

Early Marriage of Women: The Case of Bangladesh

Tahsin Farzana Jisun*

The study focuses on the present scenario of early marriage in Bangladesh and also examines the factors that are associated with early marriage. The study used secondary data from Bangladesh Demographic and Health Survey (BDHS) 2011. This data includes face to face interview of 17,872 ever married women aged 12-49 throughout Bangladesh. Cross tabulation and Chi-Square tests were used in this study to examine the determinants of age at first marriage. Logistic regression analysis was applied to find out the most significant factors of early marriage. It was found that respondent's education, husband's education, place of residence, religion and respondent's work status have the significant effect on early marriage in Bangladesh.

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Field of Research: Sociology

1. Introduction

Bangladesh is one of the world's densely populated countries which have a population of about 149.8 million, with a corresponding population density of more than 1015 persons per square kilometer (NIPORT, 2013). About 90% of the total population of Bangladesh is Muslim (Fleischer et al., 2010). The total fertility rate is 2.3 children per woman (NIPORT, 2013). Based on current fertility rates, about 25% of Bangladeshi women have children before reaching age 20 (NIPORT, 2013). Among various factors, female age at first marriage is directly related to fertility behavior in this country.

The definition of marriage varies according to different cultures but in general, marriage is a socially or ritually recognized union or legal contract between an adult man and an adult woman that establishes rights and obligations between them and their children (Somerset, 2000). Actually, marriage is considered to be an important universal social institution. Early marriage or child marriage is usually defined as marriage before the age of 18 and this is more common among young girls (NIPORT, 2013).

*Tahsin Farzana Jisun, Lecturer, School of Business Studies, Southeast University, Dhaka, Bangladesh,
Email: jisun535@yahoo.com

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According to Child Marriage Restraint Act (1929), the legal marriage age for a girl is 18 years and for a boy is 21 years in Bangladesh. The penalties for child marriage according to this act are imprisonment for one month or a fine up to taka 1000 or both. Despite national laws and international treaty, early marriage remains widespread problem particularly in developing countries like Bangladesh. It is a barrier to health and future opportunities of millions of girls (Nasrin and Rahman, 2012). According to UNICEF flagship report, the child marriage rate is 66% in Bangladesh which is one of the world's highest rates and this issue needs an urgent attention. Within South Asia, the teenage pregnancy rate is higher in Bangladesh (Raj et al., 2010). Most of the teenage girls conceive immediately after their marriage and death due to the pregnancy-related cause is almost double among women aged 15-19 compared to the women in their twenties in Bangladesh (Boyd et al., 2000). Therefore, Bangladesh is a suitable context to study on child marriage.

Child marriage is considered as a violation of rights of the girls because they cannot complete their education. The timing of first marriage is an important factor towards women's reproductive behavior (Singh and Samara, 1996). Death due to pregnancy is the number one cause of death among girls aged 15-19 worldwide (Verma et al., 2013). Moreover, they might be the victim of sexual violence and HIV infection (Innocenti Digest, 2001). Families suffering from poverty often want to reduce their number of children. As a way, they marry off their daughters. Some families believe that it brings blessings on their family if they marry off girls before their puberty (Tristram, 2014). Sometimes young girls show less interest to continue their education and in some cases, poor families are unable to bear the cost of education (Verma et al., 2013). Another incentive for the parents to marry off their daughters at the younger age is dowry (Amin, 2008). The existing practices of law seem to have not averted early marriage in Bangladesh. Our society is still facing the adverse effect of child marriage. Various reports have been published in the newspapers on a daily basis about the harmful impact of child marriage on young girls. However, this issue gets less priority from the policymakers and civil social organizations. Thus, a new aspect of study is needed to know the socio-economic consequences of early marriage and take plausible strategies to move ahead.

The purpose of this paper is to assess the present scenario of female age at first marriage in Bangladesh using data from BDHS 2011. A research question may arise:

What are the socio-demographic and economic factors that cause the rising trend of early marriage among female adolescents in Bangladesh?

This present paper will try to answer this question. Therefore, the main objective of this paper is to find out the socio-demographic and economic determinants that influence early marriage in Bangladesh. This study also tries to suggest some recommendations based on the findings of the study to stimulate the necessary actions taken by the policymakers.

The previous studies were not focused on the present situation of child marriage in Bangladesh, which is a major concern of this study. The majority of the past studies focused only the influence of education on early marriage. Thus, this present study will try to find out not only the socio-demographic but also the economic factors of early marriage in Bangladesh.

