Women's education, religion and fertility in Bangladesh

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Abstract

Bangladesh has experiencing a fertility decline over the last few decades. Although many factors have been shown to influence women's childbearing but socioeconomic factors such as education and religion are some of the prime factors that mainly influence women's fertility in Bangladesh. So, it is important to know how education and religion determine women's mean no of children and women's age at first birth. In this paper, the discussion about education is made with reference to educational attainment. This research had the interest of examining whether education level attainment (i.e. primary, secondary and higher) influences women's mean number of children or women's mean age of first birth in Bangladesh. The target group of the study was women who had their ages ranged from 15 to 49 years. To make possible the study here the 2014 Bangladesh demographic health survey (BDHS) was used. The economic theory and demand for children concept were used to offer a theoretical framework on the topic. The study was based on the contention that the higher the education level of women, the lesser number of children they have. There were also comparisons on religion. Muslim non-educated women have more children compare to other religion groups. Finally, to make relationship among fertility education and religion, regression models were used. From the regression performed, the results portrayed that educational level does influence women's fertility especially for women with completed secondary and higher education. Controlling for age and religion, women with no education have much more children and a significantly earlier age at first birth compared with women with either primary or secondary education (p<0.001). Controlling for education, there is significant difference between Non-Muslim and Muslims in total children ever born and age at first birth. Controlling for both age and education, Muslims have significantly more children and a significantly earlier age at first birth compared with women with Non-Muslim (p<0.01). This result tends to be fall in line to what was expected except a little difference in religion group. There is no difference in total number of children between Muslim and Non-Muslims educated women. The results showed that although education shapes women's fertility, the other socioeconomic and demographic factors have significant role in women's fertility in Bangladesh.

Keywords; *fertility, Bangladesh, female education, demographic health survey, religion, regression*

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Introduction:

My aim is to look at the relationship between women's fertility and educational attainment in Bangladesh. Here I use the data from BDHS in the year of 2014. I refer women whose age is 15-49. Fertility is one of the components of the population in dynamics which determine the structure, size, and composition of the population of a country. Bangladesh attained a notable instance in demographic transition mainly in the decline in fertility. Fertility falls from 6.5 births per women to 3.3births during last two decades although the recent record shows that fertility has been stalled. Previous studies showed that there is a significant relationship between fertility and socioeconomic factors such as education, employment, and wealth. The DHS Survey of 2014 showed that women education is associated with fertility and TFR decreases from 2.4 to 2.0 births subsequently from women with no education to women with complete secondary or higher education. According to BDHS 1993-94, women education rate (secondary or higher) was 15.0 which is 45.9 in 2014 (BDHS, 2014).

On the other hand, contraception is prevalently used in mass population in Bangladesh. Some previous studies found that family planning is the reason for a decline in fertility. So, it is widely debatable issues whether education or family planning is the main factor for declining fertility. In my study, educational attainment of women as considered to be a useful index of socioeconomic status and try to see how much effect of education on fertility. Moreover, is there any relationship between education and a total number of children or education and women's age at first birth? Bangladesh government had introduced free female education in both primary and secondary level of education. The current government is very keen to improve female education as well as reduce fertility to replacement level. So, Education is a pivotal factor that influences fertility among women in Bangladesh.

Educational attainment has a consistently inverse relationship to fertility and it is one of the most clear cut correlations found in the literature. Some researchers have stated that formal education with an economic development and urban lifestyle develops a continuous high aspiration which motivates them to restrict the mean number of children. It is proved that higher education enables higher socioeconomic status. Education influence women participation in family planning decisions. Studies formulated in developing countries have shown that families where partners are sharing in family planning decisions with higher inter spousal communications are the groups who practice contraception frequently and have fewer number of children. Education also gives women to access to share wide ranges of family planning information's and knowledge. Education raises the cost of rearing children that is an important factor to declining fertility levels in developing world (Caldwell, 1982). However, educated women give more importance on the quality of children than quantity (Chaudhury, 1984). Educated mothers have higher desire for a better education for children and thus resulted fewer children as quality of education can only be ensured to a few.

Bangladesh is dominated by Muslim majority whereas Hindus are the minority group. Several study on fertility behavior of minority groups stems from the fact that minorities fertility tends to diverge from that of majority population. The aim of this paper is to measure the independent effects of religious status on fertility in relation to educational attainment in Bangladesh. Some study in India and Bangladesh reveals that high fertility among religious minorities is a result of vulnerability due to socio economic disadvantageous position of minorities (Sahu and etc, 2012). Kabir and others (2004) worked with BDHS data on 1999-2000 to show the impact of women status on fertility and contraceptive use in Bangladesh and they found that women from Hindu religion had significantly fewer children than Muslim women. So from literature it can be viewed that there is an association between religion and fertility in Bangladesh. The mechanism may be the education and cultural norms and attitudes of the community groups which they belong.

This paper is divided into five sections. The first section provides information on the aim of the study, significance of study and Research questions. The second section provides background information. The third section provides previous research. The fourth section provides information on data and method while the last section indicates results, discussion, and conclusions.

I] Aim:

My aim of this study is to examine the relationship between women fertility and educational levels in Bangladesh. A sub-aim of this research is test the independent effects of education on religious groups (Muslim and Hindus) and fertility in Bangladesh.

II] Women's fertility in Bangladesh

Family structure in Bangladesh is dominated by men and they are the head of the household as well as the main bread winner of the family although recent data shows that women are involved in jobs than ever before. With a prevalence of contraception and other family planning methods, the birth rate of women is declining. Education is one of the important factors for declining fertility for two decades. Bangladesh has started its decline in fertility during the 1980s. Women's (age 15-49) TFR was 3.4 in 1993-94 but in 2014 it is 2.3. The diagram shown in below is the total Fertility Rate of Bangladesh over the year.

Bangladesh Fertility rate
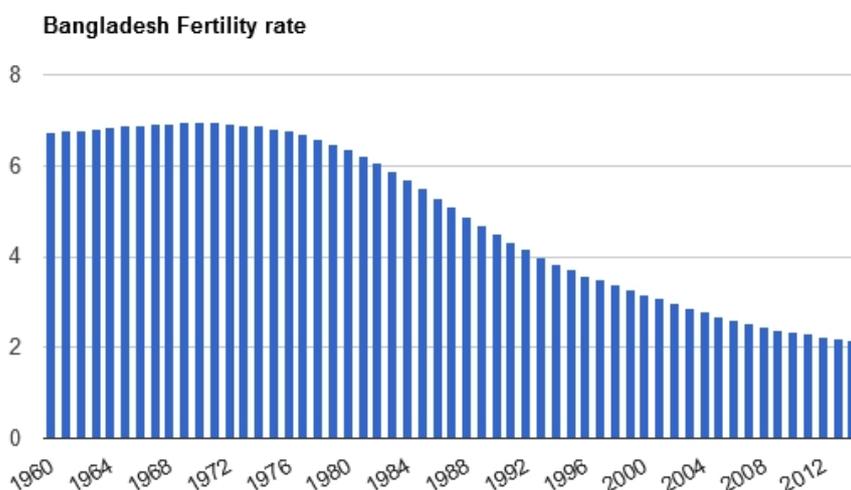
Source: TheGlobalEconomy.com, The World Bank

Figure 1: Total Fertility Rate of Bangladesh over the years

The graph shows that the 70s to 80s were periods when the TFR Bangladesh was high with 6.3 children per women and then tends to decline until 2000.Fertility started to stall during the last two decades. Researchers examined that socioeconomic factor is associated with fertility transition in Bangladesh.

PART 1: THEORY

According to Caldwell (1982), Cleland and Rodriguez (1988) and Jeffery and Basu (1996), educational differentials are the most studied and widely accepted socioeconomic differentials of fertility. Although the effect of education on women fertility is influenced by other factors such as region, residence, and wealth status. According to Merrick (2001), poor and illiterate women in rural areas have higher fertility compare to urban women. So, it is acceptable that education level has a vital role in transition in fertility in developing country like Bangladesh. Female stipend programmed influence teenage girls in secondary schools to deter their early marriage and early motherhood (Raynor and Wesson, 2006). Jeffery and Basu (1996) found in their study that 10% increase in female literacy relates to a 0.5% decrease in TFR.

Bongaarts (2003) had studied with DHS data from 57 less developed countries and concluded that educational differentials in wanted fertility are decreased but in unwanted fertility, it increases especially in a time of transition. But Fertility varies from one community of the country to another according to the social traditions norms and religion values and belief and also change with geographical and climate conditions

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 (Jejeebhoy, 1995). 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 (Jejeebhoy, 1995). 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. Other than this opportunity costs, educated women realize to spend quality time with children. Thus leads to have fewer children than

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uneducated women. So education leads to affects the mothers perceptions in relations of economic, opportunity and time costs of children through knowledge, autonomy, decision making autonomy and self reliance (Jejeebhoy, 1995).

There is a significant positive relation between education and contraceptive use ((Jejeebhoy, 1995). Cleland (1997) and Jejeebhoy (1995) refer to a study in India showing that 95% of secondary educated women knew about IUD compare to 39% of the uneducated women who had the knowledge of the method of birth control. Education influences communications between spouses through emotional autonomy and decision making autonomy ((Jejeebhoy, 1995).

Religion has special significance in Bangladesh. The major two religious communities are Muslim and Hindu. According to BDHS 2014, Muslims are 90% and Hindus and others are 10%. Each religious has its own ideology and culture that has also impact on women fertility. Visaria (1974) reported in his study on India that the marital fertility of Muslim women was about five to nine percent higher than Hindu women. These differences are not only for contraceptive use but also for social customs and norms that are practiced by a community.

Chaudhury (1984) worked with Bangladesh Fertility Survey (BFS) data and Multiple classification analysis (MCA) was used to analyze the data. He found that the fertility of Muslims was a little lower than Hindus before adjustment for the effect of other variables

When religion group holds a pro-natalistic ideology, the religious minority groups have high fertility (Adsera, 2007). But the socioeconomic disadvantaged situation of the minority groups has a positive effect on fertility (Johnson-Hanks, 2006). Feeling of marginality or insecurity has impact on minority's reproductive behavior (Poston, Chang & Dan, 2006). The assimilations school argues that when the socio economic and demographic characteristics of religious groups are similar, their fertility behavior is convergence (Bean & Swicegood, 1985).However, the link between socioeconomic (I.e. education) and cultural factors (norms, values, beliefs) is held as the key to explain the linkage between religion and fertility by the interactions school (Yeatman and Trinitapoli, 2007).

Bangladesh has conducted very few study in terms of differences in fertility behavior of the two major religious groups Muslims and Non-Muslim or Hindus. There is not enough data in Bangladesh about religious groups. So, a more research is needed to have conclusions between the role of religious and women's fertility.

Research from cross country analysis showed that religious minorities in each country (India and Bangladesh) have higher fertility as compared with their majority group. This empirical study does not depict the true nature of the relationship between two religious groups situated in Bangladesh. Here my interest to test the relationship between religion groups and fertility in Bangladesh after controlling the socioeconomic factor likes education. In order to control such factor, I use linear regression model.

