



## Impact of Female Education on Fertility Status of Muslim Community of Susta Rural Municipality: Kudiya, Nawalparasi

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### Abstract

**Background:** This study explores the impact of female education on fertility status. Nepal has been experiencing a fertility decline over the last few decades. Although many factors have been shown to influence women's childbearing, socioeconomic factors such as education and religion are some of the prime factors that mainly influence women's fertility in Nepal. The major objective of this study is to examine the relationship between education and fertility behavior of the respondents.

**Methods:** This study is descriptive in nature. Sample of this study consist the 218 married Muslim women randomly selected out of 689 families from Susta Rural Municipality of Parasi. Data were analyzed using the statistics like frequencies, percentages and mean value.

**Results:** Level of education has inverse relation to fertility. The CEB between illiterate, literate, SLC and intermediate attainment women was found significantly different. Moreover, it was also found that most of the women had knowledge of family planning but they were reluctant to use family planning method.

**Conclusion:** Major conclusion of this study indicated the inverse relationship between level of education and fertility behavior of Muslim women. Hence, fertility behavior can be changed through education policy intervention over Muslim women in rural area.

**Keywords:** Fertility, education, socio-economic factors, Muslim women

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## **Introduction**

Fertility refers to the actual reproductive performance of a male, female or a couple. Fertility is biologically related to the female population who are at the age group 15-49 years. Hence, life span of 15-49 years is called the reproductive period. Women should be fecund to bear the live child. Fecundity is the physiological capacity to bear the live child. Fertility performance among female population cannot be the same because it is basically determined by the age composition. Most of the fertility measures are to that group of female population. Traditionally, Nepalese society has favored high fertility. Children are considered as a symbol of both social and economic well-being. High fertility is desired because by producing children, preferably sons, a woman raises her status in the family (CBS, 2003). Education is one of the most important determining factors to determine fertility inverse relationship between the educational attainment of couples and fertility. Education affects fertility directly by raising the age at marriage. Educational attainment may be taken as modernization of an individual of the society as well as the scale for measuring the status of women in the society. Fertility and education have inverse relation. If the education level is high, fertility naturally decreases and the vice-versa. Educated women are more likely to voice resentments as the burden of repeated pregnancies and to take action to lighten that burden (Dyson and More, 1983).

Poor and illiterate women in rural areas have higher fertility compared to urban women. So, it is acceptable that education level has a vital role in transition in fertility in developing country (Merrick 2001). Female education has an impact on demand for children via variables such as desired family size and economic, time and opportunity costs of raising children .Educated women are much less fatalistic regarding their family size. Most research has shown that desired family size is smaller with increase in women's educational levels But this relationship varies depend on culture and on the levels of gender stratification in the society. Education has low impact in highly gender stratified societies compare to egalitarian societies and education also affects desired family size via autonomy (Jejeebhoy, 1995). Highly educated women are involved in paid work outside their home. They take into account the loss of income that will result from not having more children as they limit their fertility. (Jejeebhoy, 1995). Each religion has its own religious norms and ideology related to fertility behavior. Fertility differs from one religion to other religion within the country. Muslim women's have strong desire to have a son so this is one of the reasons having higher fertility in Bangladesh. Another reason to have more children among Muslim women as they

believe that more children is the symbol of a strength of married women. Pronatalism characteristics exist in Muslim perhaps may be a strong belief that everything is done by the Creator. They believe that creator creates sexuality and determines procreation and barrenness (Hossain, 2017). The role of women in Muslim Society is very low and had to practice in Purdah (Kirk, 1976). As Islam is against the use of contraception so the practice of family planning is almost unacceptable in this group especially in uneducated rural women (BBS, 2015).

Eswaran (2002) argues that empowerment of women may lead to lower fertility rates as women face higher costs of children than men. UN (1997) concluded that in Nepal early marriage is considered the major contributor to a persistent and high fertility level. The findings also indicate that fertility level is correlated with the level of female literacy in the country. Caldwell (1980) has concluded there are numerous channels through which education can affect fertility. Education can provide individuals with a new vision and normative orientation, better health care, better employment, and access to family planning methods and these in turn may produce depressing effect on fertility.

