ADOLESCENT MOTHERHOOD IN BANGLADESH

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Abstract

Adolescent childbearing has been a global concern due to possible change of life course, health and socioeconomic consequences for both individual as well as societal level. Despite this, little is known on the motherhood at adolescence in Bangladesh. This paper examines the factors affecting adolescent motherhood in Bangladesh using the nationally representative 2004 Demographic and Health Survey data. To examine childbearing during adolescence, the study deals on ever married adolescents and adults women. The findings suggest that 64.3% of the ever married adolescents begun childbearing. Among them 53.6% were already mother and other 10.7% were pregnant for the first time. Amongst the adolescents, 22.8% childbirths were mistimed. More than two-thirds of the adult married women started childbearing in their teen ages. The results of the multivariate logistic regression analyses reveal that women's education, husband's education, childhood place of residence, sex of household head, religion, wealth and place of region are important determinants of adolescent motherhood in Bangladesh.

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Introduction:

Over the last three decades the world has witnessed a dramatic change in reproductive behavior of women in Bangladesh. The total fertility rate (TFR) has dropped dramatically from a high level of 6.3 births per woman in the mid-1970s to 3.00 births in 2004. Meanwhile, the contraceptive prevalence rate (CPR) has increased from a low level of 7.7% to a high level of 58.1%. These achievements in reproductive behavior of Bangladeshi women have been viewed as 'success in a challenging environment'. However, these average pictures hide the wide variations in reproductive behavior that are prevailing across regions and subgroups of women by socioeconomic strata. One such behavior is the adolescent childbearing.

Despite substantial development in Human Development Indicators (HDI) in the recent decades, the patterns of early marriage and early childbearing are still persistent in Bangladesh. Teenage pregnancy and childbearing have recently captured a lot of research interest due to the socioeconomic and health consequences for both mother and child. While studies on fertility and contraceptives issues are enormous in Bangladesh, until recently adolescent childbearing has received little attention among researchers and policy makers.

Adolescent childbearing has now been a global concern due to possible change of life course and health and socioeconomic consequences for both individual as well as societal level. Although most literatures support the notion that teenage childbearing is generally associated with higher risk of adverse health outcomes for mother and newborn baby, some other studies shows controversial results.

Clinic or hospital-based studies conducted in developing countries including Bangladesh through less-rigorous analytic methods suggest that adolescent maternity is causally associated with increased poor obstetric indicators: antenatal care service utilization, delivery by skilled personnel and perinatal death (Magadi et al, 2003; Wasunna and Mohammed, 2002; Alam, 2000; Orvos et al, 1999). Among health consequences of adolescent childbearing include higher than average levels of blood pressure, toxaemia, anaemia, excessive bleeding, obstructed and prolonged labor, premature delivery and death (Zabin and Kiragu, 1998). In addition, children born to teenage mothers are susceptible to higher incidence of preterm delivery, low birth weight, prematurity of baby, stillbirth and perinatal mortality (Phipps and Sowers, 2002; Lee et al, 1998).

Besides, after controlling for the effects of socioeconomic characteristics, studies conducted so far in developed countries found no significant increased adverse obstetric and child health outcome among teenagers compared to older mothers (Smith and Pell, 2001; Tsai et al, 2001; Jimenez et al, 2000; Hoffman, 1998). Researches argue that such similarity of obstetric outcomes between adolescents and adults mothers in the developed countries is partly due to availability and easy accessibility in obstetric care and social contexts of pregnancies (Foix-L'Helias and Blondel, 2000). There is dearth of systematic documentation of obstetric outcomes between teenagers and adult women in developing countries. In developing countries the teenagers generally experience poorer maternal health indicators than their elders to a large extent.

Some studies have shown that teenage fertility has negative economic, social and health consequences for young mothers as well as for their children (Alan Guttmacher Institute, 1998; Hayes, 1987; Gage, 1995). For example, a panel established by the National Research Council concludes that, women who become parents as teenagers are at greater risk of social

and economic disadvantage throughout their lives than those who delay children until their twenties. They are less likely to complete their education, be employed, to earn high wages, and to be happily married (Hayes, 1987; p. 138).

