

Research Article

Female Child Marriage and its Socio-demographic Correlates in a Rural Area of Bangladesh

Amena Sultana¹, Aazia Hossain^{2,*}, Shamshad Jahan³, SMA Hanif⁴
Shahidul Hoque⁵ & Abbas Bhuiya⁶

Abstract

Bangladesh has one of the highest rates of female child marriage in Asia. This paper aims to find what socio-economic and demographic factors are significantly associated with female child marriages in rural areas of Bangladesh. The paper used data from the Chakaria Health and Demographic Surveillance System (HDSS) of ICDDR,B in Chakaria sub-district in the south-eastern coastal area of Bangladesh. 36% of 5,376 females' first marriages in the study area during 2007-2014 were among children under 18 years. The rate decreased from 41% in 2007-2008 to 35% in 2013-2014. Multivariate analysis revealed that marriage year, education of girl, father's education and household socioeconomic status measured by asset scores showed statistically significant inverse association with proportion of child marriage. Proportion of child marriage was higher among school going children at the time of marriage compared to those who did not go to school. Though the rate of child marriage has decreased over the years, the change is small. Bangladesh faces the challenge of reducing prevalence of child marriage faster. Social awareness campaigns communicating health, social and legal consequences of child marriage, accurate birth registration system, and strengthening implementation of anti-child marriage law may help to further reduce the rate of child marriages.

Introduction

Throughout the world, a wedding is seen as a joyous occasion - a celebration and a milestone of adult life. However, the silent and widespread practice of child marriage is no cause of celebration (UNICEF, 2001). Being married off before reaching adulthood is a harsh reality for many young girls. Around the world, over 700 million women alive today were married before their 18th birthdays (UNICEF, 2014). In much of the developing world, adolescent and child marriage continues to be a strong social norm, particularly for girls. While boys are also victims of child marriage, this is an issue that affects girls in far larger numbers and with far more intensity, and adverse health and other consequences. In many societies, adolescence means an opening of opportunity for boys, whereas for girls it often means a closing down of opportunity and personal freedom. It is, therefore, less likely that the experience for boys will be as exploitative or physically harmful, as it is for girls (UNICEF,

¹Research Officer, Health Systems and Population Studies Division, ICDDR,B. 68 Shaheed Tajuddin Ahmed Sarani, Mohakhali, Dhaka 1212, Bangladesh

²Policy Influence and Research Uptake Lead, Health Systems and Population Studies Division, ICDDR,B. 68 Shaheed Tajuddin Ahmed Sarani, Mohakhali, Dhaka 1212, Bangladesh

³ Research Assistant, National Perinatal Epidemiology & Statistics Unit (NPESU), Centre for Big Data Research in Health and School of Women's and Children's Health, UNSW Australia, Level 1, AGSM Building (G27) Sydney, NSW 2052, Australia

⁴Associate Scientist, Health Systems and Population Studies Division, ICDDR,B. 68 Shaheed Tajuddin Ahmed Sarani, Mohakhali, Dhaka 1212, Bangladesh

⁵Field Research Manager, Health Systems and Population Studies Division, ICDDR,B. Chakaria Campus Court Road, Chakaria, Cox's Bazar 4740, Bangladesh

⁶Partners in Population and Development (PPD). Block F, Plot 17/B&C, Sher-E-Bangla Nagar, Administrative Zone, Agargaon, Dhaka 1207, Bangladesh

*Corresponding author: Aazia Hossain, Email: aazia@icddr.org

2001). In South Asia, 30% of girls aged 15-19 years are currently married or in union, compared to just 5% of boys in the same age bracket (UNICEF, 2011).

Bangladesh has one of the highest rates of female child marriage in South Asia. According to national surveys, 64% of Bangladeshi women between 20-24 years were married (Plan International Bangladesh & ICDDR,B, 2013) and 46% had already borne children before they became legal adults (WHO, 2011), a large majority within marriages (Hackett, Mukta, Jalal, & Sellen, 2015). Prevalence of child marriages in Bangladesh was more in rural (71%) than urban (54%) areas (Plan International Bangladesh & ICDDR,B, 2013).