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This paper is arranged in a sequence. The objective, research question and scope of the study are discussed in the introduction phase. Then a brief literature review emphasizes the research gap of this study with the formation of hypotheses. After that, the methodology of the study describes the source of data, sample size and variables. The statistical analyses include cross tabulation and logistic regression analysis. Finally, the conclusion part answers the research question along with some recommendations and limitations of this study.

2. Literature Review

The relationship between age at first marriage and education is the most powerful and consistent documented literature. Most of the studies recognized the importance of education to increase the female age at marriage. Hirschman (1985) initiated his study with two research questions. One was, whether early family formation was affected by some premarital socio-economic roles and the other was to find out the reason of deviations about the initial family formation in Asian populations. He also overviewed a trend of early family formation across the Asian countries using the mean age at first marriage and mean age at first birth. Finally, he found that education was the most powerful determinants in delaying marriage.

Choe et al. (2005) utilized information from both male and female adolescents in their study "Early Marriage and Early Motherhood in Nepal". They applied proportional hazard model and logistic regression model to estimate covariates of early marriage, early motherhood and delayed consummation of marriage in Nepal. They discovered that education along with parental education has a highly significant effect on early marriage. The study explained that attaining the level of education increases the age at first marriage.

Field and Ambrus(2008) used data in their study "Early marriage, Age of Menarche, and Female Schooling Attainment in Bangladesh" from a rural region of Bangladesh named "Matlab Health and Socioeconomic survey 1996".They separated the causal impact of timing of marriage using the instrumental variable named 'age of menarche'. They found that higher literacy rate and preventive health services were responsible for delaying marriage by using IV (Instrumental variable) estimates and OLS(Ordinary Least Square) estimates.

Kumchulesi et al. (2011) examined in their study "Factors affecting age at first marriage in Malawi" that early marriage was influenced by high fertility, high mortality and low contraceptive use. For this study, they used 2000 and 2004 Malawi Demographic and Health Survey data. Univariate, bivariate and hazard proportional model were used to find out the relationship between age at first marriage and selected socioeconomic factors. They found that age, education, religion, region and ethnicity are the most influential factors of age at first marriage in Malawi. Sah et al. (2014) revealed in their study "Factors Affecting Early Age Marriage in Dhankuta Municipality, Nepal" that child marriage was associated with low education and low economic status by using chi-square test.

Jain et al. (2011) discussed the incident of child marriage in India, in their study "Early marriage of girls as a barrier to their education". They investigated the causes of child marriage as economic survival, protection of young girls, controlling female behavior and socio-cultural and religious values. Based on their findings, they suggested that early marriage can be controlled by

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providing economic opportunities to young girls to be self-sufficient, promoting education and raising awareness by using mass media.

It can be seen that many studies have been conducted around the world to reveal those factors which linked to early marriage. Different studies focused on different variables. However, in Bangladesh, there is hardly any significant study focusing on the present situation along with the socio-demographic and economic factors of early marriage. Therefore, this present study along with an objective of presenting the current scenario of female age at first marriage in Bangladesh using BDHS data 2011, also finds out the influencing socio-demographic and economic factors those have significant impacts on female age at first marriage in Bangladesh. Besides, this study used most updated nationally representative data, which covered all the regions of Bangladesh, which was a drawback for the previous literature.

After reviewing the above literature and achieving the purpose of this study, six alternative hypotheses have been developed:

Hypothesis 1: Respondents education has significant impact on early marriage.

Hypothesis 2: Husbands education has significant impact on early marriage.

Hypothesis 3: Place of residence has significant impact on early marriage.

Hypothesis 4: Religion has significant impact on early marriage.

Hypothesis 5: Wealth index has significant impact on early marriage.

Hypothesis 6: Respondents occupation has significant impact on early marriage.

3. Methodology

3.1 Source of Data

The study used secondary data. The current study utilized the data from Bangladesh Demographic and Health Survey (BDHS) 2011. The Bangladesh Demographic and Health Survey (BDHS) 2011 is regarded to be the sixth national demographic and health survey which was designed to give necessary data on basic national index of social progress.

3.2 Sample Design

The sample for the BDHS 2011 is nationally representative. In addition, 2011 BDHS covered total population living in non-institutional dwelling units in Bangladesh. A two-stage stratified sampling procedure of households had been used. By using this design, the survey chose about 18,222 ever married women and from them they interviewed about 17,872 ever married women aged 12-49 throughout Bangladesh. Ever-married women mean they have been married at least once throughout their lives even though their current marital status may not be 'married'.