Researches also suggest that long-term demographic effects of adolescent fertility may include larger completed family sizes. Because, the timing of a first birth is usually an indicator of future fertility patterns (Menken, 1980; Senderowitz and Paxman, 1985; Voydanoff and Donnelly, 1990; Wulf and Singh, 1991, CBASSE, 1987). Unintended and mistimed pregnancies are also higher among the teenage mother (Magadi et al, 2003), which subsumed a significant proportion for increased level of fertility. Unintended pregnancies have been shown to be associated with use of fewer health inputs such as prenatal care (Joyce et al, 2002).

In spite of rapid fertility transition in Bangladesh, teenage fertility has not been changed at the same pace and in the same direction. The contribution to the country's level of TFR by adolescents has remained constant over the decades. Almost one-third of the TFR is attributed to the adolescents. In Bangladesh, childbearing outside of marriage is illegal and not socially acceptable. In societies where child births are confined to marriage, age at first marriage marks the onset of the period of offspring procreation, and therefore, is considered the prime determinant of fertility.

Studies reveal that the females' age at first marriage in Bangladesh is still one of the lowest in the world. Traditionally, Bangladesh has one of the highest rates of child marriage worldwide (Barkat and Majid, 2003) and age at first birth remain relatively low (Bosch et al, 2008). In a study conducted on 43 developing countries, the median age at first marriage of Bangladeshi women was reported to be 14.1 years, the lowest amongst the study countries (Sing and Samara, 1996).

Woman's age at first marriage is an important indicator of exposure of women to the risk of pregnancy and is therefore important for understanding the timing of childbearing and fertility pattern where childbearing occurs only within wedlock. Early marriage typically increases the risk of childbearing at a young age. Early pregnancy poses great health risks for a young woman and, if she carries the pregnancy to term, for her infant; these risks are exacerbated by poverty and inadequate access to maternal and child health services (Sing and Samara, 1996).

Frequently experts have expressed concern about the negative social, health and economic consequences of teenage marriage, adolescent childbearing, unintended pregnancies and in some societies, high levels of pre and extra-marital conceptions (Bogue and others, 1977). Although such issues concerning adolescents are much publicized throughout the developed countries (ESCAP, 1992), the concepts are relatively new in many developing countries, including Bangladesh.

The studies conducted in Bangladesh so far on fertility related issues greatly focused to examine the causal relationship between age at first marriage, contraceptives, unintended pregnancies etc. and socio-demographic factors. Little attention has been paid to understand adolescent childbearing. This study attempts to examine the association between adolescent childbearing and various socioeconomic factors and also aims to investigate to what extent the factors influence adolescent motherhood among women of Bangladesh.

Data and methods:

The study utilizes the nationally representative 2004 Bangladesh Demographic and Health Survey (BDHS) data. The survey was carried out following a standard manner under the authority of the National Institute for Population Research and Training (NIPORT) of the Ministry of Health and Family Welfare. Survey sample was designed using scientific sampling probability.

The survey gathered detailed information on fertility levels, marriage, fertility preference, awareness and use of family planning methods, childhood mortality and causes of death of children under five, maternal and child health, HIV/AIDS related knowledge and behavior etc. from 11400 ever married women of reproductive age. Information on the timing of first birth was collected from women in the standard DHS individual module. A detailed birth history was recorded including all live births performed by women, along with the age at first birth, birth date, year of birth, sex of child, survival status of each child etc. Details of the survey are provided in the report (NIPORT et al, 2005).

The first section of the study deals with married adolescents to examine their childbearing status. The second section of the study examines the determinants of teenage motherhood among adults (aged ≥ 20). The first section would help in understanding present situation of reproductive behavior of the adolescents and the second part would help in driving up understanding the patterns and determinants of adolescent childbearing of the older women.

Both bivariate and multivariate analyses were employed to assess the association between teenage motherhood and socioeconomic and demographic characteristics of the respondents. A binary response was created for outcome variable 'motherhood at teenage' for the older women by the way that, if a woman did perform her first childbirth before her age 19, then she was coded as '1' and '0' for otherwise. Multivariate logistic regression was thought to be suitable to assess the net effect of the factors associated with adolescent childbearing. To ease the interpretations, our results have been expressed by estimated regression coefficients, standard error (SE), odds ratios and 95% confidence interval (CI). All of the statistical analyses have been performed by SPSS version 11.5 software.