The justifications used for child marriage are a combination of economic, cultural, traditional and religious arguments (UNICEF, n.d.). Parents encourage the marriage of their daughters while they are still children to protect them, in hopes that the marriages will benefit the daughters, and the family, financially and socially. In reality, child marriage is a violation of human rights. It compromises the development of girls and often results in early pregnancy and social isolation. With these girls having little education and poor vocational training, it reinforces the gendered nature of poverty (UNICEF, 2005). When a girl enters a marriage as a child, she is expected to take on adult responsibilities which she is not ready for, such as duties of a wife and bearing children (UNICEF, n.d.). Despite the anti-child marriage arguments, child marriage continues to take place with lifelong consequences of myriad nature, such as physical, mental, medical, societal, psychological and physiological (Nour, 2009). Though the issue of child marriage is a popular topic in Bangladesh, systematic studies on the topic and its socio-economic determinants has been very rare in the scientific literature.

Given the burden of child marriage and its importance in the context of development of Bangladesh and shortage of research articles on this topic, this paper attempts to examine the trends in occurrence of child marriage and identify its socio-economic and demographic correlates based data set, generated through a routine health and demographic surveillance system run by ICDDR,B (International Centre for Diarrhoeal Disease Research, Bangladesh) in a remote rural area of Bangladesh.

Materials and Methods

Study Area

The study was carried out in Chakaria *upazilla* (sub-district) situated in the south eastern coastal area of Bangladesh under Cox's Bazar district. Most of the population in the area is Muslim, accounting for up to 93%. 5% of the population is Hindu and 2% are Buddhist. Nearly 98% of the households are 'Bangalee' and the rest are from an ethnic minority group called 'Mogh' (Rakhain). The population density is 782 individuals per square kilometer (Hanifi, Mahmood, & Bhuiya, 2010). 51% of the total population constitutes of males and 49% are females. 84% households of Chakaria are headed by male members and the rest by females. About half of the population aged 6 years and above have never been to school (Choudhury, Hanifi, Mahmood, & Bhuiya, 2007). Agriculture, forestry and fishing are the main economic activities in this area (Hanifi, Mahmood, & Bhuiya, 2010).

Data Source and Method of Collection

Data for this study were from the Chakaria Health and Demographic Surveillance Systems (Chakaria HDSS) of ICDDR,B, which was established in 1999. Chakaria HDSS is a member of International Network for the Demographic Evaluation of Populations and Their Health (INDEPTH) (Hanifi et al., 2012). The primary purpose of this surveillance system is to generate relevant health, demographic and socioeconomic information for policies and programmes, monitor impact of health and development interventions, and to support research studies. Data on marriage along with other information have been collected through quarterly visits by a team of trained female workers recruited from the locality, supported by extensive supervision and quality control. 5% of the randomly chosen respondents are revisited within two weeks by members of the quality control team for identifying

discrepancies, which, if any, are corrected through discussion between the original interviewers and the members of the quality control team, and through household visits if required. All data are maintained using a relational data base allowing linkages of various events and cross sectional surveys. All marriages that took place during 2007-2014 in the HDSS area were analysed for this paper.

Definition of Variables

The dependent variable was age at first marriage in years, which was dichotomized as under-age marriage, if the age at marriage was less than 18 years or 18 or more. Up until 2016, in Bangladesh, the legal age at marriage for girls was 18 years or above. The latest law allows marriage for girls in exceptional circumstances before 18 with permission from the judiciary. In logistic regression analysis, age at marriage was used as a dichotomous dependent variable. Among the background characteristics of the individuals, marriage year was categorized as 2007-2008, 2009-2010, 2011-2012 and 2013-2014; religion was categorized into two groups: Muslim and non-Muslim (Hindu and Buddhist); education type as none (never been to any type of school), general education system, religious (madrasah education system), and both general and religious education system; education as years of schooling- 0 (no schooling of any type), 1 to 5 years, and 6 or more years.