Part 2: BACKGROUND AND HYPOTHESES

I] Fertility and religion Status in Bangladesh

Bangladesh is situated in the southern part of Asia with an area of 1, 47,570 square kilometers. Total population is around160 million. Bangladesh got independence in the year of 1971. Before independence Bangladesh was the part of Pakistan. Bangladesh is well known for its religious and ethnic diversity. People have immense opportunity to practice religion by their culture undoubtedly. Religion has a strong influence on fertility in all communities in sphere of a society. Muslims are the majority religion which is about 90% and rest 10% are Hindus with mixed religion. According to BDHS, more than 70% women lived in rural areas and at least 25% of ever-married women have never gone to any school. Most rural women are mainly involved in agricultural or domestic activities. The population density is around 1070 persons per square kilometer in 2014. A male and female ratio is 49.4% and 50.6% (Bangladesh Bureau of Statistics, 2015).

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. Pronatalist characteristics exist in Muslim perhaps may be a strong belief that everything is done by Creator. They believe that creator creates sexuality and determines procreation and barrenness. 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).

On the other hand, Hindu people have no religious barrier against contraception. They do not have even any strong doctrine against Planned Parenthood and thus attitude may have helped them to check their fertility.

So, from discussions, we can say that the relationship between education and fertility in developing countries like Bangladesh might tend towards the issue of autonomy and aspiration for women as opposed to prolonged education and childlessness which are the attributes of developed country. So, it can be assumed that the education of women in Bangladesh shapes fertility behavior through the mediating effects of factors such as demand for children as well as changing socioeconomic roles of women and children in traditional societies. Theoretical explanations discussed here uphold fertility decline to start from socioeconomic changes declining in the demand for children through the participation of educational attainment. For this reason, I formulate the hypothesis of the study I.e. women's educational attainment has an impact on the total number of children and women's age at first birth which in turn find the women's total fertility rate(TFR). It can be assumed from theoretical arguments that education affects the socioeconomic role of women in traditional Bangladeshi Societies as well as empower them more autonomy and control over their fertility.

II] Education System in Bangladesh

Bangladesh government believes that education is the backbone of a nation. Government is trying hard to uphold women education in all sphere in society. Some study viewed that still women are deprived of education in Bangladesh due to social cultural and economic reasons. Bangladesh enacted a mandatory primary education law followed by UN Child Rights convention in the year of 1990. The current education policy was introduced in 2010 where provided a huge subsidy to meet demand for girl's education in an initiative to combat MDG targets. The general age of attending in school is 6 in Bangladesh and 23% of men and 27% of women have never been in school (BDHS 2014). There are not much gender differences in primary education but this difference increased in secondary education as well as in higher education. About 50% of women age 45-49 have no education according to BDHS 2014 data. Urban areas have higher level of educational attainment and on average urban women have two more years of schooling compare to rural women. Women have 1.2 to 3.5 years of completed median years of schooling between 2000 and 2014 which indicate a positive initiative in women development in Education sector in Bangladesh (BDHS, 2014). Two ministries are responsible for entire education systems in Bangladesh. Ministry of Education (MoE) is mainly works for preparing legislation and regulations, draft policies and also supervise educational institutions. The ministry of Primary and Mass Education (MoPME) is responsible for primary education and non-formal education. After independence in 1971, most of schools are run by Government (BDHS, 2014).

Part 3: PREVIOUS RESEARCH

Research has been done before about the education and women's fertility behavior in Bangladesh. But almost nothing was done in regard to religion and fertility patterns in Bangladesh. In this section, I will discuss previous research, literature, and studies that focus on the education and women's fertility followed by religion (Mainly Muslim and Hindus).

There are three levels of an education system in Bangladesh: Primary level (grade 1 to 5), Secondary level (grade 6 to 12) and higher secondary level. Some private institutions are teaching English medium education which offers 'O' level and 'A' level courses. The entry age of primary education is 6 years. The lower secondary is 11-13 and secondary is 14-15 and the upper secondary is 16-17years. Bangladesh government is very much keen to enhance women education as Education sector got the highest allocation in the National budget for last decades.

Chaudhury (1984) found that there is an inverse relationship between education of wife and their fertility when fertility is measured as a number of children ever born. He mentioned that the use of contraception increases with each increase in educational level, rising from 8% for women with no education to 42% at the highest level. When the level of education rises their mean number of the children ever born decrease and women who had no education have average two more children than women who ever gone to high school and above. He observed similar differences in both urban and rural areas.

Islam et, al (2009), worked on "Fertility transition in Bangladesh: The role of Education" using nationwide data of 2004 Bangladesh Demographic and Health Survey to look at the relationship between Fertility and Education. Their results showed that fertility declined considerably with women's education. This relationship remained the same even after controlling the factors place of residence, religion and household wealth status.

Cleland (2002), studied "Education and future fertility trends, with special reference to mid-transitional countries". He identified that the educational composition of population for the future course of fertility ranged from 3-4 births per women. He found a clear strong positive association between transition stage of fertility and schooling at people.

Miah and Rahman (1993) worked on "Determinants of High Fertility in Bangladesh: Their Implications for social Development". Amin and Faruquee (1980) studied on "Fertility and Its Regulations in Bangladesh". They both found that there is a significant, linear and inverse relationship between women's fertility and women's education in Bangladesh.

Chowdhury (1977) got a curvilinear relationship between women's education and fertility when he worked on "Education and Fertility in Bangladesh". Jeffery and Basu (1996) showed on "Schooling as contraception, in: Girls Schooling, Autonomy and Fertility change in south Asia" that there is strong association between female literacy and fertility decline. He found that 10% increase in the female literacy is associated with a 0.5% decline in total fertility.

Kabir, Jahan and Alam (2004) worked on "The effect of Education on Fertility in Bangladesh". They studied with 1989 BFS data and 1993-94 BDHS data and also with 1996-97 BDHS data. Their study investigates the effect of education on Fertility. When they worked with religion they got from 1989 BFS data that there is no much difference among the Muslim and non-Muslim women in respect of the level of education but when they worked with 1993-94 BDHS data and 1996-97 BDHS data they suggested that non-Muslims are better educated than Muslim women.

According to Kritz et.al (1989), education plays an important role changing the status of women in male dominated societies. Education has an impact on fertility especially it has a certain effect on the demand for children.

Kravdal (2002) found that the role of education influences promoting fertility decline to accelerate woman autonomy including the ability to manage in activities outside the households, economic and decision-making autonomy. He thought that an educated woman can have certain opportunities to work outside the house, playing a role in decision-making on children and other family matters with in laws. These scopes make her lead to fertility reduction in long run.

Researchers examined that the relationship between education and woman fertility shown that decline in fertility by woman education mainly by the postponement of motherhood entrance. Empirical findings also agreed with in theory as the rate of childbearing tends to be lower when women are participating in any kinds of education.

Kreyenfeld et al. (2007) studied in Germany and Hoem et al. (2006) studied in Sweden found that woman who have highest education were likely to have fewer children and higher rates of childlessness compare to other less educated women.

Ketkar (1978) examined that there is a contrast scenario between female education and fertility in developed countries and developing countries.

Murthi (2002) pointed out that the impact of female education on fertility depends on many other factors such as culture, status of women in the society. Murthi in his study of fertility change in Asia and Africa examined that there is no consensus theory among policy makers and scholars of the reason which is responsible for decline in Fertility in Asia and Africa.

Boongaarts (2010) identified that there is a disparity in reproductive behavior between socioeconomic groups within the region as fertility rates are higher in rural areas than urban areas and higher for less educated woman compare to educated woman.

In summary there is a significant linear and inverse relationship between fertility and female education was found in Bangladesh. Only one study done by Chowdhury (1984) showed that there is a curve linear relationship exists between fertility and female education.

Kabir, jahan and Alam (2009) stated that according to 1989 BFS data there are no much difference among Muslim and Non-Muslim women in respect of the level of education but according to 1993-94 BDHS data and 1996-97 BDHS they found that non-Muslims have better education compare to Muslim women.

According to Visaria (1974) and Saksena (1973), they found that Muslim women have higher fertility compare to Hindu counter parts.

On the other hand, several other studies between fertility and religious groups explained no clear view about the predominance of one group over the other. But other empirical study agreed that Muslim women have higher fertility than other Hindu women (Goyal, 1974 and Kantikar, 1966).

The cross country analysis has been done by latest DHS (2005-2006) and BDHS (2006-2007) in Bangladesh and India and they found that the independent effect of religious minority status on fertility (Sahu & others, 2012). They found that the results supports minority hypothesis both the cross country and intra country level. The results also showed that there is a strong relation between religious status at the national level and socioeconomic factors. It also stated that high fertility

among religion minorities is a consequence of socioeconomic vulnerability in Bangladesh and India (Sahu & others, 2012). In summary, there are both diverge and converge relationship between religious status and fertility in Bangladesh.

HYPOTHESES

Fertility and family planning in developing countries are associated with socioeconomic factors of what women's education is most important. A national study by contraceptive use in Pakistan showed that women's education is strongly associated with contraceptive use. One of the mechanism of female education has a strong inverse impact on fertility is the level of modifying the supply of children as well as to reduce the demand for them. The ultimate results are a decline in the number of births. Decline in infant mortality is one of the important determinants of declining fertility. So, education of women is the mechanics to reduce child mortality and thus one of the mechanisms of fertility decline. Women autonomy is another mechanism to decline in fertility. Educated women have autonomy over labor force participation and they have stronger decision over child survival objectives through their knowledge and information's. Sarkar(1983) analyze that educated women are able to improve the survival chances of their children. In macro level, fertility declines are correlated with rising aspirations. Autonomy of women is one of the mechanisms of how education affects contraceptive use in developing country like Bangladesh. Contraceptive use or family planning was strongly associated with women's education. Autonomy mediates the association between educations and contraceptive use. Family planning is an important and priority sector in government in Bangladesh. Since 1970s, Bangladesh government supporting family planning programme but still fertility rate is high in Bangladesh although contraceptive use is relatively high.

It is important to understand the future trajectory of religion composition of Bangladesh. Are Muslims more fertile than other religion groups in Bangladesh? According to David Voas (2003), demographic methods need more attention in the study of religion. He remarks that people enter exit and move within religion just as they are born. This context is now relevant as an important postulate of second demographic transition theory is that the values are linked to fertility Behavior (Van de Kaa, 1987). Europe is now experienced the connection between religiosity (either belief or affiliation) and fertility. Different Study from multinomial regression analysis state the effect of religion on contraception use showed a different trend that observed for marriage. It also found that the Hindu Muslim
Differentials in family planning use were minimal and the religion effect decreased over time.
Bangladesh has done less attention in relation to fertility and religion due to limitations of data. Bangladesh government in macro level is enacting policies which restrict access to family planning thus enhance populations at national level. In micro level, Muslim individuals have full access to family planning and urban material incentives not to have larger families than non-Islamist Muslims. According to Goldstone (2007), large Muslim populated countries have been quite resistant to a decline in fertility, thus may influence higher growth rates.

Total fertility rates in Muslim dominant country like Somalia, Afghanistan, Yemen and Palestine have more than five children per women (Jenkins, 2007). But there has been seen opposite scenario also. Algeria, Lebanon, Tunisia, and Turkey have below replacement level fertility rates (Jenkins, 2007). According to Goldscheider (1971), Muslims like minorities tend to have higher fertility when they are in the minority group. But where Muslims are a majority (country like Malaysia, Egypt, Lebanon and Albania) their fertility differs from that of non Muslims minorities (Westoff and Frejka, 2007).