Results:

Pregnancy and motherhood among married teenagers

Table 1 shows the weighted percentage of childbearing status of ever married adolescents by various socioeconomic and demographic factors. Overall, 53.6% of the adolescents were already mothers and another 10.7% were found to be pregnant for the first time. This implies that 64.3% of the Bangladeshi married adolescents experience motherhood in their teen ages. To some extent, adolescent sub-fecundity rather than infertility may be responsible for not childbearing in teen ages of the adolescents who were not mother or pregnant. According to BDHS report, almost one-third (32.7%) of the adolescents begins childbearing in their teen ages irrespective of marital status.

Age was positively associated with adolescent childbearing. More than one-third of the female adolescents aged 13-15 and more than three-fourths of those aged 18-19 had begun childbearing. The rural-urban differentials in childbearing among teenagers showed that the proportion of childbearing adolescents was 4.0% higher in rural than urban areas. However, the association was not found to be significant. Wives and husband's education, as expected,

showed to have significant association with childbearing. The proportion of adolescent childbearing decreased with the increase of husbands and wives level of education.

The difference of teenage childbearing by religion and working status was found to be minimal. Childbearing among adolescents was found significantly higher in male headed households than female headed households. Ever use of family planning (FP) method showed that the proportion of adolescent childbearing was significantly higher among those who had ever used any contraceptive method than those who never used any family planning method. A significant inverse association was observed between adolescent childbearing and wealth index. Regional variation of proportions of childbearing of the teenagers was found to be almost equally distributed.

Is early childbearing planned among adolescents?

The 2004 BDHS recorded all births occurred during the last five years preceding the survey. All eligible women were asked whether their last birth was wanted then or later. This question provided a powerful indicator of the degree to which adolescents successfully control fertility. The information on the latest births performed by adolescents is presented in Table 2. As shown, 77.2% of the last childbirths of the adolescents were planned and 22.8% births were mistimed. The age categories for adolescents did not show any significant difference between wanted and mistimed births.

Adolescent motherhood among adults:

This section of the study deals with adolescent motherhood among older women aged 20-49. Table 3 shows the differentials of teenage childbearing by various socioeconomic and demographic factors. Overall, more than two out of three women started childbearing during their adolescence. Age pattern of women showed to have significant association with teenage motherhood. Among women aged 45-49, three out of four had had experience of childbearing at adolescence. The proportion of adolescent motherhood amongst the younger aged 20-44 was lesser than those of 45-49.

The rural-urban place of residence showed to have significant difference on adolescent motherhood among older women with the proportion being higher in rural areas. A similar pattern of adolescent mother hood was also observed for childhood place of residence, but the association was found more pronounced than current place of residence.

Level of education for both wives and husbands showed to have significant inverse association with teenage motherhood. The prevalence of teenage childbearing was more frequent among lower educated women and among those with lower educated husbands. More than three out of four women with no formal education had had experience of childbirth in their age below nineteen. The proportion was found same for women with husbands having no formal education. About half of the women who had at least secondary level of education started childbearing in their age 18. The proportion was found 57.1% among women whose husbands had same level of education.

Sex of household head did not show to have significant association with adolescent motherhood. The prevalence of adolescent childbearing was more among Muslim women than their peer non-Muslim counterparts. Ever use of contraception was found to be positively associated with teenage motherhood. Women's current work status seems to have little effect on teenage pregnancy.

A significant inverse association was found between adolescent motherhood and wealth quintile. About three out of four women with poorest wealth quintile started childbearing before they reach at nineteen, while a slightly over half of the women with richest wealth quintile had had experience of teenage motherhood. Teenage motherhood varied significantly across the region of the country. The rate of adolescent motherhood was more frequent in Khulna division while the prevalence of teenage pregnancy was found the lowest among women of Sylhet division.

Results of multivariate analyses

Table 4 and Table 5 demonstrate the effect of socio-demographic characteristics of childbearing among married adolescents and adults respectively. The results obtained in multivariate analysis are consistent with those of bivariate analysis. The variable 'childhood place of residence' did not show to have net effect on teenage childbearing for both adolescents and adults.

Age showed to have net effect on the onset of childbearing. The adolescents aged 13-17 were less likely to begin childbearing compared to those of aged 18-19. Table 5 shows that women aged 25-44 were significantly less likely to start childbearing before age 19 compared to the women aged 45-49. The difference of likelihood between woman aged 20-24 and 45-49 was not found to be significant.