In order to calculate the asset quintile of the respondents' households, ownership of thirteen assets were considered. The list of assets included *almirah* (wardrobe), table/chair, van/rickshaw, *choki/khat* (bed), television, cycle, motorcycle, fridge, sofa, electric fan, sewing machine, and telephone and electricity connection. The asset scores attained by using principle component analysis were categorized into three equal groups with nearly one-third of households in each group: poor (lowest 3rd) of the scores, not so poor (middle 3rd), and better off (highest 3rd). Additionally, whether the girl was a school going or not at the time of marriage was used as a dichotomous variable. A point to be noted here is that the school non-going category also includes girls who have never been to school. The choice of independent variables was driven by availability of data and a consideration of relevance based on literature and our knowledge of the society.

Data analysis

Data were analyzed using univariate and multivariate techniques. Logistic regression was applied to calculate crude and net effects of independent variables on child marriage, proportion married before 18 years of age, as commonly used with categorical dependent variables (Argresti, 1984). Analysis was done by IBM SPSS Statistics version 21.

Findings

Nearly 36% of 5,376 unmarried women of Chakaria HDSS area were married during childhood, that is, before reaching the legal age of marriage of 18 years. The proportion of child marriage decreased over the years from 41% in 2007-2008 to 35% in 2013-2014 (Table 1). Mean and median age at marriage remained static at 20 and 19 years respectively during 2007-2014.

Brides who had been to religious schools had lower mean and median age at marriage than the ones with no education, general education, or the ones with both general and religious education. The mean and median ages at first marriage of brides were found to vary with religion, parental education, socio-economic status of households and whether the girl was a student or not (Table 1).

Table 2 presents percentage of child marriage by various independent variables with crude and net odds ratios. It can be seen that child marriage was more prevalent among Muslims, girls from households with lower socioeconomic groups, girls who were students of religious educational institutions, girls with low level of general education, girls of illiterate parents and who were married during 2007 to 2008 compared to their respective counterparts.

Table 1: Mean and median age of first marriage among women in Chakaria HDSS area, Bangladesh

Background Characteristics	N	% married before 18 yrs.	Mean age at first marriage in years	Median age at first marriage in years
Marriage Year				
2007-2008	999	40.54	19	19
2009-2010	1,034	35.20	20	19
2011-2012	1,915	34.67	20	19
2013-2014	1,428	34.80	20	19
Religion				
Muslim	5,011	36.52	20	19
Non-Muslim	365	27.40	21	20
Education				
None	291	33.68	19	19
General	3,488	32.31	20	20
Religious	977	48.82	18	18
Both	611	36.50	19	19
Mother's education				
None	3,489	36.51	19	19
1-5	925	34.16	20	19
6+	423	26.71	21	20
Father's education				
None	2,486	40.31	19	19
1-5	906	37.64	20	19
6+	686	21.57	21	20
SES				
Poor	1,768	43.33	19	19
Middle	1,920	36.56	20	19
Rich	1,609	26.79	21	20
School going				
Yes	2,011	48.93	18	18
No	3,354	28.06	20	20
Total	5,376	35.90	19	19

In univariate analysis, all the independent variables showed statistically significant association with the proportion of child marriage. But in multivariate analysis only marriage year, education of child, current enrolment as student, father's education and household SES (socio-economic status) measured by asset scores showed statistically significant association with proportion of child marriage. In relative terms, the odds of child marriage have reduced by 50% during 2013-2014 compared to 2007-2008. Females who have only been to religious school had 1.21 times chance of child marriage than those who did not go to any school at all. Attending general schools reduced the odds of child marriage by 20%, compared to those who did not go to any schools.

The odds of child marriage is 27% less for girls who attended both general and religious schools, compared to those who did not have any type of schooling. The odds of child marriage of females with fathers who never been to school was twice the odds of females whose fathers had more than five years of schooling. The odds of child marriage are three times for girls from poor households than those from better off households. Odds of child marriage of females who were currently students were four times higher than those who were not attending school at the time of the marriage (Table 2).

