Rural community transformation and fertility transition in Malaysia

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A R T I C L E I N F O

A B S T R A C T

The rural transformation experienced due to the fertility transition in Malaysia has proven to be very meaningful research. The research question of this study is aimed at the following motivations which led to a smaller number of children. This study used the factor analysis method to establish eight main groups of 65 items in the survey. The findings of this research will be beneficial for many people in determining the direction of developments of local communities either in terms of population or national development planning in the future. The objectives of this research have led to the identification of factors influencing fertility rates in rural area Malaysia. The analysis factor and regression method have been used to find the relationship among 385 women aged fifteen years and above. The results from the multiple regression method were used to predict the relationship between fertility and multiple variables such as the age of first marriage, education, occupation and income. All these factors showed that women in rural areas are also affected by the spill-over of the fertility variable factors as translated in the Transitions of the Modern Fertility which will lead to a decrease in the gross birth rate as has happened all over the world.

1. Introduction

The increasing penetration of global capitalism into rural areas of Southeast Asia is supported by national governments as part of ambitious development agendas which often accelerate the extraction of natural resources and lead to far-reaching environmental transformations. Globalization, development, and environmental change are hence deeply intertwined in the daily experiences of men and women living in the rural areas of Southeast Asia and elsewhere (Haug, 2017). To understand the amazing decline in fertility rates–the average number of births per woman–in modern times, it is necessary to begin with an examination of high fertility in traditional societies. Fundamentally, fertility was high, typically around five to seven births per woman, because of high death rates. Without high fertility, most societies would have experienced a population decline and eventual disappearance. The necessity of high fertility for the survival of the community does not imply that most persons had a conscious awareness of the relationship. Rather, the desire for high levels of childbearing was woven into the cultural fabric and the social institutions of traditional societies. A person's ability to being fertile is a very complex and dynamic process to be described. The ability to produce many babies cannot be measured by just looking at the motherhood characteristics or her activeness in daily lives. It all begins from exposure to ovulation, fetal development, pregnancy and childbirth. Then this cycle will repeat over and over again until the women reach their menopause. In this circumstance, therefore, the factors that cause the occurrence of birth are actually not static over the pregnancy period. However, the diversities of factors gave an impact in the family institution whether to have a large, medium or small family size (Rosniza Aznie et al., 2013).

Fertility is referring to the ability to produce babies by a person or a group of women. According to Barclay (1970) from United Nations (PBB), it is explained that fertility is the actual birth of a baby by a mother after a period of pregnancy without taking into consideration the duration of pregnancy itself. The baby must show all the living signs such as breathing, having a heartbeat or pulses. Thus, fertility is referring to the actual birth achievement compared to fecundity which means the psychological ability to produce (Shryock and Siegel,

1976). According to Thompson and Lewis (1978), fertility used to show a woman's or a group of women's real reproduction potential fertility (Rosniza Aznie et al., 2013).

Corrosively, the fertility trend always had a negative relationship with the social economy impact: which is the higher the social-economic status of an individual or his spouse, the lower the number of a child that they have. The question is, is this perception (including the education status) true? According to Blake (1979) in his research in the United States of America, it is true that the higher the status, the higher the intention of having a small size of a family. This research is supported by Weeks (2002) based on their official counting of population and housing in the United States of America in 1991 showing that the higher the education status of a woman, the lesser the children she has.

This means that fertility is actually a very dynamic process. It starts from the period it is exposed to the ovulation and impregnation, pregnancy and giving birth. Then, this cycle continues until the woman reaches her menopause. Looking into this situation, the factors contributing to the delivery is un-stagnant along the process of reproductive. For example, the age of marriage either early or late also depends on the social backgrounds of a woman such as education and family values. Thus, this research aims to cultivate the positive values towards family so that the fertility rate would not decrease tremendously in the future. For these purposes, this research will be focusing on arable women within 15 to 49 years old as respondents.