Husband's education appeared as a more powerful predictor than women's education for childbearing among adolescents. Women's education showed to have minimal net effect on childbearing for teenagers. The effect of women's education became apparent for adults, while the husband's education appeared to be less effective after controlling over other confounding factors. The findings reveal that compared to the adolescents who had no formal schooling, the adolescents who had at least secondary education were 25.1% less likely to begin childbearing, while this relationship was found to be insignificant between adolescents who had primary education (Table 4). The adolescents with husbands who had primary education and had at least secondary education were significantly ($p<0.01$) less likely to begin childbearing compared to those whose husbands had no formal education. The more was the level of education the lesser was the likelihood of teenage motherhood among adults.

Although religion did not show to have effect on childbearing among adolescents, it appeared as a vital predictor for teenage motherhood for older women. The non-Muslim women were significantly ($p<0.001$) less likely to have childbirth at adolescence than their peer Muslim counterparts. Sex of household head appeared as a highly significant predictor of the onset of childbearing during adolescence, however, the findings was controversial for adolescents and adults (Table 4 and Table 5). The teenagers who belonged to female headed households were significantly ($p<0.001$) less likely to begin childbearing compared to those who belonged to male headed households. Besides, the women if female headed households were more likely ($p<0.001$) to have child at adolescence than those of male headed households.

Ever use of contraceptive showed to have net significant effect on teenage childbearing. The adolescents and adults who ever used contraceptives were more likely to start childbearing in their teen ages than those who never used any contraceptives. The effect of ever use if contraceptive was more pronounced among adults. Wealth index, as expected, showed to have significantly negative effect on adolescent motherhood. The poorer was the wealth the more was the likelihood of childbearing during adolescent period. Although regional

variation of adolescent motherhood was appeared to be insignificant for teenagers, however, region appeared as a significant factor for older women (Table 5).

Discussions and conclusion:

This study investigates the factors affecting adolescent motherhood in Bangladesh using the nationally representative 2004 BDHS data. The results of the multivariate analyses for adolescents and adult women have been discussed side by side to improve understanding the recent and recent past situation of adolescent childbearing in Bangladesh.

The findings of the study suggest that adolescent childbearing and motherhood are common and still deeply embedded among Bangladeshi women. Adolescent childbearing is highest in Bangladesh among Asian countries, which also happens in sub-Saharan African countries. The women in Bangladesh become mother at their very early ages with the large majority of women started bearing children before they reach at the age of twenty (Singh, 1998). Evidently, almost two out of three women became mother in their teen ages among adolescents or adults. In addition, more than three out of four births of the adolescent mothers were pre-planned, and less than one-fourth was mistimed. These findings suggest that, adolescent childbearing and adolescent motherhood are highly valued in Bangladesh. The study did not find any apparent trend of decreasing of adolescent childbearing. The trend of the effects of typical demographic and socio-economic factors on childbearing pattern among the women in Bangladesh does not show a substantial change (Asaduzzaman and Khan, 2009). However, the findings suggest that the rate of adolescent childbearing among women aged 20-44 had slightly decreased compared to the women aged 45-49.

The findings indicated that women's education has significant depressive influence on the probability of adolescent childbearing. Overall, women's secondary or higher education acted as catalyst toward delayed childbearing in Bangladesh. The findings may be explained by the way that the women who had at least secondary education have postponed substantial times during their schooling and married at later ages compared to their less educated counterparts. Although husband's secondary and higher education played a vital role to begin childbearing in later ages among adolescents, however, its effect was found to be less pronounced among older women. However, the husbands who had secondary or higher education are aware regarding adverse outcome of early childbearing and hence are more likely to delay childbearing of their wives as compared to husbands who had no formal education. The effect of primary education was found to have little influence on the timing of childbearing.

Current place of resident showed to have no significant effect of teenage childbearing. One of the possible reasons is that government provided female stipend program in Bangladesh has substantially reduced wide gap of educational attainment of adolescents of rural and urban areas. Another possible reason is that many women including adolescents are migrated in urban areas with their spouses for better livelihood. Migration from rural to urban areas and closer gap in secondary level of education may have made a balance in adolescent childbearing among Bangladeshi women.

