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Factors affecting on current contraception use among currently married women in urban and rural areas of Bangladesh

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Abstract: Bangladesh has highest Contraceptive Prevalence Rate (CPR) after Sri Lanka and Bhutan in South Asia but still lagged behind with the developed countries. This paper uses data from Bangladesh Demographic and Health Survey 2011 to examine different socio-economic and demographic factors which are correlates to current contraception use among currently married women in urban and rural areas in Bangladesh. Bivariate and multivariate logistic regression analyses have been used to estimate the factors affected on contraception use in city and countryside of Bangladesh. The results show that current age of respondent, number of living children, respondent currently working, fertility preference, visited by FP field worker, marital duration and region have most significant effect on current contraception use in urban and rural areas by both cross-tabulation and logistic regression analyses. Moreover, respondent's education and husband's occupation have been found significant association with contraception use in both areas.

Keywords: Contraception, Contraceptive prevalence, family planning, Urban, Rural, Bangladesh.

I. INTRODUCTION

Being the advent of modern contraception, fertility remains high in much of the developing world. This is due to lack of access to contraceptive methods; rapidly increasing availability of low-cost contraception persists along with large numbers of unwanted births in many developing countries. Population program had a tremendous progress in eighties and nineties in Bangladesh and still it is in progress. In this reason, a large number of academic and policy debate has ensued over the last few decades on whether increasing access to contraception leads to a decrease in unwanted births and thus in total fertility. In Bangladesh, the method has changed over the past two decades, and currently 8 percent of the married couples use a long-acting and permanent method (LAPM), namely IUD, implants, and male and female sterilization. The plateauing of LAPMs is of concern, as fertility is now so low that most child-bearing is completed by the mid-to-late twenties, and the women face two subsequent decades of reproductive life depending on the hormonal methods, during which they could easily protect themselves from unwanted pregnancies and unsafe abortion through use of different LAPMs. Use of different family planning methods have increased with rise of contraceptive prevalence rate (CPR) from 7.7 in 1975 to 61.2 in 2011.

II. LITERATURE REVIEW

Despite this recognition of the importance of addressing unmet need, the level of unmet need for contraception in developing countries has declined only slightly in recent decades (Alkema et al. 2013; Singh, Darroch, and Ashford 2013). An estimated 222 million women have unmet need for modern contraception in the developing world (Singh and Darroch 2012), and this number may increase in the decades ahead if the pace of contraceptive uptake does not keep pace with population growth and the growing demand for smaller families and precisely timed births (Darroch, Sedgh, and Ball 2011). Estimates also indicate that if all women having unmet need used a modern contraceptive method, 54 million unintended pregnancies and 26 million abortions would be averted each year (Singh and Darroch 2012).

According to BDHS, 2005-2006 the estimated unmet need is 22.9% which include 12.9% of women who wanted to limit (unmet need for limiting births) and 10% of women who wanted to delay child-births (unmet need for spacing births). Among the three subgroups of non user women, the subgroups non amenorrhea nonpregnant is most important accounting for 15.5% unmet need. The pregnant women constitute 2.8% and the amenorrhea women 3.4% unmet need.

Unmet need was higher among rural women (19 and 17%) than among urban women (15 and 11%) in 2004/2005 and 2006/2007 respectively. In the 1998/2000 survey it was highest among women in Chittagong and Barisal divisions (28 and 20% respectively); in the 2006/2007 survey, it was highest in Chittagong and in

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the newly formed Shylhet divisions (21 and 23% respectively). Unmet need for contraception was lowest among Rajshahi and Khulna divisions (14-16 and 12% respectively) in both surveys. Unmet need was slightly lower among women with some secondary schooling than among those with little or no education. No significant difference was found in unmet need among educated women and their uneducated counterparts in the 2006/2007 survey; however, there were significant differences in education in 2002/2004 survey. In the 2000 BFS, women with highest level of education (secondary and higher level) were 3 times as likely to practice contraception as those who had no education. As expected, education increases receptivity to new technologies including awareness and use of contraception. Educated women also may desire fewer children than their less educated counterparts because of the incompatibility between formal sector employment and child care(Cleland et al. 1994).

Many qualitative studies examining barriers to contraceptive use have also been undertaken. Although these studies have been limited in geographic scope, reviews of them have identified key themes. A review of studies of young women, primarily unmarried women in sub-Saharan Africa, identified lack of access to family planning education and to information concerning how contraceptive methods work as underlying themes across the studies (Williamson et al. 2009). Concerns regarding side effects and health risks pertained especially to menstrual disruption and fears of infertility. Unmarried women were also unwilling to risk the social disapproval associated with seeking services.

