Effect of Wife's at First Marriage on Fertility: A Theoretical Perspective

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Abstract. This study aimed to examine the description of the effect of age at first marriage on fertility. This type of research is a literature study examining references from books, journals, articles, documents, and data from the Central Statistics Agency. The analytical technique used in this study is qualitative analysis, namely by describing the findings of data and information in the form of narratives and discussions related to the effect of age at first marriage on fertility. The results of this study indicate that the age at first marriage greatly determines fertility or the number of children. If the age at first marriage is high, the number of children will undoubtedly be higher. Therefore, the government must make more preventive and educational efforts for the productive age, especially 17 years and over, to limit the number of births. They have to mature to decide when to get married because it is related to Indonesia's increase and population growth.

Keywords: age; wife; fertility; marriage.

INTRODUCTION

The world's population reaches seven billion and will jump to nine billion in 2045. Over three-quarters of the world's population live in developing countries, Indonesia [5]. There are three main elements of Indonesia's population challenges today. First, quantity is the fourth most populous country in the world with high population growth. Second, the quality of human resources is relatively low, as reflected in the [13], which places Indonesia at 124th. Third, unequal distribution and mobility. One component that affects population growth is fertility, which increases the population [6].

Fertility is the ability to produce offspring associated with female fertility (fecundity) through marriage. Marriage is a physical and spiritual bond between a man and a woman as husband and wife to form a happy and eternal family (household). The purpose of marriage is to start a happy and lasting family. For that, husband and wife need to help and complement each other to develop their personality to support and achieve spiritual and material welfare. This law states that a marriage is valid if it is carried out according to the law of each religion and belief. Besides that, each marriage must be recorded according to the applicable laws and regulations [8].

The recording of each marriage is the same as recording important events in a person's life, such as births and deaths, that are also included in the records register. In addition, marriage has a relationship with population problems. A lower age limit for a woman to marry results in a higher birth rate. This law determines the marriage age limit for men and women, which is 19 years for men and 16 years for women. The rights and position of the wife are in balance with the rights and role of the husband both in domestic life and in association with society. So that everything in the family can be negotiated and decided jointly by husband and wife [7].

The population theory explains that the birth rate will be higher if it cannot suppress the number of young marriages. Therefore, the problem that has occurred so far is that no special regulation regulates the number of children. Another issue currently happening is related to the high
birth rate in Indonesia, so population growth is increasing. It is necessary to analyze a problem related to the causative factor of population growth, namely the age at first marriage. The birth restriction is a determinant in suppressing the growth rate and population growth. Therefore, it is necessary to regulate a regulation related to anti-natality. However, Indonesia still needs policies related to reducing the population because it is a pluralist country. There is also no legal certainty, and procedures related to limiting the number of children is only programmatic, namely through the population and family planning agency, such as the promotion of two children is enough. Efforts must be made to educate the productive age population on how they will determine the age of their first marriage [11]. The aim is to reduce the birth rate because if we analyze logically, the age at first marriage will determine the number of children to be produced.

Literature review

Basic Theory of Fertility. The term fertility is often referred to as live birth, which is the release of a baby from a woman's womb with signs of life, such as breathing, screaming, moving, heart throbbing and so on. Meanwhile, parity is the number of children a woman has. If there are no signs of life at birth, it is called still live, which in demographics is not considered a birth event.

The physiological ability of a woman to give birth or participate in reproduction is known as fecundity. The absence of this ability is called in fecundity, sterility or physiological infertility.

The analysis of fertility and the analysis of the other two demographic components, namely mortality and migration, can be grouped into three discussion sections. First, it discusses the basic concepts and measures of fertility. Second, discuss techniques for calculating fertility measures, such as CBR, ASFR, TFR, GRR, NRR, etc. Third, discussing various matters concerning the causes of fertility and its impact on multiple aspects of life.

The study of fertility stems from the discipline of sociology. Before other fields systematically discussed fertility, the sociological study of fertility had already begun [14]. For a long time, the population has been a sub-field of sociology. Most of the population analysis (besides formal demographics) is sociological analysis. By [4] have developed various theoretical frameworks on fertility behaviour which are essentially sociological. Most of the population analysis (besides formal demographics) is sociological analysis. Then, he developed different theoretical frameworks on fertility behaviour which are essentially sociological [4]. Authors [4] conducted sociological research on fertility and put forward the factors that affect fertility through what is referred to as "intermediate variables". According to [4], social, economic and cultural factors that affect fertility will be through "intermediate variables". 11 intermediate variables affect fertility, each of which is grouped into three stages of the reproductive process. Authors [4] put forward the factors that affect fertility through what is referred to as "intermediate variables". According to [4], social, economic and cultural factors that affect fertility will be through "intermediate variables". 11 intermediate variables affect fertility, each of which is grouped into three stages of the reproductive process as follows:

1. Factors that affect the occurrence of sex (intercourse variables)
2. Permanent celibacy: the proportion of women who have never had sex
3. The length of the reproductive period after or between sexual intercourse:
4. Voluntary abstinence
5. Abstinence due to compulsion (by impotence, illness, temporary separation)
6. Frequency of sexual intercourse
7. Fertility or infertility affected by unintentional factors
8. Using or not using a contraceptive method:
9. Fertility or infertility affected by intentional factors (sterilization, subincision, drugs, and so
10. Fetal mortality caused by unintentional factors
11. Fetal mortality by calculated factors

According to [4], the above variables exist in all societies because each variable has its own posi-
tive and negative influence (value) on fertility. For example, if abortion is not practised, then variable number 11 is favourable for fertility. That is, fertility can increase because there are no abortions.