To explore the relationship between women's fertility and education in Bangladesh, the hypothesis I designed here is women with least education or no education has higher number of children compared to their counterpart as higher educated women. There is various fertility measures exit in literature but here I used two variables which are total children ever born and women's age at first birth. I also use a sub-question to examine the association between women's fertility and religions. I want to see if there is any association between religion and fertility and education. For this reason, I use my second hypothesis like this: a. Muslim non-educated women have more children than Non-Muslim non-educated women and b. Muslim educated women have more children than non-Muslim educated women. There are religion barriers for Muslim using less family planning method because they believe that children are the blessings of Creator. Although this practice is partly removed with women's education but still in rural and illiterate communities have this practice. So, it is relevant to examine the association between women's fertility and religious in this context. Based on this argument my hypothesis is:

1. Women with least education or no education have the higher number of children than educated women.
2. 2a. Muslim non-educated women have more children than non-Muslim non-educated women.
   2b. Muslim educated women have more children than non-Muslim educated women.

To examine women's fertility, there are so many factors that need to be considered such as an economic status of household, wealth, husband's education, contraception use, family planning and so on. But my interest is women's age

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group (as a demographic factor) to look at further the relationship between education and women's fertility in Bangladesh. I use linear regression model to look the association among fertility, religious and education of women in Bangladesh.

Part 4: DATA & METHOD

I] Description of Data Set

The study uses the 2014 Bangladesh Demographic and Health Survey (BDHS) data. National institution for Population Research and Training (NIPORT) of the Ministry of Health and Family welfare conducted the survey and it was implemented by Mitra and Associates of Dhaka. USAID was the main funding provider of the Survey. This Survey is a part of the global Demographic and Health survey (DHS) programmed. Data collection of the Survey was done over a month period from June to November 2014. It covers the total population in private households in Bangladesh. It is the 7th DHS undertaken by the government of Bangladesh from the year 1993.

II] Sample of Study

The sample of 2014 Bangladesh Demographic and Health Survey (BDHS) data is nationally representative and covers the total population household's units in the country. The Sampling frame used in the survey presented from the list of enumeration areas (EA's) of the 2011 populations census. EA's as a primary sampling unit (PSU) for this survey and an EA consists of average about 120 households. A two-stage stratified sample of households is the basis of the survey. At first stage of sampling 600, EA's were chosen where 207 EA's were urban and 393 were rural areas. At the second stage of sampling average, 30 households were chosen from each EA using an equal probability systematic sampling technique. In this survey total 18,000 residential households were selected which with about 18,000 ever married women were interviewed among them 6,210 in urban areas and 11,790 in rural areas. Finally, total sample was 17,886 ever-married women age 15-49 and 11,736 were from rural and 6,150 were from urban areas.

There were used three types of questionnaires: A Household Questionnaire, a Woman's Questionnaire, and a Community Questionnaire. The Household Questionnaire was designed to record all the usual members of the households and visitors to the selected households. Some basic information such as age, sex, education, current work status, birth registration was collected for each recorded person. The basic function of the Household Questionnaire was to categorize women who were eligible for the individual interview. Beside this questionnaire was shaped to record the height and weight of ever-married women age 15-49 and children below the years of six.

The Woman's Questionnaire was used to record information from ever-married women age 15-49. Women were asked questions such as background characteristics (e.g., age, education, religion, and media exposure), Reproductive history, use and source of family planning methods etc.

The Community Questionnaire was used to gather information about the existence of development organizations in the community and the accessibility of health services and other facilities. This was designed to a group of four to six key informants. These had the access to health and family planning services in the cluster and they had enough knowledge about current socioeconomic conditions of the society. Community leaders, teachers, government officials, social workers, religious leaders are acting as a role of key informants.

The Questionnaire were administered the demographic and socioeconomic profile of ever-married women age 15-49 interviewed in BDHS 2014. Data on men are excluded since they are not the target group of this study. The sample size for 2014 DHS Survey for women aged 15-49 was 17,863. However, this study focuses on the age of women from 15-45 as interest is to focus on women who had at least one child at the time of interview as we want to see women's fertility at end (BDHS, 2014)

III] Description of Variables

To analyze women's fertility, the study uses women's characteristics at a time when a survey was concluded. Educational attainment or religion constitutes the predictor variable while total children ever born and women age at first birth is the outcome variables.

Dependent Variables

Total children ever born:

When looking at the variable 'total children ever born' I have generated a new variable called **'tceb'**. The values and the levels of the original variable were changed. Few women have more than ten children so I merged in label **'10'** those women have 10 or more children. There are no missing values.

Women age at first birth:

This variable was used to generate a new variable called **'agerange'**. Variable name and value was changed and made it into category variables in 5 years' age group. But the variable values and labels were not changed as this is a continuous variable. Those women age at first birth in between 10 to 14 years I made it label define**'10-14'**. women age at first birth in between 15 to 19 years I made it one label define**'15-19'**, women age at first birth in between 20 to 24 years, made it label define **'20-24'**, women age at first birth in between 25 to 29 years I made it label define **'25-29'**, women age at first birth in between 30 and more years I made it label define **'30 and more'**.

Independent Variables

Women's educational attainment:

I used this variable to generate a new variable called **'hea'**. The values of the original variable 0,1,2,3,4,5 which indicates "No education", "incomplete Primary", "complete primary", "incomplete secondary", "complete secondary" and "Higher" respectively will be replaced by new values 0 "No education" 1 "Complete Primary" 2 "Complete Secondary" 3 "Higher". I replaced these with new values 0 "No education with incomplete primary", 1 "complete primary with incomplete secondary and 2 "Complete secondary with higher". In Bangladesh educational system, an individual with an incomplete primary school is not different from one with no education and incomplete secondary are treated as complete primary that why I include these two together. Complete secondary and higher were combined together for reason is that the number of responses for the two categories is too small to be considered individually. The new value and label called 0 "No education with incomplete primary", 1 "complete primary with incomplete secondary and", 2 "complete secondary and higher".

Religion:

Here I use this variable to generate a new variable called **'Religionnew'**. The values of the original variable 1,2,3,4 and 96 which indicates "Islam", "Hinduism", "Buddhism" "Christianity and other" and ". The new value and label as 1"Muslim", 2 "Non-Muslim", I merged Buddhism Christianity and other into Non-Muslim group as those are the small number.

Age group:

I use age group variable to generate a new variable called **'agegroup'**. Here I only changed the variable name but the variable values and labels were not changed as this is a continuous variable.

VI] Method

To look at the association between educational attainment and women's fertility, I will be presenting the results of the analyses. For the measure of women's fertility, I use two variables which have a direct effect on fertility are a number of children ever born to women and women age at first birth. For my sub question, I also divided these two variables by religion group getting further information. Finally, I use the linear regression model to see the relationship between women's fertility and education on the religious group for Muslim and non-Muslim women. I included p-values got from the chi-2 tests, all tables can be added in the appendix.

Part 5: RESULTS

Descriptive Findings:

Sample Characteristics

The number of cases that were excluded from this study is provided below. The total number of subjects in the survey (BDHS, 2014) is 17,863. Cases excluded from a study are 1785 as 1784 were dropped from age at first birth and one was dropped from the religious group. So, Total number of subjects included in the study is 16,078.

Table1:

Name of Variables	Missings (Dropped)
Total children ever born	0
Women age at first birth	1784
Women's educational attainment	0
Religion	1
Age group	0
Total	1785

I] Results

Figure 2: Bar chart of women total children ever born.
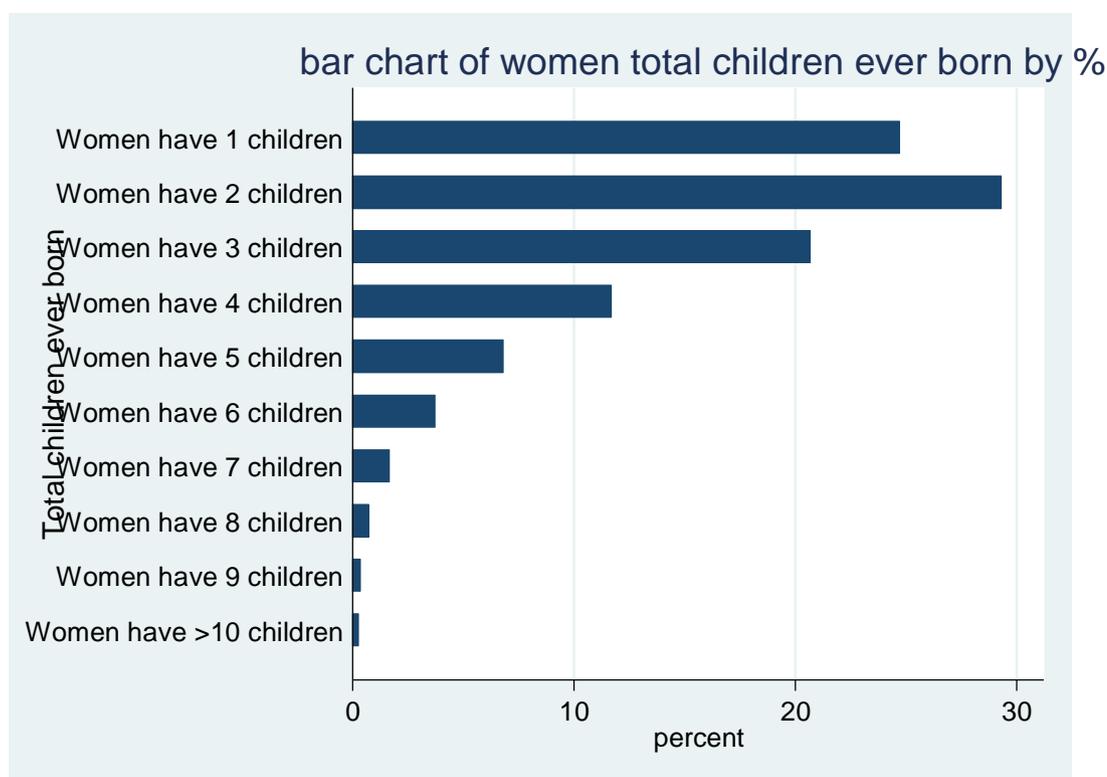
The dependent variable here is total children ever born. Before missing values, we had 17,863 women and 9.99% women of them have no children. After dropped missing values, now we have total sample 17,078 and all women have 1 to 15 children. After dropped missing values women with no children had dropped. Among 17,078women, 24.72 percent responded have 1 child and 29.31% women have two children and 20.71% women have three children and 11.69% women have four children. Very few women have more than seven children.

