Determinants and Effect of Early Marriage in Bangladesh, 2007

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Abstract: Early marriage is a complex phenomenon in Bangladesh due to various factors. It is found that complex set of relationship exists among the various socioeconomic, cultural and demographic events, which affect the fertility in Bangladesh and can provide us a preliminary idea of how important each variable is by itself. Result shows that women in Bangladesh engage in sexual activities at an early age before 20 years. Early marriage has a significant effect on divorce and remarriage and late marriage is also, associated with a significant increase in female schooling, adult literacy and quality of marital life. Islam religion has a more tendency to early marry. Findings need to be scientifically used in suitable programs addressing the case of fertility control in the developing countries as well as in Bangladesh.

Key words: Early marriage, determinants, logistic regression analysis, fertility control, Bangladesh

INTRODUCTION

Marriage is almost universal in Bangladesh and postponement of first marriage has been outlined as the main determinant of fertility decline observed (Cleland *et al.*, 1994). Husbands are considered their wives' guardians and are the primary means through, which women has access to social status, property and control over resources (Cain, 1984; Cain *et al.*, 1979). Marriage is understood to give men the right to sex on demand and the right to use physical force against their wives. Women themselves see men as having these prerogatives and control over them (Schuler *et al.*, 1998; Geetha, 1998; Jejeebhoy, 2002). In Bangladesh, as in most of South Asia, marriage is universal at least in a normative sense. The pressures to marry and lack of alternatives to marriage mean that unmarried or widowed, divorced, or abandoned women are often severely disadvantaged, both socially and economically. They have little social legitimacy or control over their living arrangements and other circumstances (Rahman *et al.*, 1992; Rahman, 1993).

Apart from protecting family norms, the major pressure for early female marriage is the fear of the effect of late marriage for the girl and her family. For Hindus, it is critical to prevent miscegenation between different castes: this would result in ritual pollution with disastrous consequences for all families involved. For Muslims, premarital sexual activity or even unchaste behaviour challenges not only the young woman's virtue, but also the ijat (or izzat-honour) of her family members (Maloney *et al.*, 1981; Kotolova, 1996; White, 1992). This was closely linked to the Islamic concept of 'purdah' (known in Bangladesh as parda), involving the separation of adult women (post-pubertal) from the presence of men and tightly controlled behaviour. As a result of these patterns, early marriage is an issue of significant concern to policy-makers and human rights advocates. Governments in developing countries face increasing pressure to eradicate the practice with legal sanctions against parents, who marry daughters before a standard age of consent. Proponents of child protection and age of consent laws argue that forcing parents to delay marriage will increase female educational attainment and reproductive control and decrease incidence of domestic violence.

The maternal deaths in the South-East Asia region are highest in the world and nearly every 2 min a woman dies as a result of complications of pregnancy or childbirth. This accounts for 40% of all global maternal deaths. Perceiving the importance of the maternal health, World Health Day has been observed over the world with the slogan Pregnancy is special, let's make it safe in 1998 and make every mother and child count in 2005. In spite of effective program every minute, a mother dies from complications in pregnancy and childbirth. That means 1400 mother's die every day more than half a million mothers die every year.

Age at marriage may be effect on fertility. In some situations, age at marriage may have no effect on fertility. First, if women start having children no matter when they marry, then the effect of age at marriage on fertility may be limited. Second, if fertility is controlled within marriage by using contraceptives or other means, age at marriage may not have much effect on fertility because couples may decide how many children they would like to have regardless of the age at marriage. Third, if the level and

pattern of fecund ability depends upon marriage duration and little on age, fertility is likely to be affected little by age at marriage because a woman, whether she marries early or late, will have the same fertility experience. Again, late marriage is associated with a significant increase in female schooling and adult literacy. One year postponement increases schooling by an estimated 0.32 years and literacy by 5-10%. In addition, each additional year that marriage is delayed among the sample of women in rural Bangladesh reduces the total number of pregnancies a woman experiences by 0.27. This implies that estimated effect on TFR of delaying marriage by 3 years is comparable in magnitude to the massive and costly contraceptive intervention that took place in the Matlab region of Bangladesh beginning in 1978. The BDHS 1999-2000 demonstrates lower interval between marriage to first birth but higher interval between subsequent births than observed in the BDHS 1996-97 (Azad, 2009). So, we can say that in Bangladesh marriage to first birth interval decreases and subsequent birth interval increases over time. The reproductive health benefits of marrying later appear to be similarly achieved through intensive reproductive health interventions. In this context, early marriage is a major determinant of fertility. These facts have been the major motive of conducting the current research on early marriage in Bangladesh.