**Fertility Determinants.** One component that affects population growth is fertility, which increases the population. Fertility is the ability to produce offspring associated with female fertility (fecundity). For this reason, Indonesia must have a Grand Design for Population Development (GDPK), which includes fertility, mortality and population mobility. The desired condition is that the population grows in balance as a prerequisite for achieving a population without growth, where fertility rates and mortality rates are decreasing, and the distribution is more even. In terms of fertility, it is the achievement of a balanced population growth condition in 2015 and will continue until 2035. To achieve a balanced population growth condition (PTS), it is expected that the total birth rate (TFR) is 2.1 per woman or net reproduction (NRR) of 1 per woman in 2015.

Family and community welfare will be easier to achieve if the number of children in the nuclear family is ideal, namely, "two children are better off", by adjusting the birth spacing and the number of children. A country's fertility level is influenced by several variables such as age, gender, marital status, use of contraceptives or other characteristics [2].

According to [4], the factors that affect fertility are intermediate variables, namely variables that directly affect and indirect variables. A country's fertility level is influenced by several variables such as age, gender, marital status, use of contraceptives or other characteristics. According to [4], the fertility rate is partly determined by background characteristics such as the perceived value of children, religion, housing conditions, education, and employment status, age at first marriage, income, and infant/child mortality. Every family has fertility norms and attitudes based on the above characteristics [1].

**METHODS**

This research method uses literature study type research. Data collection techniques are carried out by collecting secondary data through the library, namely journals, articles, books, and regulations and using data from the Central Statistics Agency [12]. Next, examine these references for qualitative analysis by describing the findings with narratives in the form of a discussion of how the description of the effect of age at first marriage on fertility then concludes on the findings of the data and information obtained.

**RESULTS AND DISCUSSION**

**First Marriage Age Fertility Analysis.** Age at first marriage also means at the start of the reproductive period of fertilization. The relationship between early marriage and fertility is negative. The younger the UKP, the longer the reproductive period or, the more children will be born. Age at first marriage can indicate the start of a woman's opportunity to become pregnant and give birth. Women who marry at a young age have a more extended period to get pregnant and give birth than those who marry at an older age and have more children. Based on the [12], the average age at first marriage is 18.1; ideally, it is 21 years for women and 25 years for men. One of the reasons a person's age at first marriage is high is several reasons, for example, education, mortality, work obsession and others. But in this case, what will be analyzed is related to the factors that affect the age of first marriage on fertility and how much fertility declines if the age of a person's first marriage is high.

Women's opportunities to obtain higher education are increasingly open at this time, causing many women to delay marriage. Women who spend more time on education will have shorter years of pregnancy risk because they spend many years giving birth to children in school. In addition, women with higher education tend to enter the labour market before marriage. Education can also increase women's knowledge of the information process regarding fertility choices and pregnancy behaviour [10].

In the future, more women with higher education levels will enter the labour market. In addition to the increasing number, employment requires specific skills, especially in service fields such as sales force, health, education, service, etc. The better the education level of women, the more they have the potential to make a more significant contribution to the family income so that the time they specifically devote to raising children is increasingly limited, which will affect the number of children they want. Age at first marriage is the first time a husband and wife have sex. According
to the Marriage Law, the minimum age for marriage for men is 19 years, and for women, they must be at least 16 years old. If married under the age of 21 years, it must be accompanied by the permission of the second or one of the parents or an appointed guardian.

The age of the first marriage carried out by every woman has a risk of giving birth. The younger the age at first marriage of a woman, the greater the risk faced for the safety of both mother and child. This happens because the womb of a young woman is immature to produce children or is not mentally ready for marriage. On the other hand, the older the age at first marriage, the higher the risk during pregnancy or childbirth. This happens because a woman's physical condition gets weaker towards old age. There are essential things in the age of first marriage, including:

1. Essential variables are affecting fertility. The younger a person’s first marriage age, the longer the reproductive period will be. This affects the fertility rate of women and the population in general.

2. Affecting population growth rate. Due to the extended reproductive period of women who do UKPM, the possibility of these women giving birth to many children will be even greater. In macro terms, this will lead to an increase in the population growth rate of an area. Age at first marriage affects the distance between generations. The younger the age at marriage, the shorter the age gap between mother and child. Of course, there are many very influential considerations to determine when the time is right in the age of first marriage. The factors that influence the age at first marriage are:
   - interpretation of religious teachings;
   - level of education;
   - socio-cultural situation;
   - opening job opportunities for women;
   - health;
   - economy;
   - matched pairs;
   - freedom to choose a partner.