According to the 2011 NDHS data, birth intervals are slightly longer in urban (40.3 months) than in rural (35.9 months) areas. There are no marked differences in median birth intervals by ecological zones. The median birth interval is longest in the Western region (43.3 months) and shortest in the Far-western region (33.2 months). Birth intervals are longer in the Western terai and Western hill sub regions than in the other sub regions. Birth interval increases with education from 35.1 months among women with no education to 42.2 months among women with an SLC or above. Similarly, birth interval increases with wealth. The birth interval for the highest wealth quintile is nearly 4 years (46.2 months), whereas for all other quintiles it is 37.2 months or less. The high fertility rate in Nepal is always due to low age at marriage, demand for children, and low rate of contraceptive use, unmet need of contraceptives etc. Marriage is almost universal in Nepal. Some of the important factors are low educational attainment, low economic status of family, unemployment of women, early marriage, contraceptive failure, unwanted pregnancy, high infant and child mortality, lack of awareness, occupation, rural settlement, poverty and so many socio-cultural attitudes, values and norms. These factors might have played even stronger role in fertility.

## **Materials and Methods**

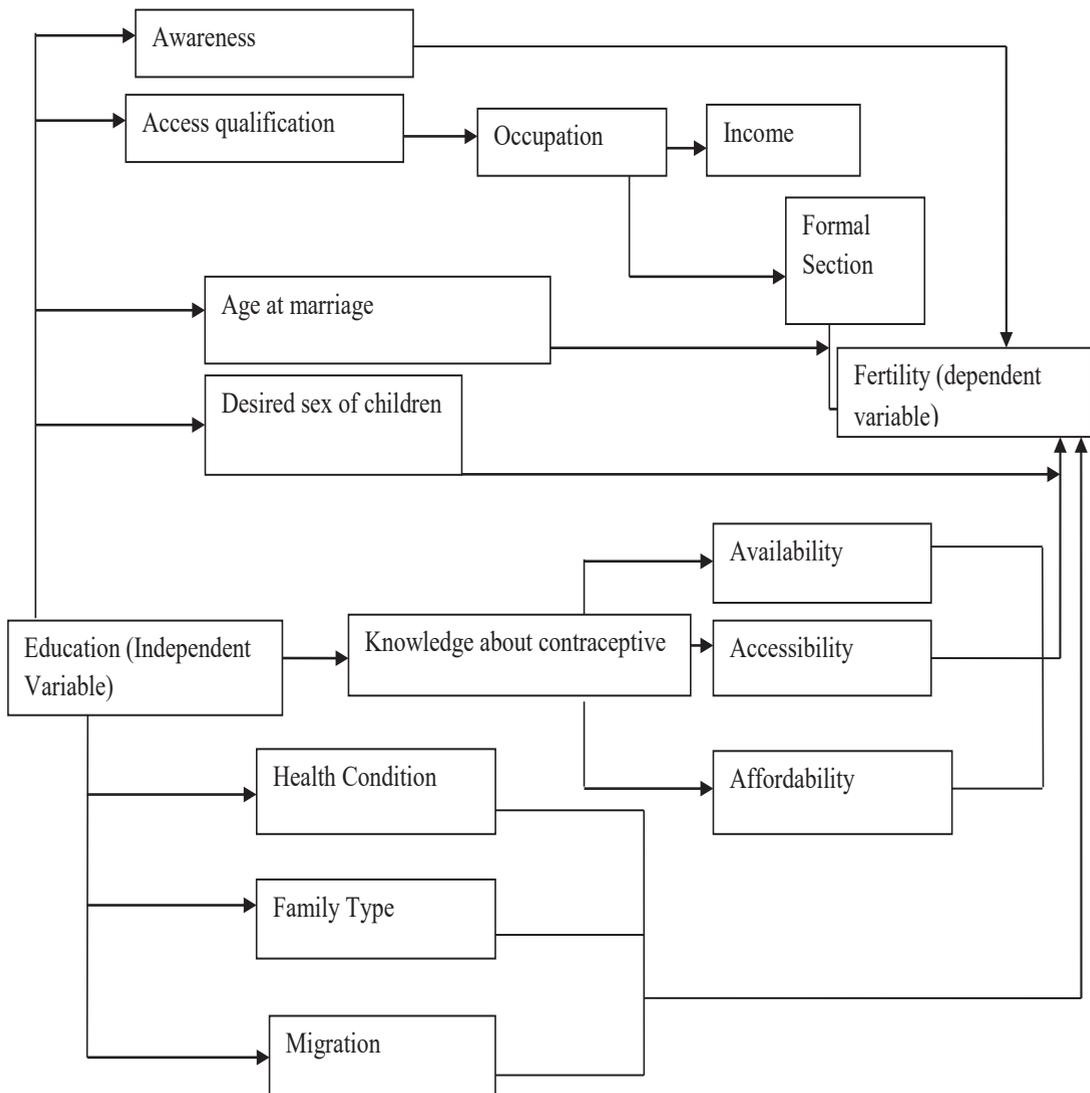
Susta is a Rural Municipality located in Nawalparasi District of Lumbini Province of Nepal. The total area of the Rural Municipality is 96.51 square kilometers and the total population of the Rural Municipality is 41396 (Susta Rural Municipality profile, 2077). The Susta Rural Municipality is divided into total 5 wards. The Susta Rural Municipality was established on 10 March 2017, fulfilling the requirement of the new constitution of Nepal in 2015. The study has drawn data and information from primary and secondary sources .The primary data was collected by using different methods, such as household survey, field observation, and focus group discussion. The secondary data was collected through books, articles, journals, published and unpublished thesis, research report and Susta Rural Municipality Profile. Out of 689 Muslim 218 married Muslim women were selected by simple random sampling method.