In a study by Haaga (1992), it was observed that the health and nutritional status of the urban poor is even worse than that of the rural poor. Infant and maternal mortality rates are higher than the national rates, and more than 80% of school-aged children in Dhaka slums do not attend school. These factors are the likely reasons why the contraceptive prevalence rate (CPR) in slums is lower than the national rate in both urban and rural areas (Barkat et al. 1995). Therefore, even if the family planning programme achieves its targeted objectives in the rural and urban formal sectors, the national CPR may not rise enough to attain the national goal of replacement level fertility. It is thus imperative to understand the

determinants of contraceptive use behaviour of the slum residents, in order to plan an effective programme targeted at raising the CPR in slums.

Chowdhury (1977) has found that education is inversely related to fertility and also positively related to practice of contraception for Bangladesh. Female education is found to have relatively more effect on fertility and practice on the practice of contraception than husband's education. Malnutrition, which affects biological mechanism of human body, is likely to be directly related to the fertility performance.

Fitting a logistic regression model to the Matlab Family planning Health Services Project (FPHSP) data. Chowdhury and Philips (1989) have shown that age and number of living children are highly correlated with current contraceptive use. The negative effect of age reflects the fact that young women are more likely to use contraceptive once the number of living children is allowed for. A higher number of living children at a younger age apparently motivate couple to accept, while older women with the same number of living children do so less frequently.

The review of literature of use of contraception shows that a number of variables are affecting on contraception use. However, the predictors are changing through time since the facilities and awareness are changing day by day. Hence, it is necessary to identify the segment of population where programs need strengthen in order to achieve the goal for control of population.

III. OBJECTIVE OF THE STUDY

In this study, an attempt has been made to examine the predictors of current contraception use in urban and rural areas of Bangladesh. There are many factors that influencing on the use of contraception. Thus, greater attentions have to be paid to find out the factors that are influencing on use of contraceptive methods and ultimately the growth of population. However, the specific objectives of this research are:

- I. To find the percentage of different current contraceptive method in urban and rural areas.
- II. To find out whether different socio-economic and demographic factors have any association with current contraceptive method in city and countryside of Bangladesh.
- III. To identify the factors that may explain the variation in contraceptive use.

IV. MATERIALS AND METHODS

This study uses data extracted from the 2011 Bangladesh Demographic and Health Survey (BDHS-2011), in which field work conducted during the period from 8 July to 27 December, 2011 in four phases of about 3 weeks each, on behalf of the Government of Bangladesh by National Institute for Population Research and Training (NIPORT), with funding from the United States Agency for International Development (USAID)/Dhaka. From a total of 17,964 selected households, 17,511 were found to be occupied. Interviews were successfully completed in 17,141households, or 98 percent of households. A total of 18,222 ever-married women age 12-49 were identified in these households and 17,842 were interviewed, for a response rate of 98

percent. Ever-married men age 15-54 in every third household were eligible for interview; of the 4,343 men, 3,997 or 92 percent were successfully interviewed. In this survey it is found that twenty-six percent of women and 28 percent of men live in urban areas. Almost one-third of respondents live in Dhaka and about one-sixth each live in Chittagong and Rajshahi. In 2011, the latter division was split into two divisions, Rajshahi and Rangpur. Rangpur has 12 percent of women and 13 percent of men, very similar to the size of Khulna division. Sylhet and Barisal are the smallest divisions, accounting for only about five percent of respondents each. Twenty-eight percent of ever-married women and 26 percent of ever-married men age 15-49 have no education, while 12 percent of women and 18 percent of men have completed secondary or higher education. Compared with data from the 2007 BDHS, these results show that there has been a decline in the proportion of women who have never attended school from 34 to 28 percent and for men from 30 to 26 percent. Overall, 61 percent of currently married women in Bangladesh are currently using a contraceptive method. The majority of women use a modern method (52 percent) and 9 percent use traditional methods. The pill is by far the most widely used method (27 percent), followed by injectables (11 percent), female sterilization (5 percent), and condoms (6 percent). About one percent of women mentioned the use of male sterilization, IUDs, and implants.

The associations between current contraception use and selected explanatory variables have been tested by applying cross-tabulation analysis. The cross-tabulation analysis is an important in first step for studying the relationship between uses of contraception with several characteristics. However, such analysis fails to address use of contraception predictors completely because of ignoring other covariates. Hence, Logistic regression analysis has also been adopted in order to estimate independent effects of each variable while controlled for others. This analysis has considered all the covariates that have found significant in cross-tabulation analysis.

V. VARIABLES

Independent Variables are: Age at first marriage, Current age of respondent, Number of living children, Respondent's education, Respondent currently working, Fertility preference, Husband's education, Husband's occupation, Visited by FP field worker in past 6 months, Marital duration, Religion, Region, Socio-economic status, Access to mass media, Heard FP on radio in last few months, Heard FP on TV in last few months, Heard FP on newspaper in last few months.