Table 2: Results of logistic regression analysis of female child marriage, Chakaria, Bangladesh

Background Characteristics	Unadjusted odds ratio		Adjusted odds ratio	
	OR (95% CI)	P-value	OR (95% CI)	P-value
Marriage Year		0.009		0.000
2007-2008	1.00		1.00	
2009-2010	0.80 (0.67, 0.95)		0.81 (0.64, 1.02)	
2011-2012	0.78 (0.67, 0.91)		0.67 (0.54, 0.83)	
2013-2014	0.78 (0.66, 0.93)		0.50 (0.39, 0.63)	
Religion		0.001		0.483
Muslim	1.52 (1.20, 1.93)		1.12 (0.82, 1.53)	
Non-Muslim	1.00		1.00	
Schooling of marrying female		0.000		0.000
None	1.00		1.00	
General	0.94 (0.73, 1.21)		0.80 (0.57, 1.12)	
Religious	1.88 (1.43, 2.47)		1.21 (0.84, 1.75)	
Both	1.13 (0.84, 1.52)		0.73 (0.49, 1.08)	
Mother's education		0.000		0.670
None	1.58 (1.26, 1.98)		0.94 (0.68, 1.30)	
1-5	1.42 (1.10, 1.84)		1.03 (0.75, 1.42)	
6+	1.00		1.00	
Father's education		0.000		0.000
None	2.45 (2.01, 2.99)		2.23 (1.72, 2.89)	
1-5	2.19 (1.75, 2.75)		2.12 (1.62, 2.77)	
6+	1.00		1.00	
SES		0.000		0.000
Poor	2.09 (1.81, 2.42)		3.35 (2.70, 4.16)	
Middle	1.58 (1.36, 1.82)		1.93 (1.58, 2.34)	
Rich	1.00		1.00	
School going		0.000		0.000
Yes	2.46 (2.19, 2.76)		4.29 (3.62, 5.08)	
No	1.00		1.00	

Discussion

Two aspects of the study need to be mentioned at the beginning. One is the quality of age and age at marriage data. In the absence of quality birth registration in Bangladesh, it is hard to get accurate data regarding age, particularly for age at marriage. In our study area, the Chakaria HDSS has recorded data from 1999. Age at marriage data used in this study were collected through this HDSS meant to generate quality data especially age data in the absence of birth registration by using various techniques commonly used by demographers. The field workers were extensively trained to estimate age using different types of techniques such as major events that happened around the time of the birth of the child and probing with age of other siblings and parental age, especially mother's age.

The consistency of the proportion of child marriage derived in this study with that of Matlab proportion, which is based on actual birth registration maintained through another 50 years old ICDDR,B HDSS, is a testimony to the accuracy of the age data used in this study. The other aspect of the study is, in fact a limitation, that the study is based on a small area, which cannot be claimed to represent the rest of rural Bangladesh. But the closeness of the findings on similar indicators with Matlab data indicates the prevailing phenomenon in this area may not be different than the rest of the country.

The findings that there has been a steady decline in proportion of child marriage during the last twenty years was less captured in the average or median ages at marriage. This emphasizes the

importance of analyzing proportions and not only averages in situations similar to the present study, where the purpose was to study the determinants of particular event, such as child marriage. In univariate situation, religion of parents, type of schooling the girl had, and current school going status, maternal and paternal educational level, and household SES had significant statistical association with proportion of children married. In multivariate situation, when all the variables were included in the model, religion and mother's education became statistically insignificant. This implies that they did not have independent effect on proportion of child marriage.

Though our study was to identify socio-economic correlates of child marriage, it may be of interest to seek an explanation for the observed associations by making use of the relevant evidences from other studies. The decline in the proportion of child marriage over time was commensurate with positive development trend in Bangladesh characterized by reduction of poverty and increase in educational level. Higher proportion of child marriage among children from poorer households and uneducated father, could be due to the inability of these households to mitigate the risk associated with late marriage both in prevention and consequences. Given the prevailing socioeconomic and cultural contexts where daughters are viewed as economic burdens and their marriages are seen as an economic survival strategy for the households (UNICEF, 2001) it is expected that socioeconomically disadvantaged households will have a tendency to marry off their daughters as soon as possible. Additionally the parents see child marriage as a way to provide better futures to their daughters. Another common cause of child marriage is the 'protection' of the girl child from hazard of pre-marital sexual exposure and its consequences.