The younger a person’s first marriage age, the longer the reproductive period will be. This affects the fertility rate of women and the population in general. The longer a woman’s reproductive period, the more likely she is to give birth to many children. In macro terms, this will lead to an increase in the population growth rate of an area. Age at first marriage is the first time a husband and wife have sex. According to several data sources, the average age at first marriage in Indonesia is still relatively low, under 20 years. Marriage under 20 years of reproductive health can be considered too young, mentally socially unprepared, and usually not well-established economically. In general, it aims to determine the causal factors that affect the age of first marriage in Indonesia. The research method carried out in this study used a qualitative approach. Informants in this study were couples of childbearing age (EFA) and prospective EFA or adolescents.

For example, in area X, we will examine several variables that become indicators of our research, as seen in the framework below. Still, here the author only emphasizes and analyzes the effect of age at first marriage on fertility. However, there are other factors besides age at first marriage, such as education, child expenses, income and others. In this case, the writer wants to explain how age at first marriage affects fertility [9].

![Figure 1 – Thinking Framework](image)

Fertility is the dependent variable, while the independent variables are child costs and age at first marriage. Furthermore, various statistical tests were used to test the level of significance or the closeness of the independent variable to the dependent variable.

\textit{t-test statistics.} To \textit{t}-test the significance of the effect of each independent variable on the dependent variable, the \textit{t}-statistical test was used at the 5\% significance level.

\textit{F-test statistics.} The \textit{F} statistical test is used to determine whether the model is valid (validity of model).

In connection with the analytical method used in testing the hypothesis, the variable limits used in solving the problem to estimate the model are:
age of First Marriage is the respondent's age at the time of first marriage.

Characteristics of Respondents based on age at the beginning of marriage aim to determine the age of women at the time of early marriage. The age of a woman's first marriage is closely related to fertility. Because if the age of the first marriage is getting younger, the closer it is to the age of the first menstruation, the longer the reproductive period. This means a longer risk of a woman getting pregnant and giving birth. For example, based on the results of the study (Table 1), the initial age of marriage under 20 years, with a percentage of 55%, was in the first rank, while for the early age of marriage in the year 21 to 25 with a percentage of 40%. It was in the second rank and for the last grade occupied by the early age of marriage in 26-30 years with a percentage of 5%.

| Age of First Marriage | Frequency | Percentage |
|-----------------------|-----------|------------|
| 20                    | 55        | 55.00      |
| 21–25                 | 40        | 40.00      |
| 26–30                 | 5         | 5.00       |
| Amount                | 100       | 100.00     |

**Effect of Age at First Marriage on Fertility.** The size regression coefficient of age at first marriage has a positive but insignificant effect on fertility, where the magnitude of the variable coefficient is 0.037. This means that for every additional year of age at first marriage, fertility decreases by 0.037, assuming other variables are constant. The statistical calculations for the variable age at first marriage (X2) obtained a t-value of 1.197 with a t-significance of 0.234. By using a significance (α) of 0.05 and a df (degree of freedom) of 93, the table value of 1.661 is obtained. Then the obtained t-count (1,197) < (1,661) indicates that the age at the beginning of marriage has no effect on fertility at the 95% confidence level.

Age at first marriage positively affects the meaning that the younger the woman is, the higher the fertility. However, the result is insignificant because the t-count is more remarkable than the t-table.

This is because the reality on the ground shows that women who marry early are not absolute. They have many children, and although a small number have 6 to 9 children, many have only 3 to 5 children. Fertility factors and socio-cultural factors also influence it. The fertility factor referred to here is a working woman who married for the first time at 14 years while she is now 32 years old with three children. This means that fertility rates tend to be low, and maybe also be because women have been influenced to use contraceptives issued by the National Family Planning Population Board. And socio-cultural factors also immensely affect the amount of fertility among poor households in the city of Makassar. Because some women tend to want to add children if they do not have a son or daughter, therefore he will stop adding children when the desired child is born.

The low age of the woman's first marriage is suspected to be due to the low level of education and financial ability, as well as the influence of socio-cultural factors. The low level of education and the family's economic capacity will encourage parents to marry off their daughters even though they are still young. Meanwhile, from a socio-cultural perspective, it generally occurs because of thoughts such as fear of their child becoming a spinster, pride if their child is quickly proposed and also wanting to reduce the burden (responsibility) as a parent if their child is married with the lowest age 14 years and the highest 28 years.

**CONCLUSIONS**

Based on studies that have been done that many factors affect fertility. Age at first marriage can indicate the start of a woman’s opportunity to become pregnant and give birth. Women who marry at a young age have a longer time to get pregnant and give birth than those who marry at an older age and have more children. The health office needs to develop service programs for the community to help regulate fertility in the family, such as increasing access to services and providing field officers who are easily contacted by the community. Health workers should further improve socialization counselling services on reproductive rights and gender and increase productive age education programs before deciding to marry.
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