Dependent variable is current use of contraception, which refers to the method that was being used of an individual client at the time of the survey. Thus, any respondent (or, her spouse) using a family planning method at the time of survey was regarded as a current user.

VI. RESULTS AND DISCUSSION

The distribution of current contraceptive method and effect of various socio-economic and demographic factors are shown in Table-1, Table-2 and Table-3.

Table-1 shows the percentage of different contraceptive methods which respondents are currently used in urban and rural areas in Bangladesh. It is seen from table that 59.1 percent urban women and 64.6 percent rural women practices contraception of which pill is used by maximum respondents in both urban and rural areas. 12.1 percent respondents in urban area have used Injections while 95 percent respondents in rural area account the same contraceptive method. There is small response in sterilization method in both areas. In traditional method maximum respondents follow periodic abstinence which amount 6.8 percent in urban and 7.6 percent in rural area among the currently married women.

Table 1: Percentage distribution of currently married women by current use of specific contraceptive methods in urban and rural areas, Bangladesh

		Urban	Rural
Modern method	Pill	26.6%	27.6%
	IUD	0.8%	0.7%
	Injections	12.1%	9.5%
	Condom	3.7%	10.5%
	Female sterilization	5.2%	4.4%
	Male sterilization	1.4%	0.8%
	Implants/Norplant	1.2%	1.1%
Traditional method	Periodic abstinence	6.8%	7.6%
	Withdrawal	1.8%	2.0%
	Other	0.4%	0.3%
Not using		40.1%	35.4%
Total		100.0%	100.0%

Table-2 presents percentage and association of different contraceptive methods by various socio-economic and demographic variables. It is found that age at first marriage has significant association with various contraceptive methods in rural area, where 53.1 percent respondents whose age below or equal 15 years and 47.9 percent respondents over 15 years have used modern contraceptive methods.

Current age of respondent has found most significant association with use of contraceptive methods in both areas. Majority of the respondents who are practices contraception in urban and rural areas have been used modern contraceptive methods. 62.1 percent women in city whose age between 23-30 years have used modern methods followed by the women whose age 31-38 years (61.6 percent), whereas 57.9 percent in the age group 23-30 years and 58.4 percent in the age group 31-38 years use the modern methods in countryside.

Number of living children to a woman has been found to be associated with the use of contraception (Rutenberg et al., 1991; Robey, Rutstein and Morris, 1992). Therefore, number of living children is considered as an important factor for using contraception. From Table-2 it is seen that the women who have 2 children use more modern contraceptive methods (65 percent) than who have 3 children (59.5 percent) in urban and also same in rural area. Childless women have practiced less contraceptive methods in both areas.

Table 2: Percentage distribution of currently married women who are currently using contraceptive method according to some background characteristics