2. The framework for socioeconomic impact towards fertility transition

According to Taeuber (1955), the modern history of the world population after World War II can be divided into three phases. The first Phase-In between 1950 until 1970-shows a very high growth rate due to the decrease in mortality rate and the fertility rate still remains at the peak. This is due to the modernization in the medical and health industry especially with the discovery of vaccines to control diseases like malaria, tetanus and polio and also due to the increase in infrastructures like clean water supply and efficient savage system (Gwatkin, 1984). The second phase takes place in the 1970s with the decrease in population growth when the fertility rate starts to go down. The third phase happens between the early 1980s until the end of the 1990s when relatively the population growth becomes constant. The decrease in the fertility rate can be due to the increase in the age of women during the first pregnancy and giving birth (Myrskyla et al., 2013) and the tendency of having the baby willingly (Haldre et al., 2005). Thus, in the modern century, global populations have raised the development of social economy aspects. Yet at the same time, fertility in modern countries has decreased drastically until it has reached under the

replacement level which is less than 2.1 children for every one woman (Myrskyla et al., 2013). Gender and ethnicity are used to downplay and upgrade particular rights, access, control, and discursive power with regard to natural resources, and shape diverse understandings of development (Großmann et al., 2017a).

In order to discuss the fertility trend in modern countries, Asia and South East Asia, data from the UN (2001) on fertility estimation through gross birth rate and total fertility within 1950 until 2015 is being used. The global fertility trend shows that there is a decline of 48.5 percent from 1950 to 2015. The decrement is a result of the successful family planning program which notes the increase in the education status among women and the participation of labor (UN, 2001).

The analysis of the fertility trend in modern and developing countries within the same time frame also shows that the trend has been declining to 55.3 and 52.2 respectively. In modern countries, the gross birth rate has dropped from 22.4 to 10.0 per 1000 populations and in developing countries; it drops from 44.6 to 21.3 per 1000 populations.

In Europe and other countries, the fertility trend also shows decrement from 1950 to 2015. Europe has shown the highest rate of change which is 58.2 percent, followed by Latin America, 55.5 percent, North America, 48.8 percent, Australia/ New Zealand, 48.5 percent and Africa, 31.4 percent. The highest decrease as in Europe is the result of a drop in mortality rate due to socio-economic changes and modernization followed by the success of the agriculture revolution and industrial revolution. In fact, the fertility rate in Europe at present is still at the *pattern of lowest-low fertility* since the 1990s that shows a tendency to procrastinate pregnancy (Billari and Kohler, 2004).

Based on the Demographic and Health Research; Demographic and Health Survey Program (DHS) and followed by World Fertility Surveys Programmed (WFS) shows that the decline in fertility rate in Africa, especially in urban areas, has started since the 1960s followed by the rural area around 20 to 30 years later. West Africa, for example, shows the decrease in the number of children for every woman from 6 in the 1965 to 1969 period to 3.4 from 1990 to 1994. The drop in the fertility rate is caused by various factors; the tremendous drop in Kenya, to the gradual drop in transitional areas outside West Africa that almost equal to natural fertility. In the 1980s, the existence of the HIV epidemic caused the fertility drop in Africa. In the beginning, even though the mortality rate was very high, it did not affect the fertility rate in Africa. Until the year 2000, only then did the fertility rate showed a dramatic decrease beyond their imagination.

For European countries that produce the highest percentage towards the changes, this can be correlated with the government policies, level of education and age during delivery of the first baby. The couples' desire to have babies only occurs after they are able to reach a comfortable life, stability in

career and at a certain age agreed upon. Research in Nordic and the United States of America prove that procrastination in getting a baby is dominated by women with higher education status. In Denmark, 20 to 40 percent of women within 40 to 42 years old who have undergone a long period of study have no child compared to the other 8 percent who do not have any vocational training. In Nordic, the six months' maternity leave practice in this country has given liberty to parents to be by their children's side for any health circumstances that might occur. This has led to the women in the country being good quality mothers and prolonged the birth of the next child. Europe as a whole, not only has the highest changes percentage from 1950 to 2015, but also has crossed the demographic transition from the high birth rate and the high mortality rate to a low birth rate and low mortality rate.