3.3 Variables

The dichotomous dependent variable of this study is the age at first marriage which was recorded in single years. The dependent variable was divided into two categories. Those who married before reaching the age of 18 were considered as early married and who married at or after age 18, were considered as late married. Eighteen years was selected as the cut-off point for defining

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the state of marriage as this is the legal female age at marriage in Bangladesh. The independent variables for this study were respondent's education (no education, primary, secondary, higher), husband's education (no education, primary, secondary, higher), place of residence (rural, urban), religion (Muslim, non-Muslim), wealth index (poor, middle, rich), respondent's occupation (unemployed, agriculture/home/poultry, labor, business/professional). Therefore, these socio-demographic and economic independent variables were meaningful to assess the factors that were responsible for early marriage.

4. Statistical Analyses

All the analyses of this paper were performed by Statistical Package for Social Sciences (SPSS 16.0). Cross tabulation and chi-square tests were performed first. Then those variables found to be significant in chi-square test were used to construct logistic regression model. It was found that about 77.7% women got married before age 18, which was considered here as early marriage and about only 22.3% married at or after age 18, which was considered here as late marriage.

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4.1 Findings from Bivariate Analysis

Table 1: Bivariate Analysis for the Dependent Variable 'Age at First Marriage' by Independent Variables

Variables and their categories	Age at first marriage		Total (%)
	Late married (%)	Early married (%)	
Respondent's education			
No education	14.7	29.2	26.0
Primary	19.5	32.9	29.9
Secondary	39.8	34.8	35.9
Higher	26	3.1	8.2
Husband's education			
No education	16.2	32.8	29.1
Primary	19.6	29.3	27.1
Secondary	31.5	28.3	29.0
Higher	32.6	9.6	14.7
Place of residence			
Rural	55.4	68.1	65.3
Urban	44.6	31.9	34.7
Religion			
Muslim	83.0	88.2	88.8
Non-Muslim	17.0	11.2	11.2
Wealth index			
Poor	22.7	40.0	34.3
Middle	36.5	41.5	39.1
Rich	40.8	18.6	26.6
Respondent's work status			
Unemployed	3.0	6.0	68.0
Agriculture/poultry/home	13.0	20.9	16.7
Labor	46.8	66.9	11.5
Business/professional	40.0	11.7	3.8

From Table 1, it can be seen that women from the rural areas have the highest percentage (68.1%) of getting married early than the women from the urban areas (31.9%). About 88.2% Muslim women reported of getting married very early. The percentage of early marriage was the highest (66.9%) in female labors and lowest in females who are unemployed. It can also be noticed that rich people have a lower tendency of getting married early than poor and middle-class people.

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Table 2: Results of Chi-Square Test to Test Significant Variables

Variables	P value	Decision
Respondent's Education	0.000	Significant
Husband's Education	0.000	Significant
Place of Residence	0.000	Significant
Religion	0.000	Significant
Wealth Index	0.000	Significant
Respondent's Work Status	0.000	Significant

At 5% level of significance, it can be found from the chi-square table that, all the six earlier formulated alternative hypotheses were accepted. Therefore, the variables respondent's education, husband's education, place of residence, religion, wealth index and respondent's work status were highly significant. The logistic regression model was then constructed using these significant variables.

4.2 Logistic Regression Model

The logistic regression model for this study is given below:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon(\text{error term})$$

Where,

Y= 0, if early marriage
1, if late marriage

So, this equation can be written using the name of the variables:

Age at first marriage = $\beta_0 + \beta_1$ respondent's education + β_2 husband's education + β_3 place of residence + β_4 religion + β_5 wealth index + β_6 respondent's work status + ε (error term).