Modern method Traditional method Not using Modern method Traditional method Not method Age at first marriage ≤15 years 55.7 10.0 34.3 53.1 9.2 37.7 >15 years 53.5 10.0 36.5 47.9 8.8 43.3 Current age of respondent **** **** **** ≤22 years 54.1 4.9 40.9 45.2 4.8 50.0 23-30 years 62.1 6.8 31.2 57.9 5.7 36.4 31-38 years 61.6 12.6 25.9 58.4 12.0 29.6 39 and above 38.3 16.4 45.2 40.3 15.2 44.5 Number of living children *** *** *** *** 0 24.1 5.3 70.6 19.2 4.1 76.7 1 56.1 7.1 36.8 49.0 5.9 451 2 65.0 10.0 25.0 61.8	Characteristics	Urban		Rural			
Age at first marriage *** ≤15 years 55.7 10.0 34.3 53.1 9.2 37.7 >15 years 53.5 10.0 36.5 47.9 8.8 43.3 Current age of respondent **** **** **** ≤22 years 54.1 4.9 40.9 45.2 4.8 50.0 23-30 years 62.1 6.8 31.2 57.9 5.7 36.4 31-38 years 61.6 12.6 25.9 58.4 12.0 29.6 39 and above 38.3 16.4 45.2 40.3 15.2 44.5 Number of living children **** *** *** 0 24.1 5.3 70.6 19.2 4.1 76.7 1 56.1 7.1 36.8 49.0 5.9 451 2 65.0 10.0 25.0 61.8 7.6 30.5		Modern Traditional Not		Modern	Traditional	Not	
≤15 years 55.7 10.0 34.3 53.1 9.2 37.7 >15 years 53.5 10.0 36.5 47.9 8.8 43.3 Current age of respondent **** *** *** ≤22 years 54.1 4.9 40.9 45.2 4.8 50.0 23-30 years 62.1 6.8 31.2 57.9 5.7 36.4 31-38 years 61.6 12.6 25.9 58.4 12.0 29.6 39 and above 38.3 16.4 45.2 40.3 15.2 44.5 Number of living children **** *** *** 0 24.1 5.3 70.6 19.2 4.1 76.7 1 56.1 7.1 36.8 49.0 5.9 451 2 65.0 10.0 25.0 61.8 7.6 30.5		method	method	using	method	method	using
>15 years 53.5 10.0 36.5 47.9 8.8 43.3 Current age of respondent **** **** **** ≤22 years 54.1 4.9 40.9 45.2 4.8 50.0 23-30 years 62.1 6.8 31.2 57.9 5.7 36.4 31-38 years 61.6 12.6 25.9 58.4 12.0 29.6 39 and above 38.3 16.4 45.2 40.3 15.2 44.5 Number of living children *** *** *** 0 24.1 5.3 70.6 19.2 4.1 76.7 1 56.1 7.1 36.8 49.0 5.9 451 2 65.0 10.0 25.0 61.8 7.6 30.5	Age at first marriage			-		***	
>15 years 53.5 10.0 36.5 47.9 8.8 43.3 Current age of respondent **** **** **** ≤22 years 54.1 4.9 40.9 45.2 4.8 50.0 23-30 years 62.1 6.8 31.2 57.9 5.7 36.4 31-38 years 61.6 12.6 25.9 58.4 12.0 29.6 39 and above 38.3 16.4 45.2 40.3 15.2 44.5 Number of living children **** *** *** *** 0 24.1 5.3 70.6 19.2 4.1 76.7 1 56.1 7.1 36.8 49.0 5.9 451 2 65.0 10.0 25.0 61.8 7.6 30.5	≤15 years	55.7	10.0	34.3	53.1	9.2	37.7
Current age of respondent **** *** ≤22 years 54.1 4.9 40.9 45.2 4.8 50.0 23-30 years 62.1 6.8 31.2 57.9 5.7 36.4 31-38 years 61.6 12.6 25.9 58.4 12.0 29.6 39 and above 38.3 16.4 45.2 40.3 15.2 44.5 Number of living children *** *** *** *** 0 24.1 5.3 70.6 19.2 4.1 76.7 1 56.1 7.1 36.8 49.0 5.9 451 2 65.0 10.0 25.0 61.8 7.6 30.5		53.5	10.0	36.5	47.9	8.8	43.3
≤22 years 54.1 4.9 40.9 45.2 4.8 50.0 23-30 years 62.1 6.8 31.2 57.9 5.7 36.4 31-38 years 61.6 12.6 25.9 58.4 12.0 29.6 39 and above 38.3 16.4 45.2 40.3 15.2 44.5 Number of living children **** *** *** 0 24.1 5.3 70.6 19.2 4.1 76.7 1 56.1 7.1 36.8 49.0 5.9 451 2 65.0 10.0 25.0 61.8 7.6 30.5			***			***	
23-30 years 62.1 6.8 31.2 57.9 5.7 36.4 31-38 years 61.6 12.6 25.9 58.4 12.0 29.6 39 and above 38.3 16.4 45.2 40.3 15.2 44.5 Number of living children 0 24.1 5.3 70.6 19.2 4.1 76.7 1 56.1 7.1 36.8 49.0 5.9 451 2 65.0 10.0 25.0 61.8 7.6 30.5		54.1	4.9	40.9	45.2	4.8	50.0
31-38 years 61.6 12.6 25.9 58.4 12.0 29.6 39 and above 38.3 16.4 45.2 40.3 15.2 44.5 Number of living children 0 24.1 5.3 70.6 19.2 4.1 76.7 1 56.1 7.1 36.8 49.0 5.9 451 2 65.0 10.0 25.0 61.8 7.6 30.5		62.1	6.8	31.2	57.9	5.7	36.4
39 and above 38.3 16.4 45.2 40.3 15.2 44.5 Number of living children *** *** 0 24.1 5.3 70.6 19.2 4.1 76.7 1 56.1 7.1 36.8 49.0 5.9 451 2 65.0 10.0 25.0 61.8 7.6 30.5		61.6			58.4	12.0	29.6
Number of living children *** *** 0 24.1 5.3 70.6 19.2 4.1 76.7 1 56.1 7.1 36.8 49.0 5.9 451 2 65.0 10.0 25.0 61.8 7.6 30.5		38.3	16.4	45.2	40.3	15.2	44.5
0 24.1 5.3 70.6 19.2 4.1 76.7 1 56.1 7.1 36.8 49.0 5.9 451 2 65.0 10.0 25.0 61.8 7.6 30.5			***			***	
1 56.1 7.1 36.8 49.0 5.9 451 2 65.0 10.0 25.0 61.8 7.6 30.5	_	24.1	5.3	70.6	19.2	4.1	76.7
2 65.0 10.0 25.0 61.8 7.6 30.5	1					5.9	
1 59.5 12.5 27.9 58.2 10.9 30.9	3	59.5	12.5	27.9	58.2	10.9	30.9
4 and above 47.3 15.5 37.1 47.1 14.2 38.7							
Respondent's education *** ***							
Illiterate 50.2 13.4 36.4 49.6 10.8 39.6		50.2	13.4	36.4	49.6	10.8	39.6
Primary 54.4 9.5 36.1 51.6 10.3 38.1							
Secondary and Higher 55.9 9.2 34.9 51.4 6.7 42.0							
Respondent currently working *** ***							
No							
Yes 54.1 9.6 36.2 50.4 9.0 40.7		54.1	9.6	36.2	50.4	9.0	40.7
56.6 11.9 31.5 56.4 9.7 33.9							
Fertility preference *** ***	Fertility preference						
Have another 48.9 6.2 44.9 42.0 5.9 52.1		48.9	6.2	44.9	42.0	5.9	52.1
Undecided 44.3 11.4 44.3 33.1 4.2 62.7							
Doesn't want 56.3 13.4 30.3 52.7 12.1 35.2							
Others(Infecund, Sterilized, 66.9 0.4 32.7 72.6 0.3 27.1							
Widowed, Divorced)							
Husband's education * ***			*			***	
Illiterate 57.7 9.6 32.7 52.8 9.9 37.3		57.7	9.6	32.7	52.8	9.9	37.3
Primary 56.0 9.1 34.9 50.5 8.4 41.1							
Secondary and Higher 53.0 10.5 36.5 49.6 8.7 41.7	1		10.5			8.7	
Husband's occupation *** ***			***			***	
Agriculture 56.8 10.9 32.2 55.0 11.0 34.0		56.8	10.9	32.2	55.0	11.0	34.0
Service 52.5 10.3 37.2 44.7 7.7 47.7		52.5	10.3	37.2	44.7	7.7	47.7
Businessman 59.8 8.7 31.4 56.4 9.0 34.6							
Others 48.2 11.1 40.7 47.5 7.1 45.4							
Visited by FP field worker in *** ***	Visited by FP field worker in		***			***	
past 6 months	•						