Figure 3: Bar chart of Women age at first birth.
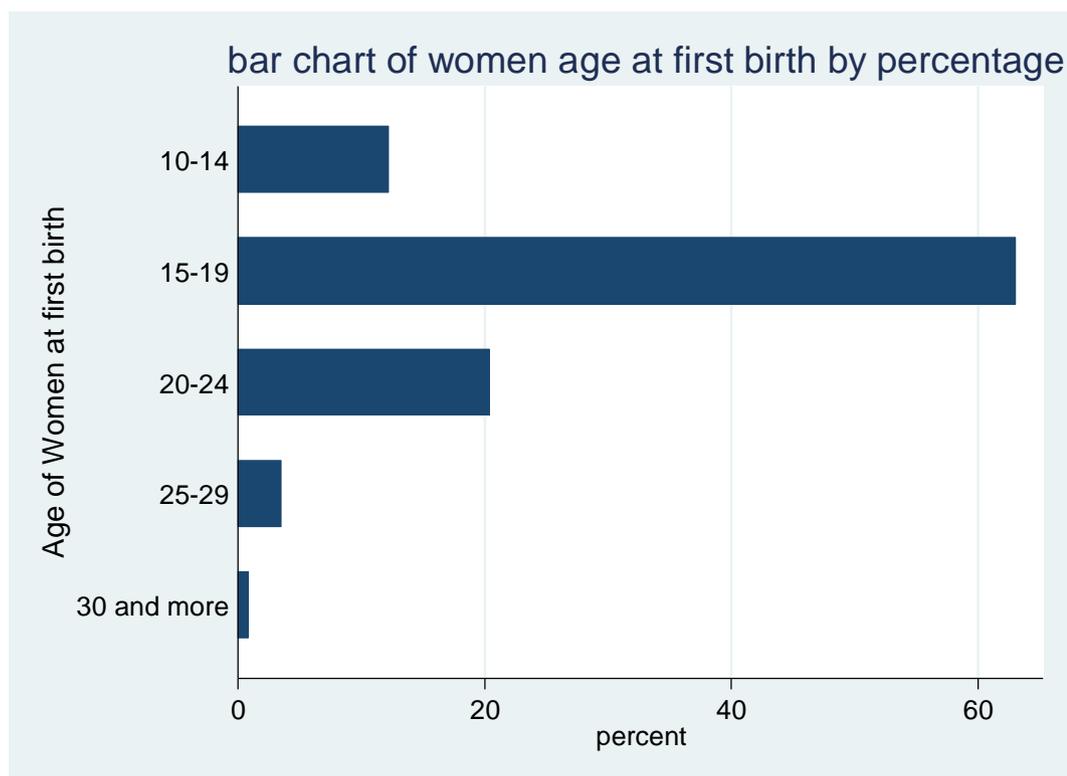
More than 12% women have first birth within age of ten to fourteen. At age of 15to 19, more than 63% women have their first child. 15 to 19 years' age are the pick years for Bangladeshi women having first child. 20.36% women have first birth within age of twenty to twenty-four. Women having first children before age 13 and after age 34 are very few.

Table 2a: Number of women by educational attainment

Educational attainment	No Education with incomplete primary	Completed Primary with incomplete secondary	Completed Secondary and Higher	total
Freq.	7,020	6,810	2,248	16,078
Percent	43.66	42.36	13.98	100

Respondents who have no education with incomplete primary and who have completed primary education with incomplete secondary are 43.66% and 42.36% which seems more or less same. But fewer women have completed secondary or higher education which is 13.98%.

Table 2b: Number of women by Religion

| Religion	Muslim	Non-Muslim	total
Freq.	14,504	1,574	16,078
Percent	90.21	9.79	100

More than 90.21% samples are Muslim and rest 9.79% are Non-Muslim or other religion.

Table 2C: Number of women by total children ever born and educational attainment

Number of children	No education (frequency)	Primary (frequency)	Secondary (frequency)	All women (frequency)
1	884	2,100	991	3,975
2	1,553	2,311	848	4,712
3	1,717	1,311	301	3,329
4	1,215	587	78	1,880
5	764	310	24	1,098
6	489	109	5	603
7	218	43	1	262
8	101	17	0	118
9	46	15	0	61
10 or more	33	7	0	40
Total	**7,020**	**6,810**	**2,248**	**16,078**

In our total sample the association between dependent variable Total children ever born and independent variable Highest Education Attained are statistically significant as p-value is 0.000($p<0.01$).

Figure 4: Bar chart of women's mean number of children ever born by educational level
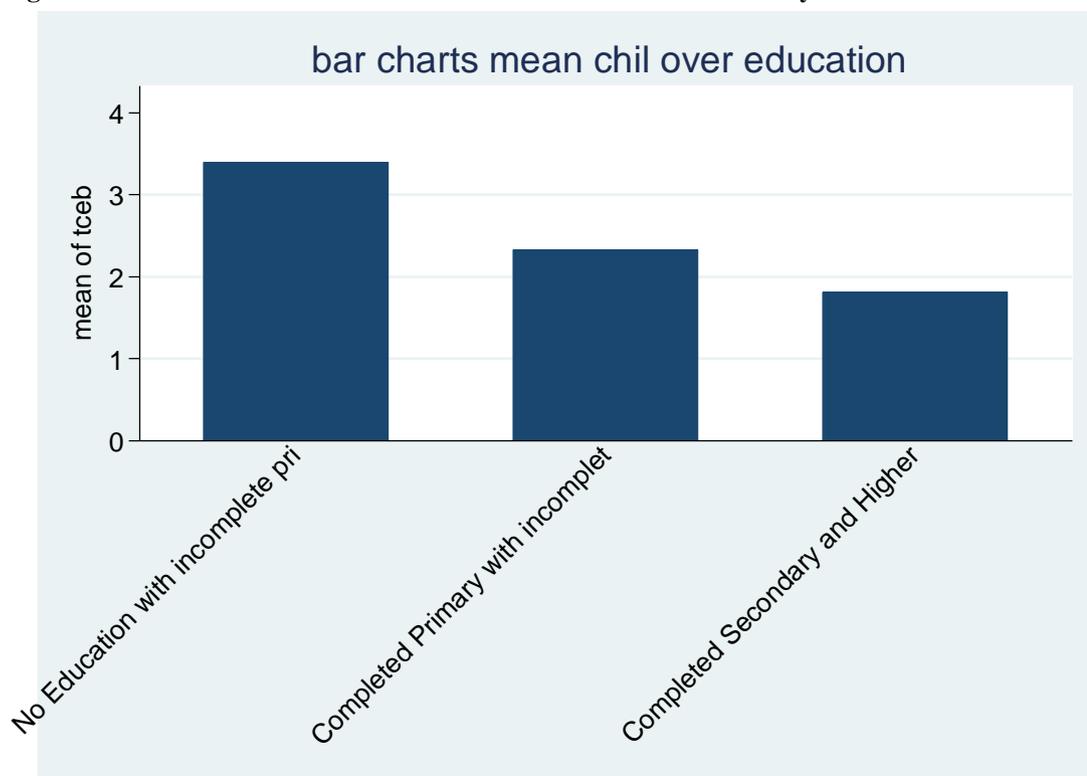
Women with no education and incomplete primary have more than 3 numbers of mean children compare to Completed primary with incomplete secondary group those have 2.33 mean no of children. Completed Secondary and Higher Educated women have least number of mean children which is around 1.81. The graph shows that the higher the education the lower the mean number of children.

Figure 5: Bar chart of women's mean age at first birth by educational level

bar charts mean age birth over education

Table 3a: women's mean age at first birth by educational attainment

Highest education Attained	No Education with incomplete primary	Completed Primary with incomplete secondary	Completed Secondary	total
Mean (agerange)	15.21	15.59	18.92	15.89

The mean age at first birth of non-educated women have 15.21 and Completed primary with incomplete secondary group women have 15.59. The highest number of mean age at first birth groups are the Completed Secondary and higher educated women those age at first birth is 18.92 which is more than 3 years' difference from Non-educated women group.

Table 3b: Number of women's age at first birth and educational attainment

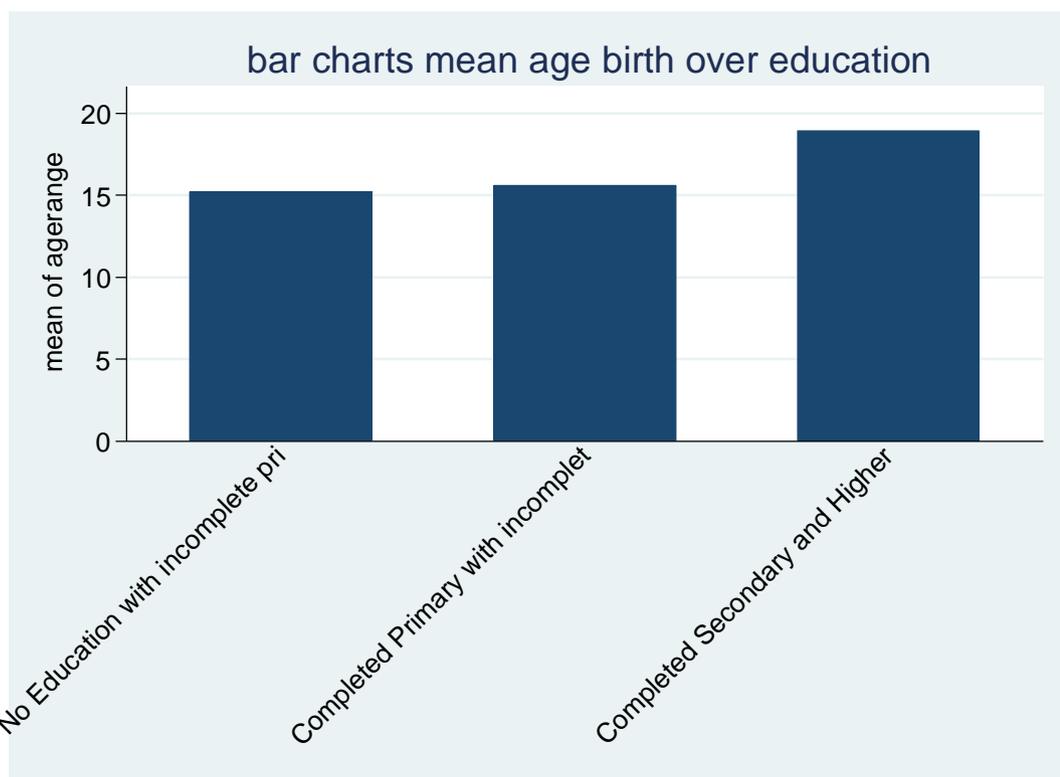| Women age at first birth	No education (frequency)	Primary (frequency)	Secondary (frequency)	All women (frequency)
10-14	1,199	738	19	1,956
15-19	4,541	4,707	893	10,141
20-24	1,102	1,203	968	3,273
25-29	140	141	290	571
30 and more	38	21	78	137
Total	**7,020**	**6,810**	**2,248**	**16.078**

In our total sample the association between dependent variable women age at first birth and independent variable Highest Education Attained are statistically significant as p-value is 0.000(p<0.01).

Figure 6: Bar chart of women's no of children ever born (tceb) by Religion (Religionnew)
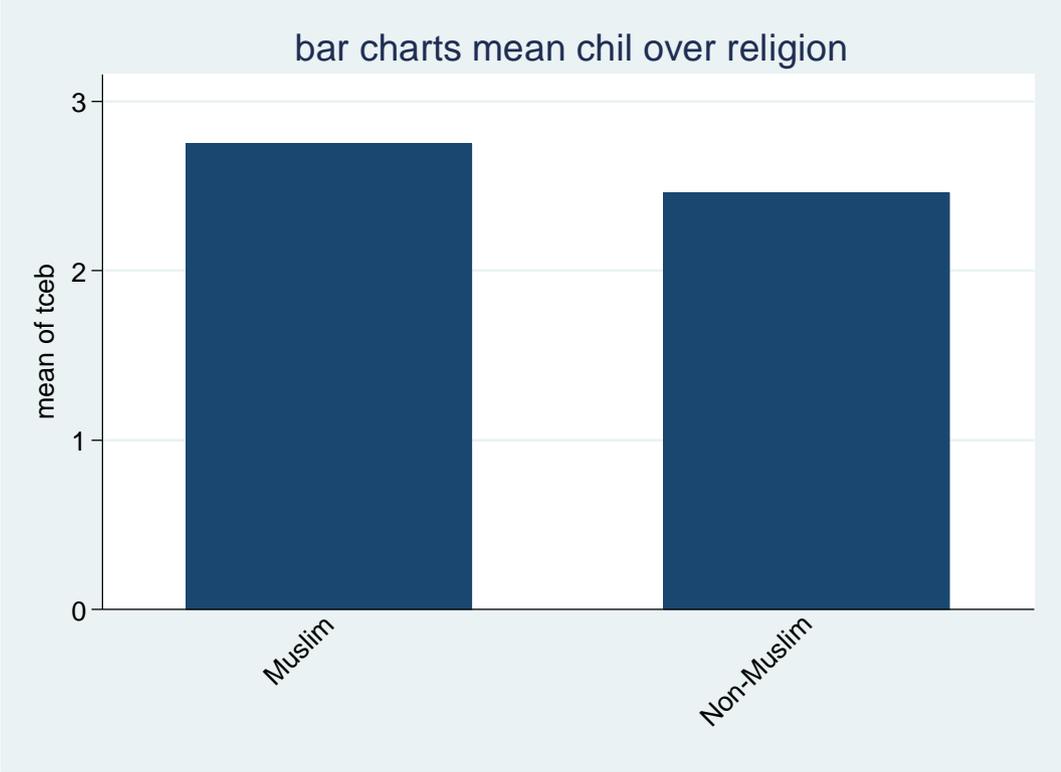
Muslim women have 2.75 no of mean children ever born compare to 2.46 which is for Non-Muslim women. In our total sample the association between dependent variable women's no of children ever born and independent variable religion are statistically significant as p-value is 0.000 (p<0.01).