Objective of the study: In present study based on following objectives:

- The determinants and effect of early marriage
- To identify the factors affecting fertility as they operate through early marriage
- To investigate the factors affecting fertility to practice of contraception

MATERIALS AND METHODS

The data for the present study have been derived from the Bangladesh Demographic and Health Survey (BDHS, 2007).

This study classifies age at first marriage into two categories. One is early marriage: women who marry before 20 years of age, two is late marriage: women who marry at age 20 and older. There are at least two reasons of classifies. First, by age 19, they hopefully would have finished their higher secondary or at the very least, primary high school. Second, in relation to the first reason, these groups of women may have a larger variation in occupational pattern; thus, it is possible to compare the occupational pattern between early marriage subjects and late marriage ones.

The determinants of early marriage includes following variables: the educational attainment level of the respondent and her husband, occupational status of the husband, religion, residence, work status, exposure to the mass media and literacy. The effect of early marriage studied include variable like marital status, current research status, occupational status and contraceptive use.

The bivriate analysis has been broken down into two parts. The first part examines the determinants of early marriage and it is based on the demographic and socio-economic characteristics of respondents and their husbands. The second part examines the effect of early marriage. The multivariate analysis carried out in the study determines, first, the net effect of the explanatory variables of early marriage and second, the net effect of age at first marriage and other explanatory variables on marital dissolution.

RESULTS AND DISCUSSION

Determinants of early marriage
Age of respondents: The legal age of marriage in Bangladesh is 18 years for women, but a large proportion of marriages still take place before the legal age (BDHS report, 2007). Meanwhile, from Table 1, it is found that respondents have higher percentage (100%) of lower age (15-19) at first union. This is indication that women in Bangladesh engage in sexual activities at an early age.

Respondents education: We know that most ever-married women in Bangladesh attained a low level of education. The early marriage percentage is gradually decreasing as education increase in both urban and rural areas. The analysis shows, a significant difference in the proportion of women with primary education (96%) and secondary education (about 92%) who married early. The smallest proportion is found among those with higher education, in which group about 52% of women married early.

Religion: Religion has a significant effect on early marriage, compared with women in other religious groups, Muslims are more likely to marry early. The data shows that 92% of Muslim women in Bangladesh married early compared with about 87% Buddhism and approximately, same amount about 84% Hinduism and Christianity religion, respectively married early. In Bangladesh >80% of the population is Muslim. Although, Muslim parents tend towards marrying off their daughters early, the high proportion of Muslim females who marry at a young age is a consequence of lower educational attainment for Muslim females in general than for their non-Muslim counterparts.

Table 1: Percentage of women aged 15-49 years, who were married early, by respondents and husband's characteristics and current residence in Bangladesh, 2007

| | Respondents characteristics (%) | | | |
| | Urban | Rural | Total | |
Characteristics			N	%
Age group				
15-19	100.00	100.00	1348	100.00
20-24	87.30	93.10	1976	90.90
25-29	80.10	92.70	1700	87.90
30-34	77.50	93.90	1456	87.70
35-39	85.80	92.30	1430	89.60
40-44	88.50	95.20	1128	92.60
45-49	91.80	97.10	1012	95.10
Education				
No education	95.40	96.90	3400	96.50
Primary	94.60	96.80	3139	96.10
Secondary	89.00	93.40	3064	91.60
Higher	48.80	60.20	444	51.90
Religion				
Islam	86.80	95.50	9145	92.20
Hinduism	78.70	86.90	851	84.20
Buddhism	50.00	90.50	20	87.00
Christianity	50.00	90.90	22	84.60
Work status				
Worked	87.40	94.70	2974	92.00
Not worked	85.60	94.60	7072	91.10
Media exposure				
Low (<3)	91.70	95.60	8001	94.30
Medium (4-7)	75.10	90.60	1957	82.30
High (8+)	63.30	74.50	41	67.50
Literacy				
Literate	82.90	93.30	3403	96.50
Illiterate	95.40	96.90	6647	89.00
Husbands information				
Education				
No education	95.40	97.20	3484	96.70
Incomplete primary	95.60	96.40	1815	96.10
Complete primary	93.60	95.70	943	95.00
Incomplete secondary	88.50	93.80	1952	91.60
Complete secondary	86.90	92.30	692	89.90
Higher	66.50	81.60	1152	72.10
Occupation				
Agricultural worker	96.30	96.70	2810	96.70
Professional worker	59.10	76.20	419	95.10
Business	85.20	93.90	2249	89.70
Labour	90.20	94.50	4215	92.60
Other	89.60	94.10	337	92.30