No	52.2	10.5	37.3	47.1	9.8	43.0
Yes	71.4	6.2	22.4	71.5	4.7	23.8
Marital duration		***			***	
0-8 years	54.1	5.3	40.6	45.7	5.1	49.2
9-16 years	63.5	8.3	28.2	58.5	6.0	35.5
17-24 years	59.6	14.9	25.6	59.3	12.1	28.6
>24 years	37.6	15.0	47.4	39.8	15.7	44.5
Religion		*			***	
Non-Muslim	58.6	10.5	30.9	50.4	8.8	40.8
Muslim	54.1	9.9	36.0	54.8	11.0	34.3
Region		***			***	
Barisal	56.7	10.5	32.8	54.0	9.9	36.2
Chittagong	53.8	7.1	39.1	41.5	7.0	51.5
Dhaka	53.0	10.5	36.5	49.5	9.3	41.2
Khulna	54.3	11.9	33.8	56.4	10.3	33.3
Rajshahi	55.9	11.2	32.9	58.7	8.9	32.3
Rangpur	60.4	10.4	29.2	60.6	8.4	31.0
Sylhet	48.9	8.5	42.6	32.8	9.7	57.5
Socio-economic status		*			***	
Poor	56.8	7.4	35.9	52.5	8.9	38.6
Middle	55.9	8.1	36.1	51.3	9.7	39.0
Rich	53.9	10.8	35.3	48.1	8.6	43.3
Access to mass media					***	
No access	51.1	9.9	39.0	49.8	10.1	40.1
Having access	55.1	10.0	34.8	51.8	8.2	40.0
Heard FP on radio in last few						
months						
No	54.5	10.0	35.5	50.8	9.1	40.1
Yes	57.0	10.8	32.3	54.4	7.0	38.6
Heard FP on TV in last few		***				
months						
No	53.0	9.7	37.3	50.7	9.3	40.0
Yes	57.2	10.5	32.3	51.8	8.0	40.3
Heard FP on newspaper in last		***		_		
few months						
No	54.4	9.7	36.0	51.0	9.0	39.9
Yes Note: Signifies reference so	56.8	14.8	28.5	46.5	7.5	46.0

Note: Signifies reference category. * p< 0.10, ** p< 0.05, *** p< 0.01

From the table it reveals that respondent's education has a strong significant association with use contraceptive methods. Higher educated respondents in urban area use more modern contraceptive methods than primary educated respondents, in contrast primary educated respondents in rural area use more modern contraceptive methods than higher educated respondents. The figures of illiterate respondents are 50.2 percent in urban and 49.6 percent in rural area.