## **Conceptual Framework of the Study**

Based on the review of the available literature related with the issues of the study, a conceptual framework has been developed for the analysis of the Impact of Female Education on the fertility on Women. The conceptual framework includes education of the women as an independent variable. Women awareness, access qualification, age at marriage, desired sex of children, and knowledge about contraceptives, health condition, family size and migration are as the intervening variables. In this study, Fertility is behavior of women taken as dependent variable. The Conceptual Framework in the form of a flow chart is presented in Figure 1.

As envisaged in the conceptual framework, education of women determines their awareness, access qualification, and age at marriage, desired sex of children, knowledge about contraceptive, health condition, family type, migration, and these factors in turn, determine the fertility behavior of the women. Education is directly linked up with the awareness level; it gives chances to access information, related with age at marriage. Occupation is influenced by education and it also gives outcome on income level and formal selection. This ultimately, influences the fertility status.

**Figure 1** *Conceptual Frameworks for the Analysis of Impact of Female Education on Fertility Behavior of Women*



## Results and Discussion

### Relationship between Education and Fertility Behavior

The level of fertility declines with in educational level of females. Education plays crucial role to reduce the fertility. There is inverse relationship between education status and fertility, especially women education. Higher the level of female literacy in a community, lower will be the fertility.

**Table 1** *Distribution of Respondents by Age Group and Number of Child Ever Born (CEB)*

<b>Age Group</b>	<b>Number of Respondents</b>	<b>Number of Children</b>	<b>CEB</b>
20-24	13	15	1.15
25-29	59	130	2.20
30-34	46	141	3.06
35-39	39	145	3.71
40-44	35	170	4.85
45-49	26	157	6.03
Total	218	758	3.48

*Source: Field Survey, 2019*

The average Child Ever Born (CEB) of women is found 3.48. The data shows that with the increase in the age of respondents CEB has increased. We can easily say that the older age group of women also have increasing CEB. The age group (45-49) women have the highest number of children ever born 6.03. This also implies that the level of fertility should be lower for the literate females compared with illiterate females. The total fertility rate (TFR) has been decreasing with increase of literacy rate in Nepal. The literacy rate was raised 23.3, 39.6, 54.1 and 57.4 percentages in 1981, 1991, 2001, 2011 respectively. But TFR was decreasing such as 6.39 in 1981, 5.6 in 1991, 4.1 in 2001 and 2.6 in 2011 (CBS, 2011).

### **Educational Status and Age at Marriage**

There is the inverse relationship between CEB and age at marriage. Higher the age of marriage, lower the fertility and vice-versa. Marital status of woman is directly related to the woman's fertility. Early married woman has large number of CEB because the child bearing age increases while woman is married at the early age. The table 2 shows that the clear picture of women's age at marriage and CEB.

Table 2 shows that the number of CEB 4.24 was found for the women who married between age 14-16 years followed by CEB 3.94, 2.98, 2.70, and 1.67 for those women whose age at marriage is between age, 16-18 years, 18-20 years, 20-22 years and 22-24 years respectively. This situation shows that rise of the educational level in community automatically rises the duration of age at marriage.

**Table 2** *Distribution of Respondents by Educational Status and Age at Marriage*

Age at marriage	Educational status									No. of Respondents	No. of children's	CEB
	Literate								Illiterate			
	Madarsha education	Non-Formal Education	Pri.	L. Sec.	Sec.	S.L.C.	Inter	Total				
14-16	2							2	47	49	208	4.24
16-18	6		3	1				10	48	58	229	3.94
18-20	8	1	4	1	1			15	69	84	251	2.98
20-22	3	3	6	3	2			17	7	24	65	2.70
22-24						2	1	3		3	5	1.67
Total	19	4	13	5	3	2	1	47	171	218	758	3.48

Source: Field Survey, 2019

### **Education Status and Age at First Child Birth**

The onset of childbearing at an early age has a major effect on the health of both mother and child. It also lengthens the reproductive period, thereby increasing the level of fertility. The median age at first birth is 20.1 years for the youngest cohort of women (age 25-29) for whom a median age can be computed. Almost one-quarter of Nepalese women (23 percent) have given birth before reaching age 18, while about half (48 percent) have given birth by age 20. The median age at first birth is about 20 years across all age cohorts, indicating virtually no change in age at first birth over time (NDHS, 2011). The table illustrates the relationship between educational status and age at first child birth of the respondents.