Computed from 2007 BDHS

Work status: According to employment status, women who engage in work are more likely to have married early, 92% of women who married early in Bangladesh do work. In contrast, 91% of women who does not engage work married early. This relates back to the point that women with higher education tend to delay marriage. Though, education and employment, women prolong their duration of being single.

Exposure to mass media: Media exposure to mass media has a significant effect on age at marriage. Women with no access to any of the mass media were more likely to have married early compared with those who had access

to all four of the media or at least one of them. Here, we consider media exposure (Radio, TV, News paper and NGO if use then consider1 and not use then consider 0) with respect to use or listen and it's classified by low, media and high. The data shows that the early marriage percentage is gradually decreasing as using media exposure increase in both urban and rural areas.

Literacy: Table 1 shows that illiterate women married earlier than those who were literate and its percentage is about 97% literate and 89% for illiterate. Again, the proportion of illiterate women who married early was higher in rural areas than urban areas. This result suggests that among the less educated women, there is a high incidence of migration to urban compared with rural.

Husbands education: The data on educational attainment for the respondents and their husbands demonstrate that the level of the husband's education generally exceeds that of the respondent's. This is a very common situation as most men look for women who have an education that is lower than or equal to that of their own education. A relatively high proportion of women who married early, married husbands who had achieved a high level of education. Seventy two percent of women, who married early had husbands with a higher education were less likely to have chosen women with a low level of education, such as junior high school or primary education.

Husbands occupation: From Table 1, it is evident that women were more likely to have married early when, their husbands worked in the agricultural sector (about 97%). The proportion of women who married early is also high for husbands who worked in labour (about 93%), compared with women whose spouse worked in business (about 90%). Included under the professional category of occupations is 95%. The high proportion of women in urban areas who were married early to husbands working in the agricultural sector (96%) is interesting. One possible reason is suggested, i.e., women frequently migrate to cities to find work, leaving their husbands and children behind in the villages (Singarimbun, 1992).

Effect of early marriage
Marital dissolution: Early marriage has a significant effect on divorce and remarriage. Owing to the lack of information on ever-divorced women, this analysis recodes marital status into to categories. The first category (currently married) is still in their first marriage, the second category (formerly married) refers to divorced,

Table 2: Demographic and socio-economic characteristics of women aged 15-49 years by first marriage, Bangladesh, 2007

| | First marriage | | | |
| | Early | Late | Total | |
Explanatory variables	marriage	marriage	N	%
Percentage of women aged 15-49 who were currently married				
Current residence				
Urban	85.70	14.30	3804	37.50
Rural	94.40	5.60	6342	62.50
Duration of marriage				
0-4	83.10	16.90	1970	19.40
5-9	88.30	11.70	1933	19.10
10-14	90.80	9.20	1639	16.20
15-19	93.10	6.90	1502	14.80
20-24	94.40	5.60	1239	12.20
25-29	97.90	2.10	955	9.40
30+	100.00	0.00	908	8.90
Percentage of women aged 15-49 who were currently working				
Current residence				
Urban	87.40	12.60	1202	37.20
Rural	94.70	5.30	2031	62.80
Education				
No education	96.50	3.50	348	41.70
Primary	96.40	3.30	943	29.20
Secondary	93.30	6.70	685	21.20
Higher	47.10	52.90	255	7.90
Percentage of women aged 15-49 who had ever used contraception				
Children ever born				
0-1	84.00	16.00	2214	25.30
2	89.10	10.90	2163	24.80
3	94.90	5.10	1591	18.20
4-5	96.70	3.30	1855	21.20
6+	98.80	1.20	915	10.50

Computed from 2007 BDHS

widowed and remarried females as women who were no longer in their first marriage (Savitridina, 1997). Table 2 shows that about 63% of women living rural areas were no longer in their first marriage, while the figures for women living in urban areas were about 38%. The tendency for marital dissolution increases from the lowest level in urban areas to the highest level in the rural areas, regardless of whether women married early or late. The duration of marriage is grouped into five-year age groups so as to make visible the pattern of marital dissolution between early and late marriage. In general, the percentage of women whose marriages broke up is highest for those who had been married the longest. Besides, the effect of divorce and remarriage, the increased number of windows also plays an important role. The probability of as woman becoming a window increases the longer she has been married. The results indicate that by controlling for duration of marriage, the difference is also significant, particularly for marriage durations of 15-19 years. The percentage of women is who married early and were no longer in there first marriage 93%, whereas for women who married late the figure is just 6.9%.