Working status of women has a significant effect on current contraceptive use both in the urban and rural areas of Bangladesh. The respondents who are working use more contraceptive methods than their counterparts. 56.6 percent working respondents in urban and 56.4 percent in rural area practice modern contraceptive methods.

Fertility preference shows significant association with current use of contraception. The women who have not decided yet for another child use less modern and traditional contraceptive methods than the respondents who don't want another child in both areas.

Husband's education in rural area has highly significant effect on contraception use. Interestingly illiterate respondents in rural area use more modern and traditional contraceptive methods than literate respondents. 52.8 percent illiterate respondents use modern methods and 9.9 percent use traditional methods in rural area.

Table-2 shows the respondents whose husbands are in business practice more modern contraceptive methods than other groups in both areas. 59.8 percent in urban and 56.4 percent in rural respondents whose husbands is

in business use modern contraceptive method. The analysis also shows that husband's occupation has significant association with current use of contraceptive method.

Visited by FP fieldworker in last 6 months has highly significant association with current contraceptive method in both areas. 71.4 percent respondents in urban and 71.5 percent respondents in rural area who have contact with family planning field worker use modern contraceptive methods.

From Table-2 it is seen that marital duration has highly significant association with current use of contraception. Women whose marital life are over 24 years prefer to practice more traditional methods than those whose age below 24 years in both areas. In contrast, the previous group practices less modern contraceptive methods than the last group in urban (37.6 percent) and rural (39.8 percent) areas.

Religion has less significant effect in urban but highly significant effect in rural area. Interestingly Muslim women (54.8 percent) practices more modern contraceptive methods than their counterparts Non-Muslim women (50.4 percent) in rural area.

It is noticed from the table that division has significant effect on current use of contraception. The women in Rangpur division use more contraceptive methods than other divisions. 60.4 percent in urban and 60.6 percent in rural of Rangpur division uses modern contraceptive methods followed by 56.7 percent urban women in Barisal and 58.7 percent rural women in Rajshahi.

Social status is one of the significant factor affect the use of contraception. Strangely poor women in urban and rural areas practices more modern contraceptive methods than other status women. 56.8 percent poor urban and 52.5 percent poor rural women practices modern contraceptive methods.

It is seen from Table-2 that access to mass media has found significant association with current contraception use in rural area. Women who have access in mass media use more contraceptive method than those who have no access in mass media. Individually, FP program in TV and FP program in newspaper have significant effect on current contraception use in urban area. 57.2 percent respondents who heard FP program on TV and 56.8 percent respondents who heard FP on newspaper have used modern contraceptive method in urban area.

Table-3 presents logistic regression analysis. In this analysis we consider those variables which are significant in bivariate analysis. From this table, it is seen that rural women whose age at first marriage over 15 years are 1.122 times more likely to use contraception than those age below or equal 15 years.

Current age of respondent has negative impact on contraceptive use. Respondents whose age 20-30 years are 0.311 times less likely to use contraception than those whose age below or equal 22 years in urban area. Similar results have been found in the age group 31-38 years and 39 and above years. In rural area respondents whose ages belong to 39 and above group are 0.408 times less likely to use contraceptive use than those belongs in the group less or equal 22 years.

Table-3 Odds ratios of the logistic regression analysis showing the effects of socio-demographic characteristics on current use of contraception of currently married women

Characteristics	Urban		Rural		
	Coefficient of β	Odds Ratio	Coefficient	Odds Ratio	
	·		of β		
Age at first marriage	Insignificant in Bivariate analysis				
≤15 years(RC)				1.000	
>15 years			.115	1.122*	
Current age of respondent					
≤22 years(RC)		1.000		1000	
23-30 years	0.272	1.000	0.122	1000	
31-38 years	-0.372	0.689***	-0.133	0.875	
39 and above	-0.339	0.712*	-0.137	0.872	
	-0.793	0.452***	-0.525	0.592***	
Number of living children					
0(RC)		1.000		1.000	
1	1.626	5.085***	1.459	4.301***	
2	2.664	14.360***	2.363	10.625***	
3	2.894	18.057***	2.551	12.815***	
4 and above	2.840	17.122***	2.626	13.821***	
Respondent's education					
Illiterate(RC)		1.000		1.000	
Primary	-0.120	0.887	0.095	1.100	
Secondary and Higher	0.018	1.018	0.133	1.142	
Respondent currently working					
No(RC)					