Figure 7: Bar chart of Women age at first birth by Religion (Religionnew)

Table 4: women's mean age of at first birth by Religion

Religion	Muslim	Non-Muslim	total
Mean(agerange)	15.80	16.72	15.89

The mean age of Muslim women's first birth is 15.80 and for Non-Muslim women is 16.72 respectively. The total mean age of women first birth is 15.89. So,Non-Muslim women have started a bit later than m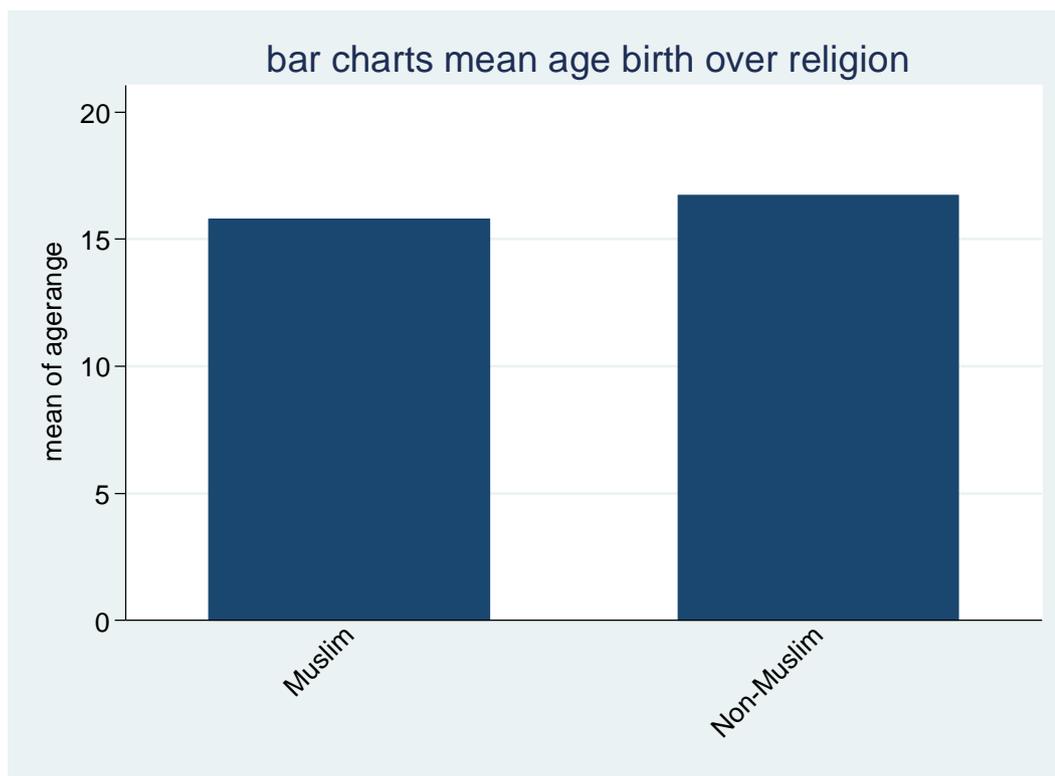ean age but Muslim women have started a bit earlier than mean age. In our total sample, the association between dependent variable women's mean age of at first birth and independent variable Religion are statistically significant as p-value is 0.000(p<0.01).

Figure 8: Bar chart of women's total children ever born by educational attainment and Religion

bar charts mean chil over education & religion
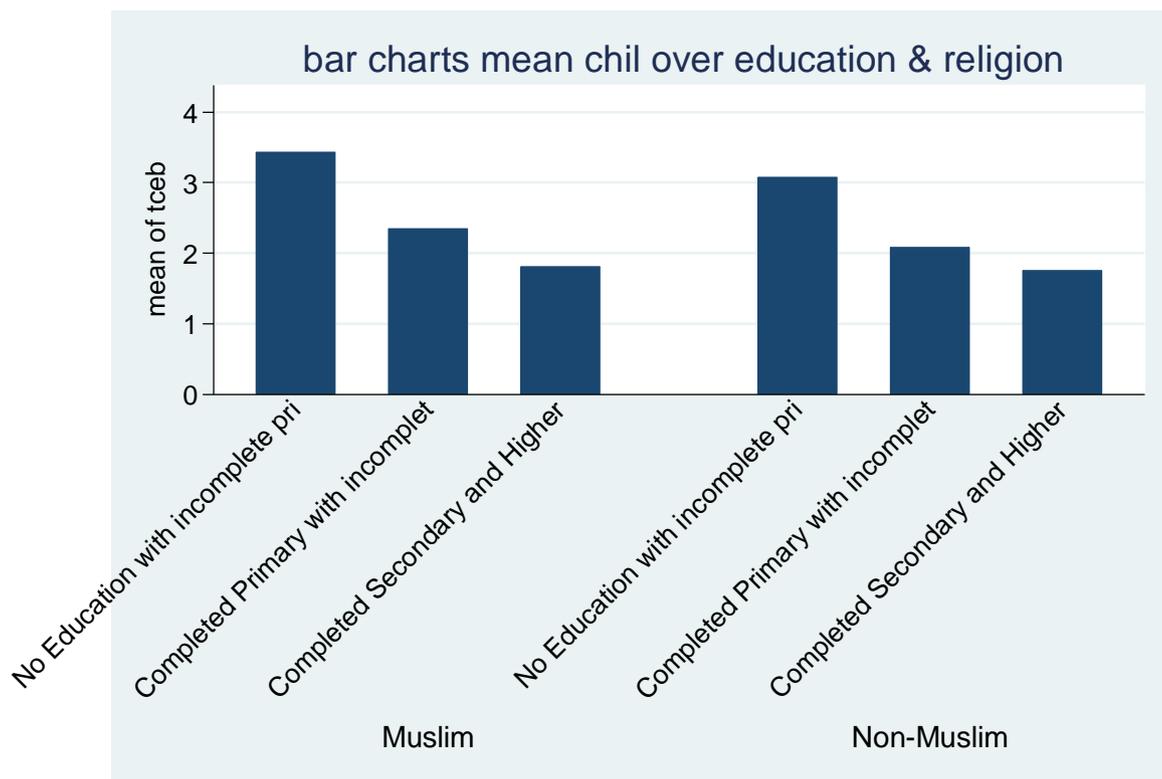
Table 5: Distribution of women's total children ever born by educational attainment and Religion

Religion	No Education	Completed Primary	Completed secondary	total
Muslim	3.43	2.35	1.81	2.75
Non-Muslim	3.08	2.09	1.75	2.46
Total	3.40	2.33	1.81	2.72

The highest no of mean children is 3.43 which belong to no education Muslim women but lowest no of mean children is 1.75 which belong to Completed Secondary and Higher educated Non-Muslim women.

**Figure 9: Bar chart of women's age at first birth (agerange) by educational attainment and Religion**
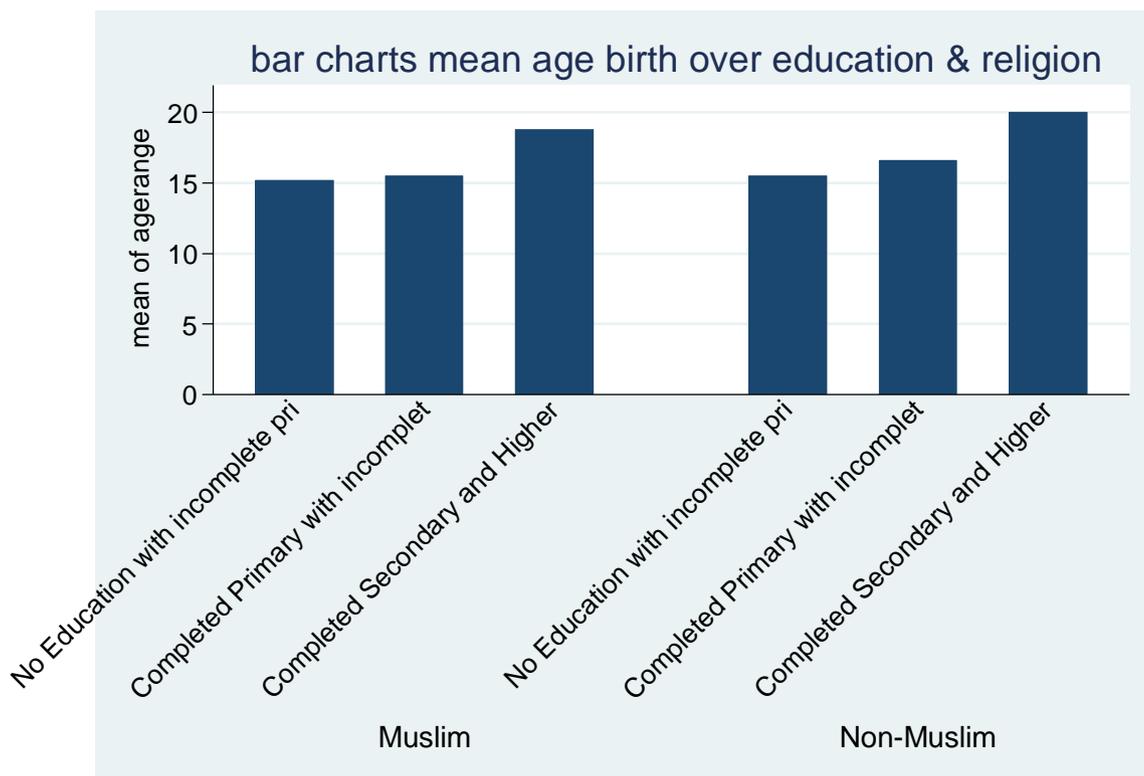
Table 6: Distribution of women's means age at first birth by educational attainment and Religion

Religion	No Education with incomplete primary	Completed Primary with incomplete secondary	Completed secondary And higher	total
Muslim	15.18	15.50	18.77	15.80
Non-Muslim	15.50	16.59	20.04	16.72
Total	15.21	15.59	18.92	15.89

The mean age of women's first birth for Muslim Non educated women is 15.18 and 15.50 for Non-Muslim women. Completed Secondary and Higher educated Muslim women have started their childbearing almost 3 years later than average childbearing age which is 18.77 years and Completed Secondary and Higher educated Non-Muslim women have started their childbearing almost 5 yearslater than average childbearing age that is 20.04. The difference for non-educated women group to highly educated group is about 3 to 4 years that mean non-educated women from both religion group have early childbearing.