Work status: The effect of early marriage on current working status is significant. The difference in the percentage of women, who were currently working is large, regardless of whether, they married early or late. In general, the percentage of women working who married earlier is higher than the figure for women, who married late. This is a result of the high proportion of women who married early working in rural areas (about 63%) than urban areas (37%). This could be explained by the fact that the rural women were engaged mostly in the agricultural sector as family or unpaid workers. The pattern of working status between early and late marriage is large differences. It is found that high proportion of women having low education (about 97%) with married early and higher education (53%) with married late.

Contraceptive use: Variable contraceptive use refers to whether, the respondent had ever used contraception. The results show that women who married early were less likely to use contraception, even if children ever born are applied as a controlling variable. This is because women, who married late have a better knowledge of contraception as a result of having had a higher education. Education exposes women to family planning knowledge, attitudes and practices (Selvaratnam, 1988). The data prove that the high proportion of women used contraception. The contraceptive prevalence rate in Bangladesh is high, reflecting the success of the Government family planning program. The success of this program has contributed to a significant decline in fertility.

Women with the same level of education will have better employment status in urban areas, quite simply because more jobs are available. It is not meaningful to differentiate occupation by residence. Table 3 shows that 19% early marriage and 25% late marriage with high employment status is professional and non-professional work in urban areas whereas, in case of rural areas 22% agricultural worker early marriage women and about 17% professional and non-professional worker late marriage women contains higher percentage. Table 3 revels that about 77% of women with secondary education who married early into the agricultural category whereas, 32% of women with higher education who married late into the professional and non-professional workers. The reason for this is that women who marry later in life are generally better established in their careers than women who marry early.

Table 4 also, shows that there is a slight difference in occupational status between women who married early and those who married late, but there is a great difference

Table 3: Percentage of women aged 15-49 years in current occupation, by first marriage, Bangladesh, 2007

| | First marriage | | | | | | | | |
| | Early marriage | | | Late marriage | | | Total | | |
Controlling variables	Ag W	Bussin	PNW	Ag W	Bussin	PNW	Ag W	Bussin	PNW
Current residence									
Urban	9.40	2.80	19.30	2.90	0.70	25.10	8.50	2.50	20.10
Rural	22.10	2.00	8.40	14.40	0.80	16.50	21.70	1.90	8.90
Education									
No education	21.90	3.40	15.60	20.80	0.80	18.40	21.80	3.30	15.70
Primary	68.10	20.10	2.20	10.10	0.00	16.30	19.70	2.10	9.90
Secondary	76.80	12.20	1.40	6.40	1.40	10.70	11.70	1.40	9.60
Higher	71.20	3.80	0.50	3.20	0.50	32.10	3.50	0.50	28.20

Ag W: Agricultural Work; Bussin: Business; PNW: Professional and Non-professional Work, Computed from 2007 BDHS

Table 4: Percentage of women aged 15-49 years in current occupation, by primary education and first marriage, Bangladesh, 2007

| | Primary school education | | | | | |
| | Not complete | | Completed | | All | |
Occupation	EM	LM	EM	LM	EM	LM
Agricultural work	97.30	2.20	94.20	5.80	96.20	3.80
Business	100.00	0.00	90.00	10.00	97.10	2.90
Professional and non-professional work	94.20	5.80	73.80	26.20	85.70	14.30

EM: Early Marriage; LM: Late Marriage, Computed from 2007 BDHS

Table 5: Multivariate logistic regression coefficients of early marriage, by demographic and socio-economic factors, Bangladesh, 2007

Explanatory variables	Base category model (odds)	Logistic regression model (coefficients)
Respondents education		
No education	RC	RC
Primary	1.014	0.014
Secondary	0.600***	-0.510
Higher	0.085***	-2.469
Work status		
Not worked	RC	RC
Worked	1.003	0.003
Husbands education		
No education	RC	RC
Incomplete primary	0.969	-0.032
Complete primary	0.811	-0.210
Incomplete secondary	0.584***	-0.538
Complete secondary	0.574***	-0.555
Higher	0.471***	-0.753
Current residence		
Urban	RC	RC
Rural	1.565***	0.448
Constant	-	3.132