In the conservative rural Bangladeshi society, early marriage is seen as a preventative measure to protect girls' chastity upon which rests the family's honour and respect (Jones, 2010). Safety and security of young girls is a source of constant worry in the mind of parents. To save their daughters from sexual harassment, pre-marital sex and relationships, rape, trafficking and unwanted pregnancies, parents often choose to get their daughters married off early (UNICEF, n.d.). Many parents truly believe that their daughters will be safer and honor protected, and they will be better off under the control of legally and socially acceptable male guardian, that is, their husbands (UNICEF, 2001; Jones, 2010). The low prevalence of child marriage among children from higher SES households and of educated father may mean that these families have at their disposal means of protecting their female children and dealing with any consequences, in case anything happens. Children's schooling, which showed girls attending religious schooling system had higher odds of childhood marriage compared to children without any schooling and those had been to general schools could be an outcome to parental and household factors. It is very unlikely that a child girl can resist her marriage, thus the lower proportion of child marriage among girls with higher education may be a reflection of parent's desire to have their girls educated for better future of the girls and for that the parents undertook certain degree of risks whatever they are.

There are other disincentives to delay girl's marriage, which included dowry associated with marrying off girls. Even though asking for and giving dowry is a crime punishable by law in Bangladesh, unfortunately, the dowry system is common in the country, especially amongst the rural community. Eligibility of brides in rural communities tend to be inversely related to their age. As the eligibility of the girl goes down, that is, as the girl gets older, the amount of dowry increases (Shahnaz, 2006). Failure to pay dowries often lead to domestic violence and sometimes even murder, in the hands of the girl's husband and/or in-laws. Thus, poor parents are more willing to get their daughters married off at younger ages to lower their own financial burdens, and also for the safety and well-being of their daughters.

The finding that child marriage is more common among girls who still go to school is somewhat unexpected. While the real reasons are not known, one of the possible explanations could be that going and coming to school exposes girl to public increasing the prospect of receiving marriage proposals. Moreover, it is easier to 'view a girl' by the groom's family or the potential bride on her way to school and way back home avoiding the hassle of a formal arrangement. This may add an enhanced opportunity for a school going girl to be married off sooner compared to the ones who stay at home that go unnoticed by the broader community and seeing involves formal arrangements.

As depicted in this paper, the proportion of female child marriage is declining in the country but the pace of decline is very slow with girls from higher socio-economic groups doing relatively better than the other. This is despite an anti-child marriage law has been in place for many years. The challenge facing the nation is what can be done to accelerate the rate of reduction of child marriage. It is understandable that the reasons for parents to marry off a girl at childhood are complex and not always driven by sheer financial incentive but also by concern about security of the girls and other factors. Thus, a radical improvement in the situation may require time till an overall improvement takes place in the society. This may mean that there may be two components of this problem – one is easily amenable to interventions like education and awareness raising, and the other is rooted in the overall social context, which may only be amenable to long term broad development. The question thus is what can be done to tackle the easily amenable part of the problem. Is enough being done? In this context, two issues can be brought forward – the awareness about legal age at marriage and health and social consequences, such as lack of readiness for child bearing and rearing of child, and enforcement of minimum legal age of marriage. Adhering to the minimum legal age of marriage of 18 is of utmost importance in the goal to reducing, and eventually, eradicating child marriage. The Bangladesh Parliament passed a law in February 2017 to the existing Child Marriage Restraint Act, which includes a clause that would allow girls younger than 18 to be lawfully married under “special provisions” with prior approval from relevant authority. It will be crucial to monitor the circumstances under which the new law is used and its impact on child marriage.