Childhood place of residence and religion are two important determinants in adolescent motherhood. These two variables reflect woman's cultural and familial background where she spent her formative years as a child and teenagers. It is very plausible that her basic values and expectations about married life, education and career are all affected by the type of family where she grew up. The family where woman grew up may help to determine how she evaluates cost and benefit of timing of childbearing.

The women resided in rural areas were tended to be more likely to have childbirth earlier than those who resided in urban areas in childhood period. The Muslim women were also more likely to have childbirth earlier than non-Muslim. The normative pressure and cultural tradition of Muslims lead women to have early birth compared to their non-Muslim counterparts which also reflected from the findings of the study. Another possible reason of higher likelihood of adolescent childbearing among the Muslim women and whose childhood place of residence was in rural areas is lower age at first marriage compared to their non-Muslims and urban counterparts.

The effect of 'sex of household head' on adolescent childbearing is vogue for controversial results of the two models for adolescents and adults. The adult women belonging to the female headed household compared to male headed household were more likely to have first birth in teen ages. Besides, the risk of being a mother during adolescence was found lower among adolescents who belonged to female headed household than male headed household. To have a clear understanding of the fact there needs an extensive study.

The effect of wealth index on adolescent childbearing was also vague. The richest compared to the poorest were less likely to be adolescent mother. This is partly attributed to the fact that the women from richest family are more educated, more conscious regarding the timing of childbearing and also better informed of adverse effect of early motherhood compared to women of other wealth quintiles. The estimated odds ratios for other wealth quintiles than the richest did not substantially predict significant difference on adolescent childbearing.

The region of place indicates that compared to the women of Barisal division, the risk of adolescent childbearing of the women of Chittagong and Sylhet divisions were found lower and that of the women of Khulna division was found higher, while other two divisions Dhaka and Rajshahi did not show substantial variation in adolescent childbearing. The higher and lower risks of adolescent childbearing in the regions are partly due to lower and higher age at first marriage of women in those regions. However, most of the findings of the study are consistent with those conducted on data of Sub-Saharan Africa (Gupta and Mahy, 2003).

The findings of the study suggest that adolescent childbearing is a common phenomenon in Bangladesh. Early marriage is directly associated with early childbearing. Higher incidents of early marriage of Bangladeshi girls' result higher prevalence of teenage motherhood. This finding indicates poor status of women, poor initiation of adulthood and poor starts of conjugal life. In view of high incidence of adolescent childbearing in Bangladesh immediate policy and special programmatic measures should be undertaken to prevent the incidence of adolescent childbearing. Adolescents and their guardians should be made more aware of the adverse health outcome, social and economic consequences of early marriage and early childbearing. Despite of wide expansion of female stipend program in the country early marriage and early childbearing have not been substantially changed over the decades. The prevailing social and cultural norms are still favoring to get marry earlier and to have early childbirth. To reduce early marriage, the ordinance of legal age at marriage should be properly implemented across regions and rural-urban areas of Bangladesh. Mass media campaigns may play effective role in reducing adolescent motherhood focusing on the adverse outcomes of early marriage, long run health consequences of mothers and child. If the trends of adolescent childbearing continue it would be difficult to ensure healthy life of mothers and child and to achieve the replacement level of fertility in Bangladesh.

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Table 1: Weighted percentage of ever married women aged 13-19 by childbearing status and socio-demographic characteristics, Bangladesh 2004