Level of significance: ***$p<0.000$ (highly significant), Computed from 2007 BDHS

Table 6: Multivariate logistic regression coefficients of currently married women in first marriage, by demographic and socio-economic factors, Bangladesh, 2007

Explanatory variables	Base category model (odds)	Logistic regression model (coefficients)
Respondents education		
No education	RC	RC
Primary	2.088***	0.736
Secondary	4.009***	1.389
Higher	5.894***	1.774
First marriage		
Early marriage	RC	RC
Late marriage	1.100	0.095
Religion		
Islam	RC	RC
Hinduism	1.238	0.214
Buddhism	1.8000	19.010
Christianity	1.087	0.084
Other	0.472	-0.752
Current residence		
Urban	RC	RC
Rural	1.404***	0.339
Constant	-	1.620

Level of significance: ***$p<0.000$ (highly significant), Computed from 2007 BDHS

between those who did not finish primary school and those who did. According to early marriage, about 94% of women, who finished primary school worked in agricultural compared with 100% of women with occupation business that did not finish.

Results of logistic regression analysis on early marriage: Multiple logistic regression analysis is conducted to asses the determinants of early marriage as dependent variable (0 = if he/she age at first marriage after age 20 and 1 = if he/she age at first marriage before age 20) by some explanatory variables. There are many potential independent variables. Of all the potential independent variables we consider only those of the variables, which give significant result in empirical study and that are also suitable for theoretical purpose. From Table 5 it is found that respondents with secondary and higher education are highly significant but primary education not significant and 1.014 times more preferable to many after age 20 than the reference category. From Table 5, we also observe that the entire engage in working contains 1.003 times more likelihood to early marriage than the not working women. Husband's education is also an indicator of early marriage as we seen from Table 5, we found that respondents with incomplete and complete secondary and higher education, respectively are significant than the reference category, but 0.969 times and 0.811 times with incomplete and complete primary education, respectively contains a less negative likelihood than the reference category. Place of resident exerts the significant effect on

the dependent variable, which shows rural respondents are 1.565 times more preferable to engage in early marriage than the urban respondents.

Table 6 shows, the logistic regression model, which is constructed to estimate the probability of women having their currently marriage dissolved. Women education is highly significant compared with women having no education. Women who married later were 1.100 times more likely to experience currently marriage than those who married early. Hinduism women 1.238 times more likely to currently marriage than muslim women. Those who lived in rural areas were 1.404 times more likely to currently marriage than women in urban areas.

CONCLUSION AND RECOMMENDATIONS

Early marriage is one of the vital indicators of and it influences fertility. This study provides empirical evidence that the institution of adolescent marriage in Bangladesh is costly for women in several dimensions. As a result of high rates of marriage at very young ages, girls in rural Bangladesh attain significantly less schooling, experience more frequent reproductive health complications have higher fertility and experience lower levels of gender equality in marriage. Meanwhile, the reproductive health advantage of late marriage is stronger among younger cohorts of women and appears to operate in part through differences in preventive and primitive health care practices and the utilization of available health care services before and during birth. Early marriage in Bangladesh has long been a topic of interest to population research because of fertility apparent direct relationship with lack of health facilities and indirectly with the poverty. By running and interpreting the logistic regression analysis, study shows that education, residence and religion is the major factor/contributors of fertility. This indicates that various socio-demographic factors have played a crucial role in directly and indirectly influencing early marriage in fertility of Bangladesh. Though, it is difficult in poor setting Bangladesh, the regarding authority should take proper steps in improving the situation of mother education in rural areas as well as throughout the country. The fact that early marriage appears to be causally related to female outcomes in adulthood indicates that the current policy focus on enforcing or instituting age of consent laws is justified in many contexts and legal bans on marriage below this threshold may be comparable in effectiveness and more feasible policy measures in settings, in which adolescent marriage is costly to prevent. Again, the impact of fertility

also marriages related deepen on govt. policy. As the country govt. policy will be cruel and actual then the country will be lie on fertility level and fertility rate with respect to fulfill consistency of natural resources. However, there is a real need for more in depth studies on this regard.

Thus, necessary action in called for to reduce future level of mortality in the country in order to achieve better living conditions in future.

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