Figure 10: Bar chart of Total children ever born (tceb)and Educational attainment (hea) by only Muslim religion group.

bar charts mean chil over education by Muslim religion
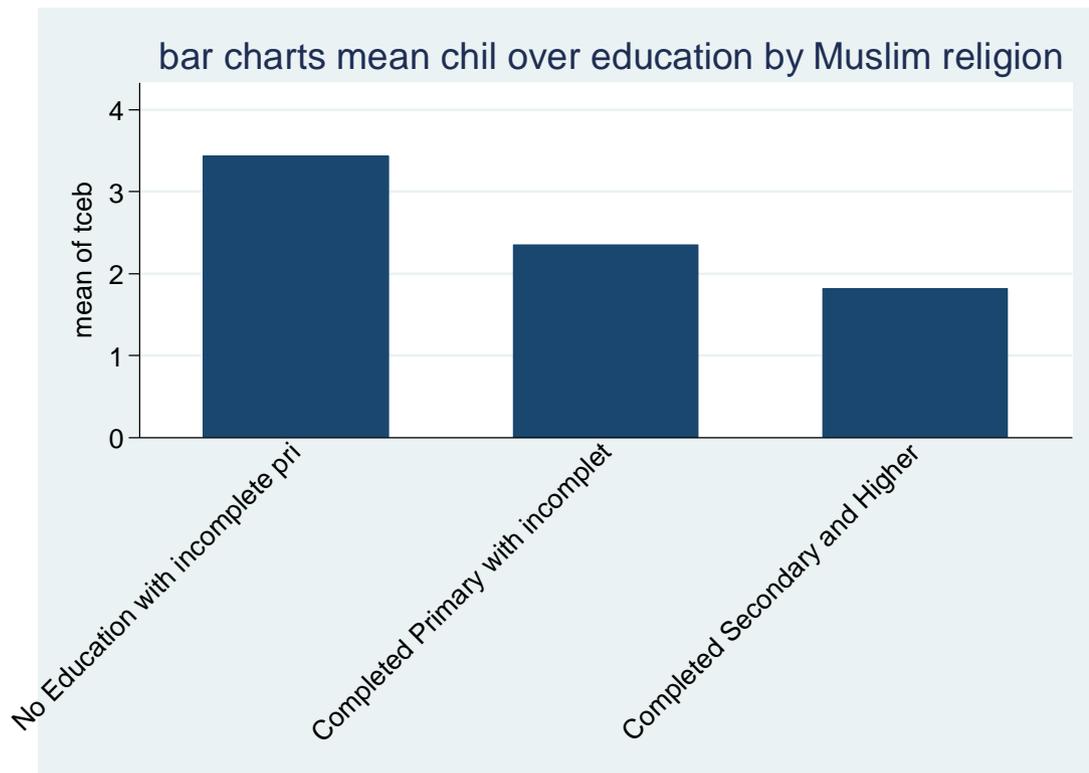
Figure 11: Bar chart of Total children ever born (tceb)and Educational attainment (hea) by only Non-Muslim religion group.

bar charts mean chil over education by Non-Muslim religion
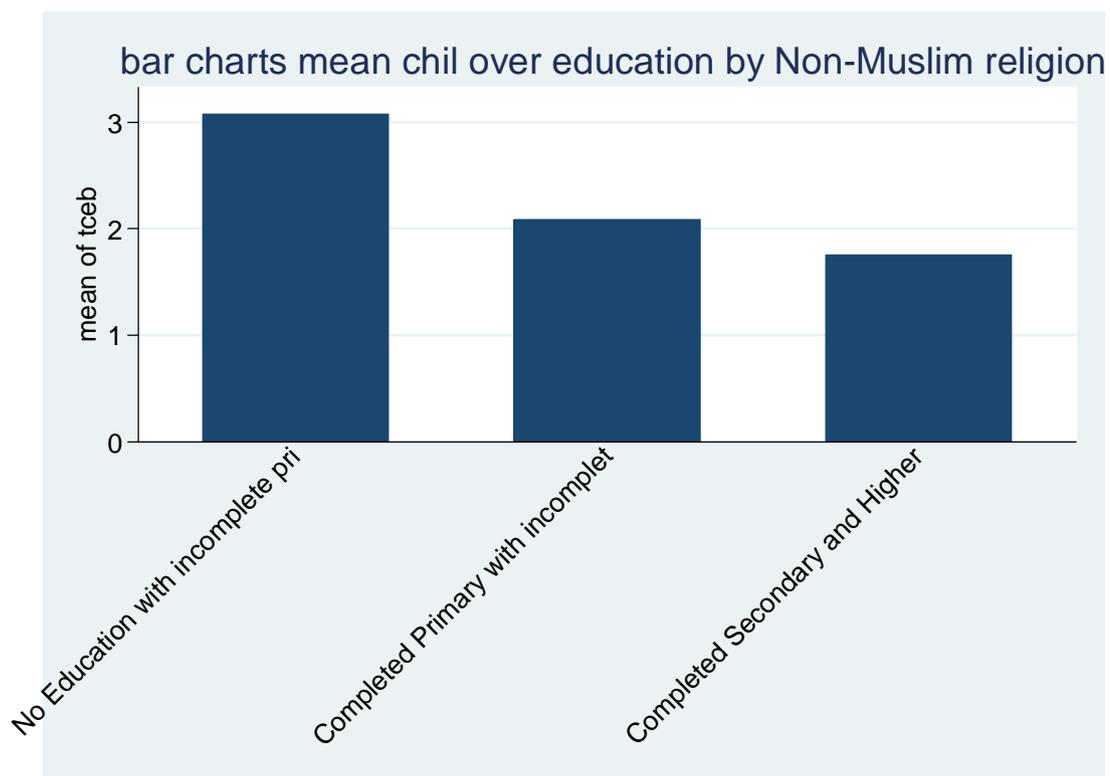
Non-Muslim non educated women have 3.08 no of mean children but Non-Muslim educated women have 1.75 no of mean children which shows that on average educated Non-Muslim women have one and half children less than non educated

same religion women. Here the relationship between women's no of children ever born and independent variable religion by Hindu women are statistically significant as p-value is 0.000 (p<0.01).

Figure 12: Bar chart of Women age at first birth by educational attainment with Muslim Religion women.
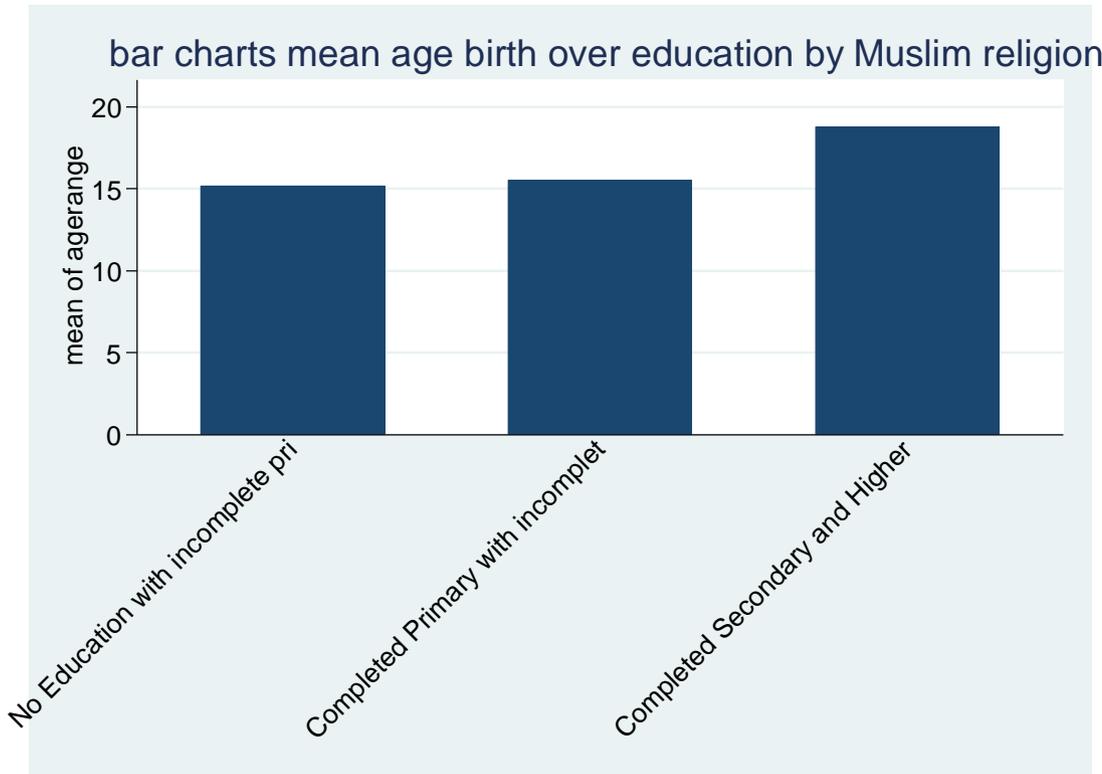
Figure 13: Bar chart of Women age at first birth by educational attainment by Non- Muslim Religion women.
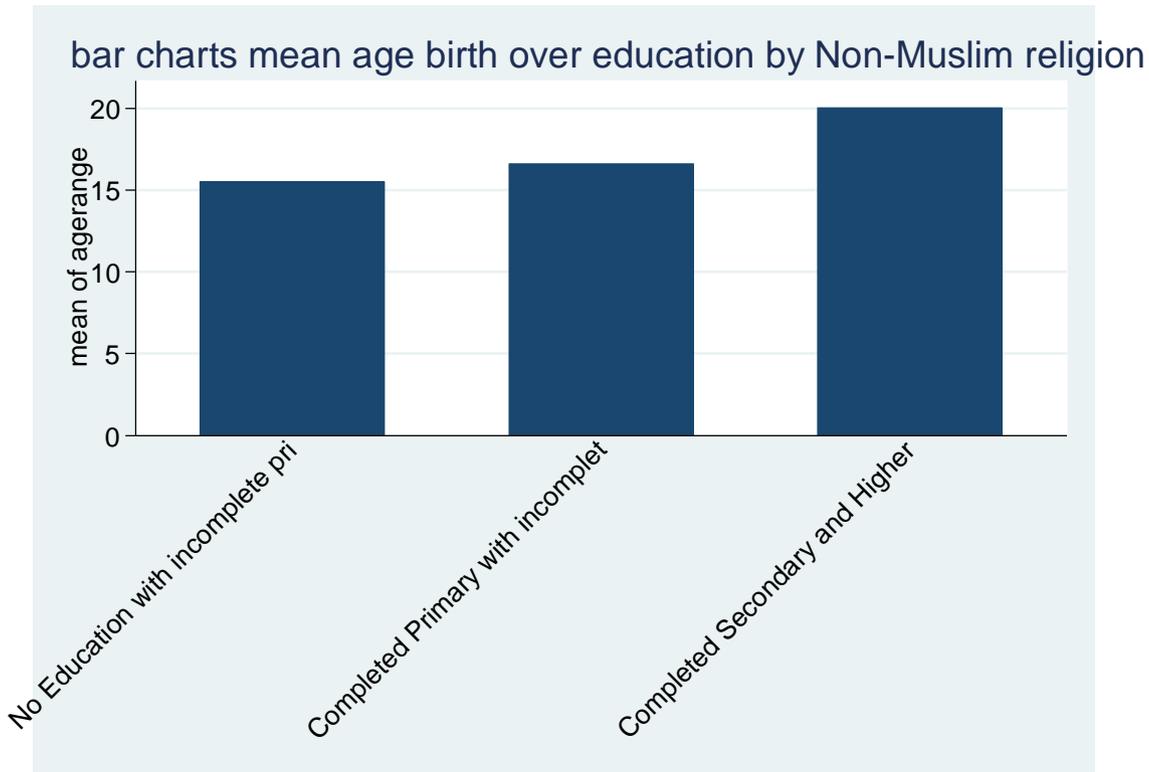
Non-Muslim non educated women mean age at first birth is 15.50 whereas Non-Muslim educated women mean age at first birth is 20.04 which shows that non educated Non-Muslim women have an average five year earlier childbearing than educated women.Here from pearson chi 2 test we found that the relationship between women mean age at first birth and independent variable religion by Non-Muslim women are statistically significant as p-value is 0.000 (p<0.01). Respectively, the relationship between women's no of children ever born and independent variable religion by Muslim women are statistically significant as p-value is 0.000 (p<0.01) and the relationship between women mean age at first birth and independent variable religion by Muslim women are statistically significant as p-value is 0.000 (p<0.01).