The fertility rate in modern countries including Africa, Asia, and Latin America in 1950-1955-2010-2015 shows that the total fertility rate in several European countries has been under the replacement rate since the 1980s. This decrement can be caused by the establishment of health care and school curriculum that changes the reproductive patterns among women in these countries especially in the era of modernization (Haldre et al., 2005). Collectively, modern countries have achieved the replacement level (1.52), while developing countries are still at a high stage which is at 2.66 and 2.50.

The total fertility rate index has also shown that Africa is at the highest-ranking with 6.71 per 1000 population in 1950–1955 and has decreased to 4.27 per woman in 2010–2015 with 36.4 percent drops. Based on the research by Eggert and Sundquist (2006) it has been shown that the decrease in fertility and the procrastination in giving birth for Swedes have become the main factor to increase the health status among their communities. In fact, it leads to an increase in not having a baby at all and unproductiveness. In the year 1998, the total fertility rate (TFR) among Swedish has dropped to the lowest in the record which is at 1.53. This is due to the average age of women for the first delivery increasing from 23 years old in the 1970s to 27 years old in 2002. The concept of an ideal family has led to a trend of not having any babies among married couples in Sweden. However, research by Eggert and Sunquist (2006) showed that 95 percent of women in the age of 23 to 25, still have the desire to have babies in the future. Therefore, the drastic change is a fertility among women in Europe is significant with the age during the delivery of the first baby.

3. The fertility trends in Southeast Asian countries

History of population shows Southeast Asian population is only one-third the size of Europe in the 1950s (182 million as compared to 547 million in Europe), but it is estimated that in the year 2050, the population of Southeast Asia is expected to be 25 percent larger with 786 million in population against

628 million from Europe. This dramatic reversal is expected to occur in both regions' demographic transition. Throughout history, it has been shown that fertility started to decline in some countries in Northwest Europe in the last quarter of the nineteenth century and has spread to the rest of Europe just at a half time first in the twentieth century. Fertility in Southeast Asia has shown signs of deterioration in some countries in the 1960s, and then moved down, at varying speeds, all over the region from the 1970s to the 1990s. While fertility in Southeast Asia is likely to approach the level of replacement in the early twenty-century, the momentum of demographics and the power of compound growth will still continue to expand in population growth East Asia compared to Europe (and North America).

Overall, the trend of fertility shows the annual percentage changes of 59.4 for the Southeast Asian States within 1950-1955-2010-2015 and shows the decline for all countries in Southeast Asia. Analysis of fertility trends in Southeast Asian countries from 1950 to 2015 shows a deteriorating fertility trend. Singapore showed the highest decline of 74.8 percent, followed by Thailand and Brunei each 69.5% and 66.6%. The total fertility rate in countries of Southeast Asia is leading to the replacement level by 2015, at the level of 2.17. Although seven out of eleven countries of Southeast Asia are and have been below replacement; an analysis of the trend of fertility shows that Singapore has the earliest fall below replacement, starting from the 1980s. While the remaining (five countries) who were heading to a replacement are Laos (3.82), Cambodia (3.80), Middle East (2.85), Philippines (RM2.33 of social) and Malaysia (2.26) by 2015.

The process of falling below the replacement level similar to Singapore had already occurred in four other countries such as in South Korea, Taiwan, Indonesia, and Thailand which attributes its changes to the rapid socio-economic factors and the national population policy. National commitment to slow down population growth, combined with the support for the family planning program on a voluntary basis, to contribute to the environment policy proved to be very successful. In these five countries, the rapid decline in fertility resulted in having a significant impact on economic growth and life rate (Mc Donald, 2007).

4. Fertility transition in Malaysia

Rapid population growth in the period 1911 to 1931 was due to factors encouraging the advent of British laborers from ethnic Chinese and Indians for the development and expansion of economic activities. Due to the contribution of immigrants, high population growth continues to accelerate again. This is because during the period, the contribution of natural increase is very small although fertility rates are at high levels due to mortality rates also being at a high.