Characteristics	N	Childbearing status		Begun childbearing		
		Mother	Pregnant for the first time	No	Yes	chi-square
Current age						196.96***
13-15	346	18.7	16.7	64.6	35.4	
16-17	639	52.0	10.9	37.1	62.9	
18-19	762	70.9	7.8	21.3	78.7	
Place of residence						1.82ns
Urban	333	50.7	10.4	38.9	61.1	
Rural	1415	54.3	10.8	34.9	65.1	
Childhood residence						5.28**
Urban	172	46.5	9.7	43.8	56.2	
Rural	1575	54.4	10.8	34.8	65.2	
Women's education						16.80***
No education	263	63.0	6.4	30.6	69.4	
Primary	590	59.6	9.5	30.9	69.1	
Secondary+	895	47.0	12.8	40.2	59.8	
Husband's education						24.10***
No education	512	63.6	8.3	28.1	71.9	
Primary	563	54.0	11.0	35.0	65.0	
Secondary+	671	45.7	12.4	41.9	58.1	
Religion						0.01ns
Islam	1627	53.5	10.8	35.7	64.3	
Others	119	54.7	9.2	36.1	63.9	
Sex of household head						7.41**
Male	1621	54.1	11.2	34.8	65.2	
Female	126	48.1	4.8	47.1	52.9	
Ever used FP method						38.09***
No	596	37.8	16.8	45.4	54.6	
Yes	1152	61.8	7.6	30.6	69.4	
Women's work status						0.00ns
Working	1583	53.2	11.1	35.7	64.3	
Non-working	165	57.4	7.1	35.5	64.5	
Wealth index						15.24***
Poorest	347	60.9	6.2	32.9	67.1	
Poorer	392	57.2	11.8	31.0	69.0	
Middle	416	52.8	10.1	37.1	62.9	
Richer	333	50.8	14.2	35.1	64.9	
Richest	260	43.5	11.6	44.9	55.1	
Region						2.03ns
Barisal	111	50.0	9.8	40.2	59.8	
Chittagong	314	55.1	9.6	35.3	64.7	
Dhaka	485	53.9	10.3	35.8	64.2	
Khulna	231	50.1	12.8	37.2	62.8	
Rajshahi	523	54.8	11.2	34.0	66.0	
Sylhet	83	53.6	10.0	36.5	63.5	
Total	1748	53.6	10.7	35.7	64.3	

Note: *** $p<0.001$; ** $p<0.01$; * $p<0.05$; and ns not significant.

Table 2: Percentage of adolescents whose most recent birth occurred within last five years preceding the survey by birth intention, Bangladesh 2004

Birth intention	N	Current age of adolescents			Total
		13-15	16-17	18-19	
Intended	717	75.7	78.3	76.5	77.2
Mistimed	212	24.3	21.7	23.4	22.8
Total	929	100.0	100.0	100.0	100.0

Table 3: Weighted percentage of ever married women aged 20-49 by childbearing status, age of childbearing and socio-demographic characteristics, Bangladesh 2004

Characteristics	N	Childbearing status		Begun childbearing before age 19		
		Mother	Pregnant for the first time	No	Yes	chi-square
Current age						29.39***
20-24	2202	89.1	2.4	34.0	66.0	
25-29	2013	95.6	0.8	32.3	67.7	
30-34	1793	96.8	0.2	32.9	67.1	
35-39	1457	97.7	0.0	33.2	66.8	
40-44	1160	97.2	0.0	32.3	67.7	
45-49	1066	98.6	0.0	25.1	74.9	
Place of residence						57.80***
Urban	2253	93.3	0.9	38.7	61.3	
Rural	7439	95.5	0.7	30.2	69.8	
Childhood residence						93.85***
Urban	1038	91.1	1.9	45.4	54.6	
Rural	8651	95.7	.06	30.6	69.4	
Women's education						566.14***
No education	4449	97.0	0.1	24.9	75.1	
Primary	2769	96.8	0.4	26.6	73.4	
Secondary+	2474	90.3	2.3	51.4	48.6	
Husband's education						298.14***
No education	3908	96.6	0.1	24.2	75.8	
Primary	2379	96.4	0.7	29.8	70.2	
Secondary+	3399	92.7	1.5	42.9	57.1	
Religion						54.78***
Islam	8683	95.2	0.7	31.0	69.0	
Others	1005	95.2	0.9	42.5	57.5	
Sex of household head						0.10ns
Male	8755	95.4	0.7	32.2	67.8	
Female	937	93.6	1.0	31.7	68.3	
Ever used FP method						148.14***
No	1672	84.5	1.8	44.8	55.2	
Yes	8020	97.4	0.5	29.5	70.5	
Women's work status						4.26*
Working	7307	95.1	0.9	32.7	67.3	
Non-working	2385	95.6	0.3	30.4	69.6	
Wealth index						217.38***
Poorest	1932	95.8	0.2	26.2	73.8	
Poorer	1898	97.2	0.6	26.5	73.5	
Middle	1851	96.2	0.5	29.3	70.7	
Richer	1974	94.8	0.7	33.0	67.0	
Richest	2037	92.2	1.8	44.8	55.2	
Region						83.86***
Barisal	608	95.4	0.9	32.9	67.1	
Chittagong	1727	95.3	0.7	37.3	62.7	
Dhaka	3085	94.6	0.9	31.8	68.2	
Khulna	1166	95.7	0.5	27.3	72.7	
Rajshahi	2470	96.0	0.6	28.3	71.7	
Sylhet	636	93.2	1.2	42.8	57.2	
Total	9692	95.2	0.7	32.2	67.8	

Note: *** $p<0.001$; ** $p<0.01$; * $p<0.05$; and ns not significant.