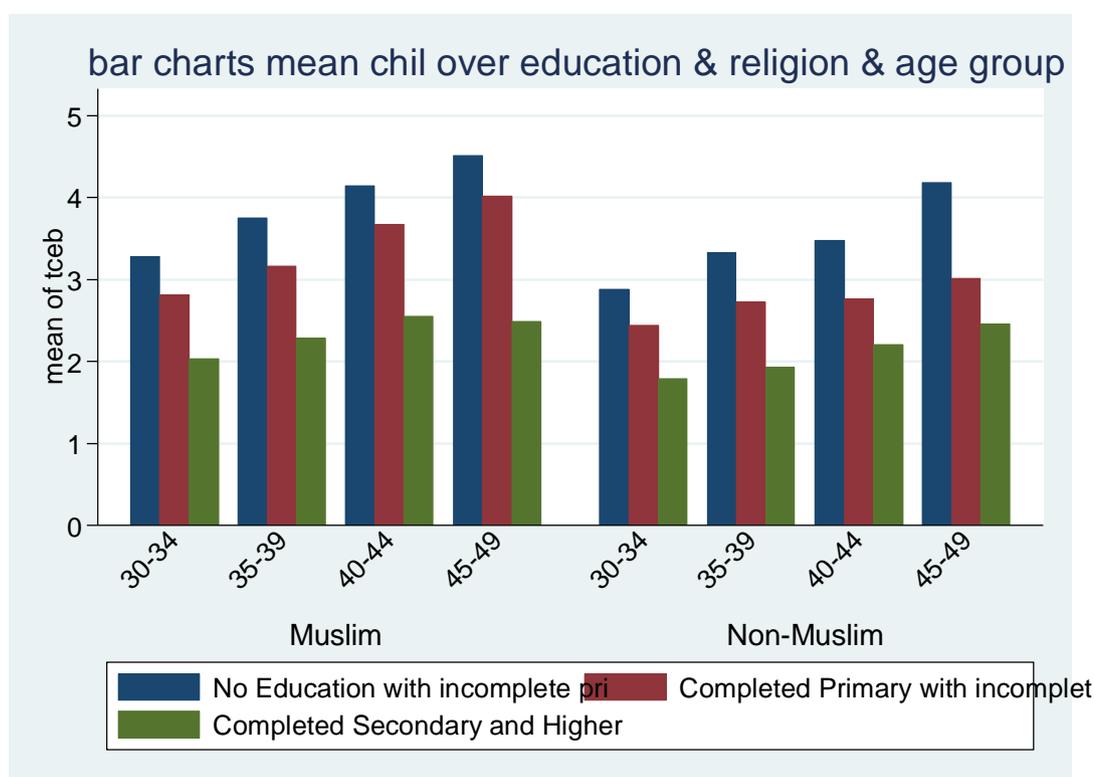**Figure 14: Bar chart of Total children ever born (tceb)by Religion (Religionnew) by Educational attainment (hea) by age group (agegroup)**

That Muslim non educated women age group 30-34 have 3.28 no of mean children and Non-Muslim non educated women age group 30-34 have 2.81 no of mean children. Completed Secondary and Higher educated Non-Muslim women have 1.79 no of mean children compare to Muslim women with same age group who have 2.03 no of mean children. So among 30-34 age group women, Completed Secondary and Higher educated Non-Muslim women have least no of children and non-educated Muslim women have the highest number of children.

In women age group 35-39, Muslim non-educated have 3.75 number of mean children compare to Non-Muslimnon non-educated women who have 3.33. Completed Secondary and Higher educated Muslim women have 2.28 mean number of children and Non-Muslim women in the same group have 1.93 number of mean children.

Age group 40-44, Muslim non educated women have 4.14 number of mean children compare to Non-Muslim non-educated women who have 3.48. Completed Secondary and Higher educated Muslim women have 2.55 mean number of children and Non-Muslim women in the same group have 2.21 mean number of children.

In women age group 45-49, Muslim non-educated has 4.51 number of mean children compare to Non-Muslimnon educated women have 4.18. Completed Secondary and Higher educated Muslim women have 2.49 mean number of children and Non-Muslim women in the same group have 2.46 number of mean children.
Here we can see that Muslim older and non educated women have more mean no of children compare to Non-Muslim. Muslim women are educated they have even more impact on fertility than Hindu women.

Figure 15: Bar chart of women's age at first birth by Religion (Religionnew) by Educational attainment (hea) by age group (agegroup)

bar charts mean age birth over education & religion& age group
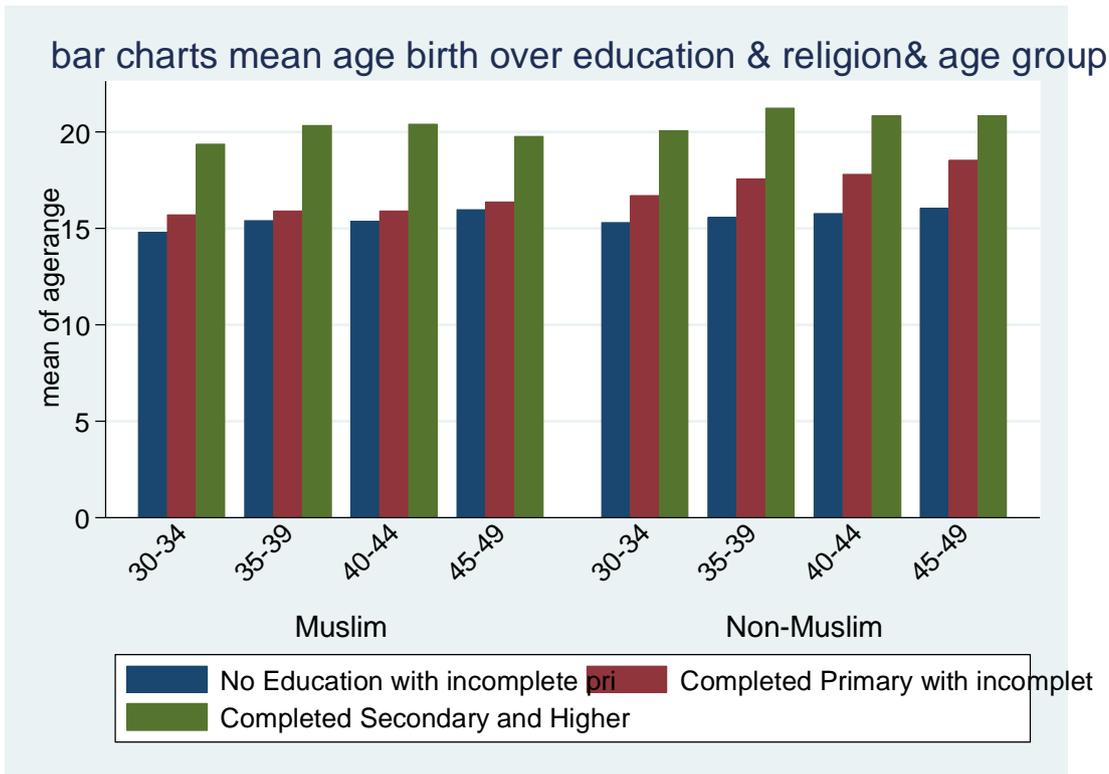
Muslim non educated women age group 30-34 have started their first childbearing at the age of 14.79 and Non-Muslim non educated women age group 30-34 have started their first childbearing at the age of 15.31. But Completed Secondary and Higher educated Non-Muslim women's age at first childbearing is 20.09 which meansNon-Muslim educated women have started childbearing 1 year later than same age group Muslim women but even Non-Muslim educated women have started childbearing more than 4 years later than non-educated Non-Muslim women.

Age group 35-39 of Muslim non educated women have started their first childbearing at the age of 15.40 and Non-Muslim non educated women age group 35-39 have started their first childbearing at the age of 15.57. But Completed Secondary and Higher educated Non-Muslim women's age at first childbearing is 21.25 which meansNon-Muslim educated women have started childbearing 1 year later than same age group Muslim Completed Secondary and Higher educated women which is 20.34.

 Muslim non educated women age group 40-44 have started their first birth at the age of 15.39 and Non-Muslim non educated women age group 40-44 have started their first birth at the age of 15.78. Completed Secondary and Higher educated Non-Muslim women's age at first birth is 20.83 which is 20.42 for same aged group Muslim women. Here is an important thing that Higher educated Muslim women have the higher impact on fertility compare to Non-Muslim higher educated young women. Maybe reason is thatNon-Muslim community in Bangladesh want to increase their family as they are the minority group in Bangladesh and they have the intention to enlarge their family by having more children.

Figure 16: Line graph of total children born by education and religion.
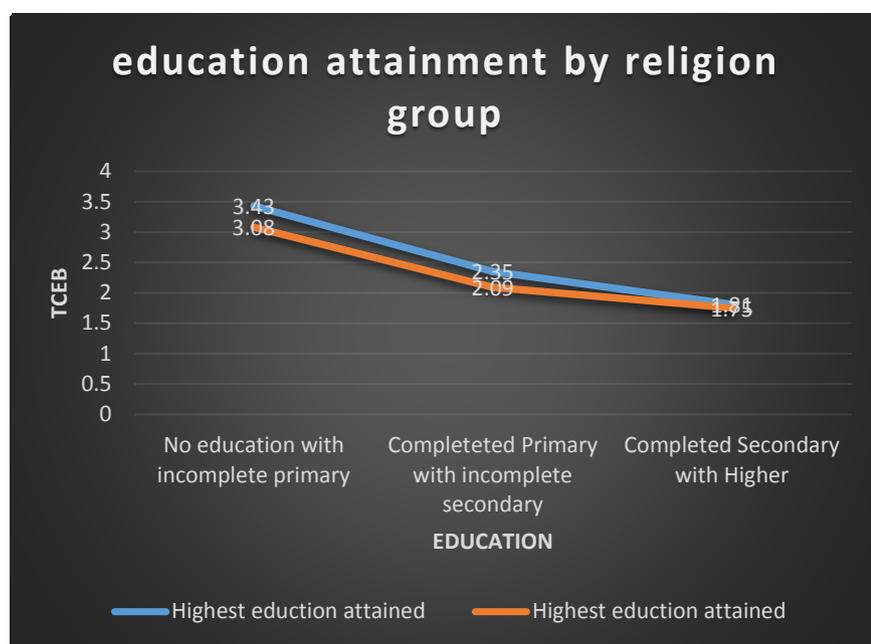
From graph we can see that although there are clear differences in both religion group by total children born in women with no education and completed primary education group but almost no difference among higher educated women group. Both Muslim and Non-Muslim women have same no of total children when they are highly educated.