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Table 3: Logistic Regression Analysis with All Selected Independent Variables

Variables and their categories	Coefficient	Standard Error	P-value	Odds ratio
Respondent's Education			.	
No education	2.165	0.245	.000*	8.711
Primary	2.149	0.237	.000*	8.578
Secondary	1.742	0.201	.000*	5.707
Higher ****			.	
Husband's Education				
No education	.585	0.219	.008*	1.796
Primary	.603	0.208	.004*	1.828
Secondary	.333	0.183	.049*	1.396
Higher****				
Place of residence				
Rural	.265	0.120	.027*	1.303
Urban ****				
Religion				
Muslims	.774	0.133	.000*	2.169
Non Muslims ****				
Wealth index				
Poor	.312	0.173	.071	1.367
Middle	.256	0.138	.064	1.292
Rich ****				
Respondent's work status				
Unemployed	.838	0.871	.336	2.312
Agriculture/ home/poultry	.288	0.182	.114	1.333
Labor	.442	0.144	.002*	1.555
Business/professional****				

****=Reference category, level of significance: *p<0.05= significant

Here the odds ratios indicated that respondents having no education, primary and secondary education were found to have early marriage 8.711, 8.588 and 5.707 times more likely compared with those having higher education. From this analysis, it can be shown that occurrence of early marriage is 1.796, 1.828 and 1.396 times more likely for those whose husbands have no education, primary and secondary education in comparison to those whose have higher education. In contrast, women living in the rural areas were 1.303 times more likely to get married early than those women living in urban areas. In addition, early marriage among women who are unemployed and who are involved in agriculture based profession were 2.312 and 1.333 times higher and insignificant than the professional women. However, child marriage was 1.555 times more likely and significant among women who are involved in labor based profession in comparison to women who are involved in the business profession. Muslim women were 2.169 to get married early than Non-

The results of the logistic regression analysis showed that, at 5% level of significance, the earlier formulated alternative hypothesis 1, hypothesis 2, hypothesis 3, hypothesis 4 and hypothesis 6 were accepted. So, the alternative hypotheses containing variables, respondent's education,

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husband's education, place of residence, religion and respondent's work status were accepted. That means these variables have the significant impact on early marriage. However, the alternative hypothesis 5 was rejected. That means, the alternative hypothesis containing variable, wealth index was rejected. Hence, wealth index has no significant influence on early marriage.

5. Conclusion

Bangladesh has laws to regulate early marriage, but these laws are not followed by most of the people in our country. However, till now, most of the studies focused on the impact of education in rising the age at first marriage. This present study used logistic regression analysis to see how various factors influence the likelihood of decisions in favor of early or late marriage. The quantitative cross-sectional study revealed the most current situation of early marriage using data from BDHS 2011. The BDHS 2014 data has not been officially published yet. Thus, BDHS 2011 remained the most recent data for this study. It can be observed that the rate of age at first marriage in Bangladesh is still very high (77.7%). The incidence of early marriage is higher among respondents having no education (29.2%), primary (32.9%) and secondary (34.8%) education. This rate is higher among the respondents from the rural area (68.1%). The influential factors of early marriage were found to be respondent's education, husband's education, place of residence, religion, and respondent's work status. In another way, these factors can cause early marriage rise. This study provided evidence that wealth index has no significant effect on early marriage. Finally, it can be inferred that the presence of early marriage in our country is still very high and the strong determinants of early marriage are respondent's education, husband's education, place of residence, religion as well as respondent's work status.

The child work activists, policymakers, and social workers can utilize the findings of this study to outline some intervention program to prevent the adolescents from the adverse effect of child marriage. Hence, based on the findings, some recommendations are stated below to prevent the young girls of Bangladesh from the disadvantageous impact of early marriage:

- Uniformity of national income should be confirmed throughout Bangladesh to reduce economic disparity. As a result, the consequences of early marriage will maintain homogeneity in the urban and rural areas.
- It is essential to educate both male and female counterpart of this country up to higher level, which will eventually increase the age at first marriage.
- We need to invest more on education in rural areas, where the rate of early marriage is quite high.
- Also, creating employment opportunity for female population in rustic areas will ultimately alleviate poverty as poor families often want to marry off their daughters early.
- Being one of the largest Muslim countries in the world, early marriage is extensively practiced in Bangladesh. Therefore, Government can take the initiative to arrange seminars to explain the awful effect of child marriage in a religious way.

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- It is necessary to provide skill based training and opportunities for young girls so that they can earn their livelihood and discourage marriage at an early age.

If all the mentioned recommendations will be implemented properly, the age at first marriage of female adolescents of Bangladesh will be increased gradually.

6. Limitations

One of the major limitations of this study is that the study utilized information from BDHS 2011 because of the unavailability of data from BDHS 2014. In addition, if primary data had been used then the reliability of this study would have been better and we get to know the most current scenario of child marriage. Another limitation is that the study used only six socio-demographic and economic variables. Some more significant variables could have been included in the study. In addition, further research is required to examine some physical and psychological consequences of child marriage like teenage marital pregnancy, reproductive health complications and so on.

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