After 1957, the population growth was seen to be more dependent on a natural increase. The birth rate has increased to the highest level in 1957. The impact of the fall in mortality is not balanced with fertility, the rate of population growth increased from 2.3 percent in 1947 to 3.4 percent in 1957. At the same time, the rate of natural growth in the gross annual population increased from 1.7 percent to 3.3 percent. For Chinese, the rate of increase was 3.0 percent to 3.4 percent. While the natural growth rate of the year for Indians is in the range of 3.3 percent to 3 percent. The crude birth rate increased at the highest level in 1957 has started a downward trend in the 1960s. By the time it reached 1977, the natural increase rate was highest among the annual population of 2.7 percent, followed by Indians at 2.1 percent and the Chinese population was at its lowest rate with 2.0 percent.

The still-high fertility and declining mortality rate have rapidly kept population growth at a level of more than two percent a year, while immigrants are not factors that play a role. The fertility change in Malaysia can be associated with various factors such as the increase of first marriage age (Jones, 1994; Hirschman and Guest, 1990), a reduction of mortality rates of infants and children (DaVanzo and Haaga, 1982), increased levels of education; the addition of income, wider job opportunities outside houseware radius (Mason and Palan, 1981), the process of urbanization (Hirschman, 1980), and the use of modern contraception as well as changes in family size norms against (Leete, 1987).

Saw (1989) stated that the main factor which made fertility fall a certain age before the mid-1960s was due to the increase in the age of first marriage. It has been confirmed through various sources such as census data (DaVanzo and Haaga, 1982). For example, the mean age of women who married in 1950 to 1954 is 17.2 years which increased to 21.2 in 1970 to 1976 (DaVanzo and Haaga, 1982). For men, the median age of first marriage has increased by more than three years between 1957 and 1970 which is 17.1 years to 20.5 years respectively. The Chinese represent 21.6 to 23.6 and Indians 17.2 to 21.0 the year over the same period (Sidhu and Jones, 1981). The main factors that cause Malay women's fertility remain high due to less use of contraception for family planning. The Malays fertility in rural areas is difficult to be reduced in a short period. This is a result of the demographic transition in Peninsular Malaysia which could not materialize in full.

The Malaysian population is made up of three main ethnic groups, namely the Malays, Chinese and Indians. In Peninsular Malaysia (79.6% of the Malaysian population by 2010); with the percentage of the population of 59.4% other 1.4%) followed by Chinese 24.4%, Indians 8.4% and others by 0.6%.

Generally, from 1950 to 2008, a decrease of crude birth rate in Malaysia only occurred since the beginning of 1992, particularly in Penang, Johor, Kedah, Melaka, Kelantan and Selangor. While most other states have shown a decline since the end of the 1990s. State with the highest deterioration from 1950 to 2008 is Negeri Sembilan which is 62.93 percent. Between 1950-2008, two states which registered the lowest decline was Kelantan and Terengganu respectively 39.30 and 42.59 percent. The latest developments show all states in Malaysia had recorded a crude birth rate under 20.0 per thousand populations. According to Ramachandran and Shantakumar (1973), the decline of more than 50 percent in all states in the North and South of Peninsular Malaysia is due to socio-economic development and urbanization. In addition, the increase in the age of first marriage, birth control and increasing the age of marriage, particularly for people living in urban areas is happening in these states thus can influence the increase in marriage and fertility.

The declining trend in Peninsular Malaysia since the 1960s is in line with the decline in births in developing countries. It has to do with the Demographic Transition Theory, which stressed that socio-economic development important in affecting fertility and mortality in the population. In this context, in Peninsular Malaysia, Hirschman (1980) argued that the demographic transition of the birth rate and high mortality to low occurred especially among the Chinese and Indians in the cities.