Table 4: Logistic regression results of childbearing among adolescents by background characteristics, Bangladesh 2004

Characteristics	β	SE	Odds ratio	95% C.I.
Current age				
13-15	-1.991	0.150	0.136***	0.102-0.183
16-17	-0.760	0.126	0.468***	0.366-0.598
(18-19)RC	---	---	1.00	--
Women's education				
(No education)RC	---	---	1.00	--
Primary	0.068	0.181	1.071ns	0.751-1.526
Secondary+	-0.289	0.187	0.749‡	0.519-1.082
Husband's education				
(No education)RC	---	---	1.00	--
Primary	-0.325	0.151	0.722**	0.538-0.970
Secondary+	-0.560	0.160	0.571***	0.418-0.782
Sex of household head				
(Male)RC	---	---	1.00	--
Female	-0.634	0.202	0.530***	0.357-0.588
Ever used FP method				
(No)RC	---	---	1.00	--
Yes	0.687	0.117	1.987***	1.580-2.500
Wealth index				
Poorest	0.508	0.210	1.662**	1.101-2.508
Poorer	0.656	0.191	1.927***	1.325-2.803
Middle	0.415	0.180	1.514**	1.065-2.154
Richer	0.495	0.184	1.641**	1.143-2.356
(Richest)RC	---	---	1.00	--

Note: *** $p<0.001$; ** $p<0.01$; * $p<0.05$; ‡ $p<0.10$; and ns not significant. RC Reference category.

Table 5: Logistic regression results of adolescent childbearing among adult women aged 20-49 by background characteristics, Bangladesh 2004

Characteristics	β	SE	Odds ratio	95% C.I.
Current age				
20-24	-0.104	0.092	0.901^{ns}	0.753-1.078
25-29	-0.299	0.091	0.742***	0.620-0.887
30-34	-0.421	0.092	0.656***	0.548-0.786
35-39	-0.460	0.095	0.631***	0.524-0.760
40-44	-0.378	0.099	0.686***	1.186-1.591
(45-49)^{RC}	---	---	1.00	--
Childhood residence				
(Urban)^{RC}	---	---	1.00	--
Rural	0.318	0.075	1.374***	1.186-1.591
Women's education				
(No education)^{RC}	---	---	1.00	--
Primary	-0.118	0.062	0.889*	0.788-1.003
Secondary+	-1.095	0.074	0.334***	0.289-0.387
Husband's education				
(No education)^{RC}	---	---	1.00	--
Primary	-0.161	0.064	0.851**	0.751-0.965
Secondary+	-0.322	0.068	0.724***	0.634-0.828
Religion				
(Islam)^{RC}	---	---	1.00	--
Others	-0.415	0.073	0.660***	0.572-0.762
Sex of household head				
(Male)^{RC}	---	---	1.00	--
Female	0.191	0.079	1.211**	1.037-1.415
Ever used FP method				
(No)^{RC}	---	---	1.00	--
Yes	0.945	0.062	2.573***	2.277-2.907
Wealth index				
Poorest	0.140	0.087	1.150‡	0.971-1.363
Poorer	0.195	0.082	1.215**	1.035-1.428
Middle	0.213	0.078	1.237**	1.062-1.442
Richer	0.221	0.072	1.247***	1.082-1.437
(Richest)^{RC}	---	---	1.00	--
Region				
(Barisal)^{RC}	---	---	1.00	--
Chittagong	-0.158	0.106	0.854‡	0.694-1.051
Dhaka	-0.015	0.101	0.985^{ns}	0.809-1.201
Khulna	0.262	0.115	1.299**	1.037-1.628
Rajshahi	-0.006	0.103	0.994^{ns}	0.812-1.217
Sylhet	-0.311	0.128	0.733**	0.570-0.942

Note: *** $p<0.001$; ** $p<0.01$; * $p<0.05$; ‡ $p<0.10$; and ^{ns} not significant. ^{RC} Reference category.