the less chance of getting Marriage early age compared to the women who live rural areas. The odds ratio of area 0.276 means that the possibility of early marriage women at aged 15-20 years living in smaller urban areas compared to women aged 15-20 years who live in rural areas. Value marginal effect -0.0185 means that when women aged 15-20 years living in urban areas, the possibility of early marriage will be decreased by 0.0185 points or 1.85 percent.

Table 4. The results of logistic regression, odds ratio and Marginal effect Marriage Early Decision

Variable	Coef	Odds Ratio	Marginal effect	Z	P> z
Edu	0,066	1,068	0,0099	1,16	0,246
Region (WIL)	-1,286	0,276	-0,0185	-2,77	0,006
Ratio of food expenditure (RPM)	-0,008	0,992	-0,0001	-0,66	0,509
Edu KRT	-0,159	0,853	-0,0023	-4,19	0,000
Working status of head of household (SPKRT)	-0,051	0,950	-0,0168	-0,11	0,913
Dummy of jobs head of household (LPKRT)	0,423	1,527	0,0065	1,24	0,216
Status of home ownership (Home)	0,436	1,548	0,0058	0,89	0,371
Number of family (Pop)	0,247	1,280	0,0037	3,11	0,002
Constant	-4,402	0,012		-2,79	0,000

Variable ratio of food expenditure has a significant negative effect on the decision early Marriage women at aged 15-20 years in West Sumatra. The odds ratio of 0.992 means that the higher the ratio of food expenditure then it is likely to marry early age will be smaller. Value of marginal effect -0.001 means manakan expense ratio increased by 1 percent, the possibility of women aged 15-20 years to get Marriage early age will decrease by 0.0001 points or 0.01 percent.

Education of head of household significant negative effect on the decision to get Marriage early population at age 15-20 years in West Sumatra Province.

If the education of household head increases the probability of children at age 15-20 years were early marriage will be decline. Odds Ratio value 0.853 means that the higher education of head of household then the chances of girls at age 15-20 years to early marriage will be getting smaller. Value marginal effect of education of household head of -0.0023 means of education of household heads increased by one year, then the likelihood of girls at age 15-20 years to get Marriage early will decrease by 0.0023 points or 0.23 percent.

Employment status of household head has no significant and negative effect on the possibility of early marriage women at age 15-20 years. If the head of the household work in the formal sector, then the probability of girls at age 15-20 years Marriage early will decrease. Odds Ratio value of 0.950 means that the likelihood of girls at age 15-20 years Marriage early whose parents work in the formal sector is smaller than the non-formal sector. Value marginal effect variable employment status of household head -0.0168 means that when the head of household work in the formal sector, the possibility of children women at age 15-20 years to get Marriage early decreased by 0.0168 points or 1.68 percent.

Furthermore, job of head of the household has no significant and positive effect on the chances of early marriage of young girls aged 15-20 years. The odds ratio of jobs of household heads is 1,527 meaning that the probability of girls at age 15-20 years of household heads who work in the agricultural sector to get Marriage early is greater than the head of household who work in non-agricultural sector. Marginal effect variable employment of household head is at 0.0065, as the head of household works in agriculture, the possibilities for early Marriage of girls at age 15-20 years will increase by 0.0065 points or 0.65 percent.

Furthermore, home ownership status has no significant and positive effect on the chances of early marriage of young girls aged 15-20 years. The odds ratio of home ownership status is 1,548 meaning that the probability of children women aged 15-20 years from households who have a house to get Marriage early is greater than households that do not own a home. Marginal effect of home ownership status variable is equal to 0.0058 when households have a home then the chances for early marriage women at age 15-20 years will increase by 0.0058 points or 0.58 percent.

Variable number of household members has a significant positive effect on the chances of early marriage of young girls aged 15-20 years. If the number of family members increases the probability of children women aged 15-20 Marriage early will be increase. Odds Ratio value of 1.280 means that the more the number of household members, the possibility of early marriage of young girls aged 15-20 years will be even greater. Value marginal effect of household members 0.0037 meaning that if the number of household members increased by one person then the chances of children women aged 15-20 years to get Marriage early will increase by 0.0037 points or 0.37 percent.

Number of family members is one of the causes of early marriage. The greater the number of family members, the greater the possibility of parents marry of their children at a young age with the assumption that will alleviate the burden the family. The reason why

early marriages are also quite varied, but in fact there are still some reasonable people get Marriage because their parents told. Usually also supported by the state with low economy, so they asked marriage of his daughter only to reduce the burden of household and independently. Some people get Marriage on their own because it was already old enough and it's time to get Marriage although their age still not yet entered their teens and twenties. This is consistent with the results of research Fatmawati, that the number of family members influence the occurrence of early marriage. (Stang 2011).

V. Conclusion

Women education has positive and significant effect on age of first marriage of women in West Sumatra, Status of working women has positive and significant effect on age of first marriage of women in West Sumatra, residence area of women also has positive significant effect on age of first marriage of women in West Sumatra, the welfare of household seen from the use of fuel for cooking, poverty have a significant negative effect on the age of first marriage in West Sumatra.

The decision to get Marriage early influenced by individual characteristics, the elderly and households. The study found that the region of residence, education of head of household and the number of household members partially influence significantly to the decision of early marriage of young girls aged 15-20 years in West Sumatra, while the level of education of girls at age 15-20 years, the ratio of food expenditures , the work of parents, parental employment and home ownership status had no significant effect on the decision to get Marriage early women at age 15-20 years in West Sumatra.

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