However, this initial wedding trend is seen starting to decline from year to year, leading to a slow wedding among Malay women. In 2000, on average, women aged 25 to 29 years already have 2.3 children which are lower in comparison with the values in 1970 at 3.2 children. This phenomenon is influenced by various factors, and they are improving education for the women of receiving education for 12 years (up to secondary school) or higher which is over 15 years old (receive education up to the higher education level). Evidently, this situation reflects that the education factor had resulted in women marrying at the age of late and thus influencing the rate of fertility among them.

5. The socio-economic impact on fertility transition in Malaysia

The increase in population in the early stage of human civilization itself, not after the industrial revolution began in the 18th-century. In the middle of this century, the demographics were starting to observe the European population growth pattern based on data early in the 19th century. One response to the challenges of environmental transformations is a transdisciplinary approach. Therefore, an understanding of transformation processes demands an assessment of their relationships with human values and socio-economic development pathways (Großmann et al., 2017b). Notestein (1945) and Davis and Blake (1956) saw the European trend of increase in population at the time as a form of an attractive pattern. Beginning from stable population growth to a condition of population growth that boomed out mortality rates to decrease. This phenomenon is called the Demographic Transition.

This demographic transition theory was introduced by Thompson (1929) to describe and summarize the process of reduction of mortality rates and high birth and death rates to low birth in developed countries especially in Europe through population data for the period 1908 to 1927 (Thompson, 1929). These demographic shifts are formulated by Notestein (1945) when identifying three types of incipient decline population growth, growth in transitional and high growth potential (Taeuber, 1955).

The theory of Demographic Transition has shown that socio-economic development or modernization projects a lot of importance in affecting fertility and mortality in the population. This theory suggests the experience in some countries in Europe who suffer from socio-economic changes affecting the high rate of fertility and death to low rate fertility and death. However, this theory is inaccurate for determining factors in relation to demographic transitions specifically. This is because it is unable to interpret the relative importance of various decisive connections and does not identify the countries or groups of the population involved in upgrading fertility.

6. Family background

Stepwise Regression analysis was used to measure the degree of strength and direction variable which interferes with the relationship between the independent variables and dependent variables. According to Baron and Kenny (1986), there were three circumstances identified to have interfered with the variables (i) variable fortune-tellers have significant impact with fuming variables, (ii) variable fortune-tellers and interfere with the variables have significant effects with independent variables, and (iii) the effect of the variable fortune-tellers in the past will change to insignificant or reduce the size of the effect variables clairvoyant when variables are fuming involved in analysis.

Significantly, the study found the results of the ideal number of children [F (1,189)= 1115.60, p≤ .05] contributed a total of 85.5 percent of variance (R2= .855) in the fertility of respondents. This means that the ideal number of children (β= .925, p≤ .05) is the main indication that resulted in the conduct of fertility in the study area. The combination of the ideal number of children (β= .851, p≤ .05) and the age of respondents (β= .253, p≤ .05) add as (91.3-85.5) per cent, 5.8 percent change variance (R2=. 913) in the fertility variable (F2, 188)= 991.68, p≤ .05]. Based on the results of the analysis, researchers reported that the clairvoyant had [1] an ideal number of children; [2] the age of respondents; [3] the first child's gender; [4] age given birth; [5] the age of first child was born; [6] the husband's income and employment [7] husband is variable clairvoyant for fertility residents of the study area.

Based on the background of the study area involving rural Malaysia, types of homeownership were highest for own compared to the houses rented by 52.8 percent. The reasonableness for renting a home because of its property values has risen from 200 to 400 percent since the year 2000 and this has led to the value of medium-cost houses being sold at a minimum price of 250 thousand Ringgit Malaysia (MYR) per unit. This showcases the number of baby care facilities in the area. Rural development projects require a longer time to have a visible impact on the living conditions of the target group, smaller urban centers are quick to take up impulses for development.