Acknowledgements

This research study was based on data generated by Chakaria Health and Demographic Surveillance System (Chakaria HDSS) which has been funded by ICDDR,B from its unrestricted funds. Current donors providing unrestricted support include: Government of the People’s Republic of Bangladesh; the Department of Foreign Affairs, Trade and Development (DFATD), Canada; Swedish International Development Cooperation Agency (Sida); and the Department for International Development (UKAid). We gratefully acknowledge these donors for their support and commitment to ICDDR,B’s research efforts. The authors would further like to acknowledge the support of the community people of Chakaria and the members of the Chakaria field team. Lastly, the authors would also like to acknowledge the support of Dr. Shehrin Shaila Mahmood, an assistant scientist of ICDDR,B, for her encouragement.

References

- Agresti, A. (1984) ‘Analysis of categorical data’, New York: Wiley.
- Choudhury, K., Hanifi, S. M., Mahmood, S. S. & Bhuiya, A. (2007) ‘Sociodemographic characteristics of tobacco consumers in a rural area of Bangladesh’, *J Health Popul Nutr*, 25(4), pp. 456-464.
- Hackett, K. M., Mukta, U. S., Jalal, C. S. & Sellen, D. W. (2015) ‘A qualitative study exploring perceived barriers to infant feeding and caregiving among adolescent girls and young women in rural Bangladesh’, *BMC public health*, 15(1), pp. 771.
- Hanifi, M. A., Mamun, A. A., Paul, A., Hasan, S. A., Hoque, S., Sharmin, S., . . . Bhuiya, A. (2012) ‘Profile: the Chakaria health and demographic surveillance system’, *Int J Epidemiol*, 41(3), pp. 667-675, doi: 10.1093/ije/dys089.
- Hanifi, S. M. A., Mahmood, S. S. & Bhuiya, A. (2010) ‘Smoking has declined but not for all: findings from a study in a rural area of Bangladesh’, *Asia-Pacific Journal of Public Health*, 23(5), pp. 662-671.
- Jones, G. W. (2010) ‘Changing marriage patterns in Asia’, *Asia Research Institute*, Working Paper No. 131, Singapore: National University of Singapore, Available at: http://www.ari.nus.edu.sg/wps/wps10_131.pdf.
- Nour, N. M. (2009) ‘Child marriage: a silent health and human rights issue’, *Rev Obstet Gynecol*, 2(1), pp. 51-56.

- Plan International Bangladesh & ICDDR,B (2013) 'Child marriage in Bangladesh: Findings from a National Survey 2013', Dhaka, Available at: <https://plan-international.org/child-marriage-bangladesh-findings-national-survey>.
- Shahnaz, H. (2006) 'Dowry in Bangladesh: Compromising women's rights', *South Asia Research*, 26(3), pp. 249-268.
- UNICEF (2014) 'Ending Child Marriage. Progress and prospects', New York: UNICEF, Available at: http://www.unicef.org/media/files/Child_Marriage_Report_7_17_LR..pdf.
- UNICEF (2011) 'UNICEF global databases, 2011', Based on DHS, MICS and other national surveys, 2000-2010.
- UNICEF (2005) 'Early Marriage: A harmful traditional practice, A statistical exploration', New York, USA: UNICEF, Available at: http://www.unicef.org/publications/files/Early_Marriage_12.lo.pdf.
- UNICEF (2001) 'Early marriage: child spouses', Florence, Italy: UNICEF, Office of Research-Innocenti, Available at: <http://www.unicef-irc.org/publications/pdf/digest7e.pdf>.
- UNICEF 'Early Marriage in South Asia', *Discussion Paper*, Retrieved April 2, 2016 from: [http://www.unicef.org/rosa/earlymarriage\(lastversion\).doc](http://www.unicef.org/rosa/earlymarriage(lastversion).doc).
- WHO (2011) 'The sexual and reproductive health of younger adolescents: Research issues in developing countries', *Background paper for consultation*, Department of Reproductive Health and Research, Geneva, Switzerland: WHO, Available at: http://apps.who.int/iris/bitstream/10665/44590/1/9789241501552_eng.pdf.