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Yes		1.000		1.000
103	0.330	1.391***	0.271	1.311***
Fertility preference	0.550	1.371	0.271	1.511
Have another		1.000		1.000
Undecided	-0.339	0.713	-0.814	0.443***
Doesn't want	0.127	1.135	-0.814	0.986
		1.551***		2.087***
Others(Infecund,Sterilized,	0.439	1.551***	0.736	2.08/****
Widowed, Divorced)				
Husband's education		1.000		1.000
Illiterate	0.120	1.000		1.000
Primary	-0.129	0.879	-0.089	0.915
Secondary and Higher	-0.161	.851	-0.014	0.986
Husband's occupation				
Agriculture		1.000		1.000
Service	-0.237	0.789*	-0.421	0.656***
Businessman	-0.047	0.954	0.054	1.055
Others	-0.358	0.699**	-0.352	0.703***
Visited by FP field worker in				
past 6 months				
No		1.000		1.000
Yes	0.492	1.636***	0.705	2.023***
Marital duration				
0-8 years		1.000		1.000
9-16 years	1.372	3.943***	-0.385	0.680***
17-24 years	0.865	2.374***	-0.215	0.807
>24 years	0.769	2.158***	-0.790	0.454***
Religion				
Non-Muslim		1.000		1.000
Muslim	-0.350	0.704***	-0.330	0.719***
Region	0.000	0.70	0.000	0.7.29
Barisal		1.000		1.000
Chittagong	-0.411	0.663***	-0.807	0.446***
Dhaka	-0.192	0.825	-0.309	0.734***
Khulna	0.027	1.028	0.064	1.066
Rajshahi	-0.056	0.945	0.108	1.114
Rangpur	0.125	1.133	0.100	1.043
Sylhet	-0.671	.511***	-1.165	0.312***
Socio-economic status	0.071	.,J11	-1.103	0.312
Poor		1.000		1 000
	0.007	1.000	0.025	1.000
Middle	-0.007	0.993	0.025 -0.102	1.026
Rich	0.181	1.198	-0.102	0.903
Access to mass media	T			1.000
No access	Insignificant in Bi	variate analysis	0.117	1.123*
Having access		T	0.117	
Heard FP on TV in last few				
months		1.000		in Bivariate
No	0.161	1.174*	analysis	
Yes	0.101	1.1/1		
Heard FP on newspaper in last				
few months	1.000		Insignificant in Bivariate	
No	0.373	1.452**	analysis	
Yes				
Constant	-1.575	0.207***	-0.650	0.522***
1	•	•		

Note: Signifies reference category. * p< 0.10, ** p< 0.05, *** p< 0.01

Table-3 shows that number of living children has positive impact on contraceptive use. It is found that use of contraception increases with the increases of number of living children. The women who have one living children are 5.085 times more likely to use contraception than those who have no children. Similarly, women who have two, three, and 4 and above living children are 14.360, 18.057 and 17.122 times consecutively more

likely to use contraception than those who have no children in urban area. Similar results have been found in rural area. Women who have 4 and above children are 13.821 times more likely to use contraception than women have no children in rural area.

Women's working status is a vital factor to use contraception. Women who are currently working are 1.391 times and 1.311 times more likely to use contraception than those not working now in urban and rural areas respectively. Fertility preference plays an important role on contraceptive use. In rural area women who have not decided yet for another child are 0.557 times less likely to use contraception than those who want another. Husband's occupation plays a vital role on use of contraceptive methods. In rural area, women whose husbands are doing services, 0.344 times less likely to use contraception than those husbands in agriculture.

Visited by family planning field worker indicates positive effect on contraception use. Woman who have visited by family planning worker in last six months are 1.636 times and 2.023 times more likely to use contraceptive methods than those who have not visited in urban and rural areas respectively. Urban women whose marital duration belongs to 9-16 years are 3.943 times more likely to use contraception than those belong to 0-8 years. Similarly, those belong to 17-24 years are 2.374 times more likely to use contraception than the group 0-8 years. On the other hand adverse scenery has been seen in rural women. Women in rural area whose marital duration belongs to 9-16 years are 0.32 times less likely to use contraception than the reference category group women 0-8 years. Religion has negative effect on contraception practice. Muslim women in urban and rural areas are 0.296 and 0.281 times less likely to use contraception than non-muslim women respectively. Respondents in urban of Chittagong are 0.337 times less likely to use contraception than Barisal followed by 0.489 times less likely to use in Sylhet than reference district. In Dhaka, respondents in rural are 0.266 times less likely use contraception than rural women in Barisal district.