Rapid urbanization is then accompanied by accelerated economic growth and a change in lifestyle. Various new chances open up to the local population with regard to education, employment, health care etc. As increasingly important regional nodes of political, economic and social networks, the development of smaller urban centers, in consequence, has an impact on its rural hinterland (von Bloh, 2008). Overall, this visible relationship background does not give any significant difference with respect to the ownership of which had small families (one to two children) to medium (four to five) for each group of 40 to 49 women have given birth with parity one to five for each group.

In the socio-economic aspects, on the other hand, the results show levels of parental education play an important role in demographic behavior. This situation was also proven based on findings by scholars in the field of demographics through their study. Weeks (2011) pointed out that the education of the adults emerged as the most dominant single astrologer of demographic behavior associated with the beginning of reproductive life (the age of first marriage and the age of pregnancy), with fertility and the use of birth control (Weeks, 2011). However, the study among women in the study area showed a significant relationship between fertility and the education level of wife or mother. The group which had a son within more than eight children was encompassed of women who had a level of education at the certificate level of education, Diploma and first degree each representing 1.3 percent, 4.00 percent and 1.4 percent. On the other hand, women who have low levels of school education only managed to have a son a total of five persons only.

For several decades, education has been seen as one of the major determinants of changes in the behavior of women's fertility and has also been understood to be closely related to changes in their fertility behavior (Andersson et al., 2009; Kravdal and Rindfuss, 2008). Higher education in Western countries usually has a simple relationship to decrease fertility (Andersson et al., 2009; Fieder and Huber, 2007; Hoem et al., 2006). One of the factors that can influence fertility is the background of the family which is the third factor, such as a priority on the lives of families, or socio-economic status as a priority in his career that led to the decline in fertility factor (Tavares, 2010).

Occupational factors and duration in this study also influence the conduct of the fertility in the study area because for women who have lived long in the study area have been able to draw on the patterns of

everyday life and it is not difficult for them to get involved in the process of continuing pregnancy although no support from basic family systems exist, i.e. from mother or father.

The findings in the study area showed the relationship between duration of stay with the number of children owned and it turns out the longer period of stay in the study area will affect the number of children more. Ironically, the longer the duration of stay for a woman shows that they are getting old.

The Data shows a total of 25.57 percent of the women still do not own or go through childbirth, compared to a small family, medium, medium-large and large respectively stood at 27.01 percent, 37.07 percent, 7.47 percent, and 2.87 percent. By comparison, the highest period of stay with parity by group showed the highest number for every year lived between less per annum (29.20%= 26 parity 0; 16.30%= 8 parity 2), two to five years (32.60%= 29 parity 0; 20%= 9 parity 2), six to ten years (18.00%= 16 parity 0; 22.90%= 11 parity 4), eleven to fifteen years (18.00%= 16 parity 0; 26.80%= 11 parity 3), sixteen to twenty years (42.50%= 17 parity 5; 33.30%= 16 parity 4) and more than twenty years, each stood (20.90%= 10 4 parity; 20.00%= 8 parity 5). This has indirectly shown that the family size of women outside the city is leaning to a medium-sized family.

The mean age of marriage in the study area is low and equivalent to the mean age of first marriage in Malaysia in the 1980s at 23.88 years. That is in line with the mean education wife by area of the same level of education diploma 5.94 up to a final year in secondary school. Based on the mean level of education of women in the area which was the woman who got education up to form five explains that they are exposed to employment opportunities as early as the age of 18 years and also the chance to find their couples at a younger age. Results of observations and surveys derive that one must not participate in expecting family background factors and poverty driving women to postpone their marriage processes for families and also achieved a certain level in their jobs before entering the marriage.

The study also recommends the assumption that there are some women groups that have fertility behavior proportionate to their socio-economic background although socio-economically elevated women levied in the study area and are not involved in the migration process. Aside from that, the level of future fertility will be affected directly by the family values of Malay women in the study area. The higher the desire and the willingness of the family to decide in taking up a large family will affect the increase in fertility rate. On the other hand, the collapse and neglect to produce content will result in fertility rates downwards and the number of children in the family will gradually diminish. Due to this, the household size is getting smaller as discussed in the previous section in this chapter.