II] Regression result

The tables present the coefficients for the respondent's fertility. It is interpreted as a change in total children ever born and women age at first birth caused by a unit increase in the value of the predictor variables which is educational attainment and religion of the respondents and age group of the women. In linear regression I have counted women who have age 35 and more as this time most women alredy experienced their birth events. Total number of women here are 9,159 as rest women afre dropped due to age limit. Tables representing the results of the regression is below:

Table 7: Regression table

| | Model 1 | | Model 2 | |
| | Children ever born | | Age at first birth | |
	coefficient	p-value	coefficient	p-value
Education:				
No education with incomplete primary	(reference)	-	(reference)	-
Completed Primary with incomplete secondary	-.6719089	***0.000	.6539848	***0.000
Completed Secondary and higher	-1.629148	***0.000	4.540673	***0.000
Religion:				
Muslim	(reference)	-	(reference)	-
Non-Muslim	-.4474546	*'*0.000	.7905969	***0.000

Note: [p values in parentheses; ***p<0.001]

Table 8: Regression table

	Model 3 Children ever born coefficient	p-value	Model 4 Age at first birth coefficient	p-value
Education:				
No education with incomplete primary	(reference)	-	(reference)	-
Completed Primary with incomplete secondary	-.5349915	***0.000	.760182	***0.000
Completed Secondary and higher	-1.450383	***0.000	4.681715	***0.000
Religion:				
Muslim	(reference)	-	(reference)	-
Non-Muslim	-.4863362	*'*0.000	.7599266	***0.000
Age group				
30-34	(reference)	-		
35-39	.3892226		.5172734	***0.000
40-44	.7757805		.522341	***0.000
45-49	1.12152		.9981631	***0.000

Note: [p values in parentheses; ***p<0.001]

Table 6 and 7 present the coefficients of regression models, estimating the effect of education and religion and age group on women's fertility. Four models were estimated. Model 1 with education and religion as the independent variables as to know the relationship between educational attainment and children ever born. Model 2 includes with education and religion as the independent variable as to know the relationship between educational attainment and women age at first birth. Model 3 with education and religion and age group as the independent variable as to know the relationship between educational attainment and children ever born. Model 4 with education and religion and age group as the independent variable as to know the relationship between educational attainment and women age at first birth.

The results illuminate that there is a relationship between education and women 'total children ever born. Model 1 shows that there is a negative relationship between Education and women's total children ever born. It represents that women with Completed primary and completed secondary and higher education groups are significantly less number of total children than women with no education or incomplete primary. Women with Completed primary have more than half children less compare to no education women if religion is controlled for. Women with Completed secondary and higher education have 1.6 times less no of children compare to no education women. But if education is controlled, there is also a negative relationship between religion and women's children ever born. Hindu women have almost half children less compare to reference group Muslim women. P-value always here is 0.000 which is highly Significant (p<0.01). These results confirm that there is an inverse relationship between education of wife and their fertility when fertility is measured as no of children ever born (Chaudhary, 1984) and fertility declined considerably with women's education. This relationship remained the same even after controlling the factors place of residence, religion and household wealth status (Islam ET, al, 2009).

Model 2 shows that there is a positive relationship between Education and women's age at first birth. It represents that women with Completed primary and completed secondary and higher education groups have significantly started few years' later childbearing than women with no education. Women with Completed primary have started 0 .65 years later childbearing compared to no education women if religion is controlled for. Women with Completed secondary and higher education have started 4.5 years later childbearing compared to no education women if religion is constant. But if education is constant, there is also a positive relationship between religion and women's age at first birth. Hindu women have 0.79 years later childbearing compared to reference group as Muslim women. P-value in Completed primary and completed secondary and higher education groups and non-Muslims here is 0.000 which is highly significant.

The results from model 3 and 4 illuminate that there is a significant relationship between education, age group, religion and women's fertility.

Model 3 shows that there is a negative relationship between Education and women's children ever born when religion and age of women's are constant. It represents those women with Completed primary and completed secondary and higher education groups are significantly less no of total children than women with non education group. Women with Completed primary have 0.53 times less no of children compare to no education women if religion and age group is constant. Women with Completed secondary and higher education have 1.45 times less no of children compare to no education women. But if education and age groups are constant, there is a negative relationship between religion and women's children ever born. Hindu women have almost 0.48 times fewer children compare to reference group Muslim women. When education and religion are controlled there is a positive relationship between women's age groups and women's children ever born. Women age group 35-39 has 0.38 more children compared to reference group which age group is 30-34. Women age group 40-44 have 0.77 more children compare to women age group 30-34 and women age group 45-49 have 1 more children compare to women age group 30-34.

That suggests that older women's have higher no of total children compare to younger women if education and religion are constant. P-value always here is 0.000 which is highly Significant (p<0.01).

Model 4 shows that there is a positive significant relationship between Education and women's age at first birth. It represents that women with Completed primary and completed secondary and higher education groups have started their childbearing later than women with no education. Women with Completed primary have started 0.76 year later childbearing compared to no education women if religion and age group is constant. Women with Completed secondary and higher education have started 4.6 years later compare to no education women. But if education and age groups are constant there is a positive relationship between religion and women's age at first birth. Hindu women have started 0.75 years later childbearing compared to reference group Muslim women. When education and religion are controlled for, there is a positive relationship between women's age groups and women's age at first birth. Women age group 35-39 has started their childbearing 0.51 years earlier compared to women age group 30-34. Women age group 40-44 have started their childbearing 0.52 years earlier compared to women age group 30-34 and women age group 45-49 have started their childbearing almost 1 year earlier compared to women age group 30-34. That suggests that older women's have started earlier childbearing compared to younger age women if education and religion are constant. P-value in all cases is 0.000 which is highly significant (p<0.01).

These results confirm that there is not much difference between Muslim and Non-Muslim women in respect of the level of education (according to 1989 BFS data) but according to 1993-94 BDHS data and 1996-97 BDHS they found that non-Muslims have better education compare to Muslim women (Kabir, jahan and Alam,2009). It also matches with the result from Visaria (1974) and Saksena (1973) as they found that Muslim women have higher fertility compare to Hindu counter parts. Other empirical study agreed that Muslim women have higher fertility than other Hindu women (Goyal, 1974 and Kantikar, 1966).

From regression performed, the results showed that Controlling for age and religion, women with no education have significantly more children and a significantly earlier age at first birth compared with women with either primary or secondary education (p<0.001). Controlling for education, there is also significant difference between Hindus and Muslims in age at first birth. Controlling for both age and education, Muslims have significantly more children and a significantly earlier age at first birth compared with women with Hindus (p<0.01).

 Discussion and Conclusion:

This study examined the relationship between female education and women's fertility in Bangladesh. The main hypothesis was that women with least education or no education have a higher number of children than educated women. In other words, as purported by the economic theory of the demand for children, the participation of women in education reduces the demand for children. Analysis matches with the other empirical study such as Jejeebhoy (1995) who stated that 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 as 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 (Jejeebhoy, 1995). This results also confirmed previous research such as Caldwell's(1982) and Chaudhury's (1984) finding as education also gives women to access to share wide ranges of family planning information's and knowledge. Education raises the cost of rearing children that is an important factor declining fertility levels in developing world (Caldwell, 1982). However, educated women give more importance on the quality of children than quantity (Chaudhury, 1984). Educated mothers have higher desire for a better education for children and thus resulted fewer children as quality of education can only be ensured to a few.

The results of this study showed that education does play a role in shaping women's fertility regarding a number of children and their age at first birth. Nonetheless, in accordance with the hypothesis, the estimated results show that women with no education have more fertility than the secondary and higher educated ones. Education does decrease women's fertility no matter the level of education. The plausible explanations for the differences in women's fertility in Bangladesh

based on the results of the educational levels can be attributed to being due to the higher opportunity cost of childbearing for women with higher education compared to those with no education. Women with higher education to have lower fertility as they may meet higher opportunity cost than women with no education because this includes the high cost of childbearing and rearing. women with no education to have higher fertility can be explained by the fact that most of them live in rural areas where educational facilities are limited and where agriculture is mostly practiced and children are recognized as the source of agricultural labor. Based on these explanations it can be suggested that the higher the educational level the lower will be their fertility and the lower the educational level the higher will be their fertility. The implication of the results of this study is that the participation of women in education irrespective of the education level does reduce their total fertility.

The second hypothesis was that Muslim non-educated women have more children than non-Muslim non-educated women and Muslim educated women have more children than non-Muslim educated women. From regression result we found that apart from education, other variables religion and age group of women have a significant relationship with women's fertility desire in Bangladesh. Religion and women's age group differences in fertility between older women and younger women are an issue that has been less addressed in earlier studies. But within the religion groups, is there much variation of fertility due to education. Findings from this analysis showed that there are significant relationship among fertility and education of religious group as p-values in all cases are 0.001. But religion does not play much impact on fertility when women are highly educated. So, result does not admit minority hypothesis for Bangladeshi Hindu minority groups. However it does not supports the idea that socioeconomic disadvantaged situation of the minority groups has a positive effect on fertility (Johnson-Hanks, 2006) and feeling of marginality or insecurity has impact on minority's reproductive behavior (Poston, Chang & Dan, 2006). My second hypothesis as Muslim non-educated women have more children than non-Muslim non-educated women and Muslim educated women have more children than non-Muslim educated women are confirmed by test. Although the Results from linear regression is significant but from line graph (fig:14) showed that fertility are similar for both majority religion (Muslim) and Minority religion (Hindus) when women are secondary or higher educated. That means the differences in fertility between Muslims/Hindu are more pronounced for low educated and small for high educated. This is an interesting finding as it points to the possibility that the fertility differences by religion might become smaller in the future because education is increasing for women in Bangladesh.
It can be concluded that women's fertility in Bangladesh is not only associated with their educational level or religion or women's age but also with other socioeconomic and demographic factors such as a number of living children, husband or partner's employment, husband partner's desire for children, income and area of living. Although the results addressed all the hypotheses, I believe that more research should be needed in future in the topic about religion (Muslim & Hindu) and fertility in Bangladesh.

Acknowledgments

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APPENDIX I

Chi Square test: Results

Total children ever born

Pearson chi2(30) =3.1 e+03Pr = 0.000	Total children ever born and Education
Pearson chi2(15) = 56.9295Pr = 0.000	Total children ever born and religion
Pearson chi2(20) = 294.2872 Pr = 0.000	Total children ever born and religion(Hindu)
Pearson chi2(30) = 2.8 e+03 Pr = 0.000	Total children ever born and religion(Muslim)
Pearson chi2(90) = 1.2 e+04Pr = 0.000	Total children ever born and Age group

Pearson chi2(66) = 3.0 e+03 Pr = 0.000	Age of women first birth and Education
Pearson chi2(33) = 117.3662 Pr = 0.255	Age of women first birth and religion
Pearson chi2(46) = 354.2246Pr = 0.000	Age of women first birth and religion(Hindu)
Pearson chi2(66) = 2.7 e+03 Pr = 0.000	Age of women first birth and religion (Muslim)
Pearson chi2(198) = 5.0 e+03 Pr = 0.000	Age of women first birth and Age group