Media has positive effect on contraception use among rural women. Women having access any mass media are 1.123 times more likely to use contraception than those have no access. On the other hand, women in urban area who have heard family planning on TV and newspaper are 1.174 times and 1.452 times more likely to use contraception than those who have not heard family planning program on the above two mass media.

VII. RECOMMENDATIONS AND CONCLUSION

This study investigates the predictors of current contraception use in urban and rural areas in Bangladesh. It has been utilized the national representative data from the Bangladesh Demographic and Health Survey (BDHS-2011). Both cross-tabulation and Logistic regression analysis techniques have been applied to identify the important predictors of current contraception use. Since contraception is one of the important proximate determinants of fertility, the present study also analyzed the use of contraception. In addition to the level of contraceptive use, multivariate Logistic Regression has also been employed to identify the rich factors of current contraception use.

Level of contraception use indicates that rural women use more contraceptive methods than urban women. Among the women using contraception pill is widely use method in both areas followed by injections method. Contraception use accordance with background characteristics of the respondents illustrate that traditional method is extremely unpopular method among the respondents in both areas. Bivariate analysis suggest that age at first marriage, current age of respondent, number of living children, education of respondents and their husbands, working status respondents, partner's occupation, fertility preference, marital duration, visited by FP field worker, region, socioeconomic status have significant effect on current use of contraception. On the hand, In view of findings of multivariate logistic analysis, it is evident that the explanatory variables such as current age, number of living children, fertility preference, partner's occupation, marital duration, region and visited by FP field worker are important in explaining both urban and rural areas of use of contraception. From the above analysis, we recommend sustained efforts to raise awareness and motivation for proper contraceptive use. This can be brought about by facilitating access to more information, education of both husband and wife, NGO programs, effective communication by family planning worker and encourage practicing of contraception in reproductive age.

The government should take more strategy for dissemination and implementation include collaborating with other private agencies and professional and service organizations to widely distribute the concept and practice of contraception through presentations, electronic distribution, newsletters, and other publications; development of provider tools and job aids to assist providers in implementing the new recommendations; and training activities for staff, as well as for continuing education. And most importantly, conduct a survey of family planning health-care providers before and after release of the government report to assess attitudes and practices related to contraceptive use. Results from this survey will assist in evaluating the impact of contraception practice in the Bangladesh.

REFERENCES

- [1]. Alkema, Leontine et al. (2013), National, regional, and global rates and trends in contraceptive prevalence and unmet need for family planning between 1990 and 2015: A systematic and comprehensive analysis, The Lancet 381(9878): 1642–1652.
- [2]. Barkat, A., Howlader, S.R., Rahman, M. & Bose, M.L. (1995), Family Planning Survey in the Urban Slums in Bangladesh. National Advisory Board study funded by Management Sciences for Health through a grant from The William and Flora Hewlett Foundation, USA, University Research Corporation (Bangladesh), Dhaka.
- [3]. Cleland, J., Phillips, J., Amin, S., & Kamal, G.M. (1994), The determinants of Reproductive Change in Bangladesh, regional and sectoral Studies, World Bank, Washington D.C.
- [4]. Chowdhury, A.I., Phillips, J.F. (1989), Predicting contraceptive use in Bangladesh: a logistic regression analysis, Journal of Biosocial Science, 21 (2):161-168.
- [5]. Chowdhury, R.H. (1977), Education and fertility in Bangladesh. Bangladesh Dev. Stud.. 5(1):81-110.
- [6]. Darroch, J.E., Sedgh, G. & Ball, H. (2011), Contraceptive technologies: Responding to women's needs. New York: Guttmacher Institute.
- [7]. Singh, S., Darroch, J.E. & Ashford, L.S. (2013), Adding it up: The need for and cost of maternal and newborn care—Estimates for 2012, New York: Guttmacher Institute.
- [8]. Haaga, E. (1992), A Case Study of the Slum Improvement Project, Bangladesh, UNICEF, Dhaka.
- [9]. Robey, B., Rutstein, S. O. & Morris, L. (1992), The reproductive revolution: New survey findings. Population reports, Series M, Number 11.
- [10]. Rutenberg, N., Ayad, M., Ochoa, L. & Wilkinson, M. (1991), Knowledge and use of contraception. Demographic and Health Surveys, Comparative studies No. 6, Columbia, Maryland, USA: Institute for Resource Development/Macro International Inc.
- [11]. Singh, S. & Darroch, J.E. (2012), Adding It Up: Costs and Benefits of Contraceptive Services—Estimates for 2012, New York: Guttmacher Institute and United Nations Population Fund (UNFPA).
- [12]. Williamson, L. M., Parkes, A., Wight, D., Petticrew, M., & Hart, G.J.(2009), Limits to modern contraceptive use among young women in developing countries: A systematic review of qualitative research, Reproductive Health 6(3): 1–12.