7. Accomplishments to improve fertility

Changes in family institutions and fertility occurring in Malaysia have given a requirement for charting the development process that can integrate among the residents with the changing times. A wide range of policies in order to advance as a face pattern transitions of the Malaysian population is going on. Implementation of policies showcases Malaysia's experience in balancing the growth of the population with development processes that take place.

Among them is the implementation of the new economic policy and national development policies in Malaysia aimed at eliminating poverty and reducing inter-ethnic social illness in terms of economic (income, employment and ownership) which also affects the family institution in Malaysia. Efforts to create more jobs in the modern sector and the reduction of the dependence of the Malaysian society of employment agriculture seen have been able to bring changes to the family institution and fertility behavior of the population. The implications of that in the early stages of implementation have increased fertility due to the lower poverty gap leading to decrease fertility as a result of the participation of women in education and employment opportunities. Still, this policy should be used as a stepping stone towards openness in Malaysian society today due to having received modernization and can thrive in an era of globalization from time to time.

Expanding education opportunities among the people also left an impact on family formation and fertility actions to the population. Increasing one's level and education opportunities for women reduced their chances of getting married at a young age, and marriage at the age of late causes a shorter reproductive period to the women. This phenomenon proves that the Malaysian Government's efforts to promote and expand educational opportunities in all sectors of the community have given pressure to fertility to continue its decrease.

Moreover, the increase in education among members of the public can also increase their knowledge about family planning methods in a more effective manner. Development of health clinics by the Government up to account for the countryside and the city and rising to the people widely to family planning services also affects the family institution and the role of their fertility.

The country's efforts to create more health clinics facilities in towns and rural areas and effectively opening them to all will encourage its use extensively. Hence, this has allowed increasing fertility in the study area in particular unsuccessful. Thus today, education towards building the family institution which symbol, large size should be provided to all Malaysians as the adoption of contraception is introduced once upon a time. Malaysians, women in particular, should be disclosed to health education towards quality care because of

their failure to conceive phenomena exists that is becoming increasingly significant, especially in big cities in Malaysia even without practice of contraception.

Although it can be associated with stress and other factors, the education of teenagers will certainly provide fertile women and productive during the wedding process and is able to make up an ideal family size larger which is between three to five children. Changes in family institutions and fertility behavior of the Malaysian population is also dependent on the effectiveness of the Government through education and communications to provide effective information about the advantages and benefits of owning a medium-sized family and how it can be achieved through the formulation of the effective use of health care. This is because the increase in family fertility also cannot be separated by the success of the Government through health improvement programs to the community for lower levels of infant mortality.

In order to boost fertility, the practice of the Government and some private sectors allowing women maternity leave for ninety days is the largest incentive in the family institution. Although the number of accumulated leave as many as ninety days that is taking into account is the ability of a woman in Malaysia these days to become pregnant with number 3 children only (mean 2.7), with accumulated leave which allowed for ten months [(90 days' x 3 children) 30 days].

This method will actually abandon a woman who gives birth to more than three children in the future. This is because women have to take unpaid maternity leave for an extended time. It will increase their burden to saddle the cost of the formation of families who grow larger in terms of remuneration for the older son, installment payment for housing and vehicles and another domestic spending. At the same time indirectly suppressing the desire to have a larger family size and lower levels of fertility in the country. Thus, the proposed maternity leave is more effective which allows maternity leave for ninety days with full pay up to five children should be enforced. This is because increasing the age of a woman, the more they are exposed to a variety of illnesses, let alone when they conceive and have a new member of the family.

8. Conclusion

Overall, this study has managed to give the real picture of the most dominant factor variables of the socio-economic influence and shows the uniqueness of the level of fertility in the study area. What's interesting is the process of data collection bridging the researchers with the women in the study area. It is hoped that this study will contribute considerably to academics and development planning as well as the various stakeholders to find the deciding point in their development planning, especially Malaysia's population today and the future.

Compliance with ethical standards

Conflict of interest

The authors declare that they have no conflict of interest.

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