The table shows that 12 literate and 21 illiterate respondents gave birth to their first child between 16-18 years of age. Similarly 15 literate and 40 illiterate respondents had first child birth between 18-20 years. Likewise 14 literate and 74 illiterate respondents had first child birth when they were aged between 20-22 years. Among 3 literate and 36 illiterate respondents had first child birth between 22-24 years, and only 3 literate respondents had first child birth between 24-26 years of age.

**Table 3** *Distribution of Respondents by Education Status and Age at First Child Birth*

Age Group	Educational status									No. of Respondents	No. of children's	CEB
	Literate								Illiterate			
	Madarsha education	Non-Formal Education	Pri.	L. Sec.	Sec.	S.L.C.	Inter	Total				
16-18	8		3	1				12	21	33	148	4.48
18-20	8	1	4	1	1			15	40	55	212	3.85
20-22	3	3	5	2	1			14	74	88	277	3.14
22-24			1	1	1			3	36	39	116	2.98
24-26						2	1	3		3	5	1.67
Total	19	4	13	5	3	2	1	47	171	218	758	3.48

Source: Field Survey, 2019

### **Educational Status and Number of Child Ever Born (CEB)**

Child Even Born is defined as the number of live birth to women at the time of study. Number of live birth also determines the status of women because the women having more children are likely to suffer from various family burden by which their economic condition and health become deteriorated. The table 4 illustrates the relationship between educational status and number of Child Ever Born of the respondents.

Illiterate women have high 3.62 CEB as compared to those respondents who are literate which mean CEB accounts 2.93. This study shows that the educational status directly affects the child ever born. Women having lower educational status had given more births whereas women having higher education status had given low birth. It was found that education status and child ever born have opposite relationship.

**Table 4** *Distribution of Respondents by Educational Status and Number of Child Ever Born*

<b>Educational Status</b>	<b>Number of Respondents</b>	<b>Number of Children's</b>	<b>CEB</b>
Illiterate	171	620	3.62
Literate	47	138	2.93
Total	218	758	3.48
<b>Level of Education</b>			
Madarsha education	19	67	3.52
Non Formal education	4	14	3.5
Primary	13	33	2.53
Lower Secondary	5	12	2.4
Secondary	3	7	2.33
S.L.C	2	4	2.00
Intermediate	1	1	1
Literate	47	138	2.93

*Source: Field Survey, 2019.*

### **Use of Family Planning Method and Number of CEB**

The use of the family planning method reduces the fertility. It can also manage the rapid growing population and to increasing the birth space. In developed countries CPR level is higher than under developed and developing countries. It is because of lack of the knowledge of the contraceptive method, educational attainment and low economic status. In Nepal the CPR level is 39 percent according to census 2001. Among Nepalese women the use of CPR level increasing each year. In the study area the CPR level is given below in the table.

The table 5 shows that 54.58 percent respondents have not been using any type of family planning method and 46.33 percent have been using of family planning method. It is clear that women using family planning have only 3.08 CEB, whereas women not using any family planning have CEB 3.75. We can conclude that using family planning material has direct impact on Child Ever Born.

**Table 5** *Distribution of Respondents by Use of Family Planning Method and Number of CEB*

User / Non-Users	Number of Respondents	Percentage of Respondents	Number of Children	CEB
Users	101	46.33	311	3.08
Non-Users	119	54.58	447	3.75
Total	218	100	758	3.48

Source: Field Survey, 2019

### Conclusions

Education status of women plays an important role on fertility of Muslim community. The finding shows that, level of education has inverse relation to fertility. The CEB between illiterate, literate, SLC and intermediate level women are also significantly different. It is found most of women have knowledge about family planning but lowest number of women are using family planning method. It is seen that the level of CEB of family planning users is lower than non-users. Time has changed and due to the increment of media facility. Awareness level of people towards family planning is also increasing. In the researcher's observation, there is no significant impact of Islamic education on age of marriage and child bearing of the Muslim women. The finding from this study indicates that Madrasa education does not seem to be effective to bring about changes in the fertility behavior of the women. The findings of this study suggest that local government should take necessary initiatives to ensure higher education for all Muslim women with a view to reduce fertility rate in Kudiya . Findings based on decomposition analysis suggest that among the socio-demographic factors age at first cohabitation has the strongest impact on the total number of children. Therefore, strict implementation of legal age at marriage should be ensured by the local government which will also facilitate career development of young females in Kudiya.

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