### Pattern of Contraceptive Use among the Married Couple of Rural Community in Cumilla District.

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### Abstract

**Background:** Bangladesh has experienced a sevenfold increase in its contraceptive prevalence rate (CPR) in less than forty years from 8% in 1975 to 62% in 2014. Contraceptive practice acceptable moderately in society is said to be associated with socio-economic status, education and other factors. Population stabilization and a gradual lowering of population growth is the basic aim behind contraceptive practice. The population rate of Bangladesh in December, 2018 was 2.01%. The population density is 1252 per km2. Maximum of the population increased in the rural area, because they were not properly used the contraceptive methods. They seldom used contraceptive methods which influenced to increase the population. The purpose of the study is to examine the pattern of contraceptive use among the married couples of the rural area in Bangladesh. The objectives of the study is to determine the extent of awareness regarding contraception among the married persons, to estimate the perception of couples using contraceptive methods, identify the reasons for their adoption & non-adoption and to assess needs of contraceptive methods in rural area. Materials and Methods: It was a descriptive type of cross sectional study, which was carried out in some selected villages at Laksham, Cumilla. Study populations were married women in reproductive age and married man. Purposive sampling was done. Sample size was 333. The number was identified on the basis of assumption. Pretested questionnaire and checklist were used for data collection. **Result:** It was found that the age range of the respondents were 16 to 70 years, among the 333 respondents 34.2% were 20 to 29 years of age group, 86% were female &14% male.42.6% respondents were educated up to primary level. Majority of the respondents had 10,000 to 20,000 monthly family income. Among 333 respondents majority 28.5% had 3 children. 65.46% of the respondents were house wife, 80.5% respondents were using different types of contraceptive methods, 62.5% were using OCP, 3% IUCD, 3.9% barrier method or condom, 1.5% were in terminal method. 46.8% discontinue their previous contraceptive methods, 11.1% suffered from irregular period and 5.1% weight gain. 68.5% respondents were satisfied with their current contraceptive method, 36% felt need to adopt the contraceptive methods, 18.6% motivated by health workers, 25.2% influenced by the family members and 0.9% by the media. The number of children directly dependent on the educational qualification and monthly family income and are statistically significant (at p < 0.05 and p < 0.00). Conclusion: Although success of the family planning program in Bangladesh has been widely acclaimed, many challenges still remain. Inter-spousal communication, counseling can ensure the most appropriate contraceptive methods for couples.

**Introduction:** Primary care physicians should be aware of the alarming population growth in the developing countries including Bangladesh. The mortality rates and pregnancy-related morbidities are significantly higher among the women of younger age group in many South Asian and Sub-Saharan African countries<sup>1</sup>. Bangladesh is a densely populated developing country with declining land man ratio, improper distribution of land and wealth. In 1994 its crude birth rate was estimated as 28.4 per thousand

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populations and crude death rate 9.2 per thousand populations. The population will be doubled in 33 years if it continues like this rate<sup>2</sup>.

Bangladesh experienced an impressive sevenfold increase in its contraceptive prevalence rate (CPR) in less than forty years, from 8% in 1975 to 62% in 2014<sup>3</sup>. The CPR plays a significant role in assessing the demographic impact of family planning (FP) programs. However, it is imperative to recognize that fertility is not solely dependent on the prevalence of contraceptive use but also on contraceptive use-effectiveness and user adherence. Married women in the country are having 0.7 more children than they desire, meaning that the total fertility rate (TFR) would be 30% lower if unplanned pregnancies were avoided. While this may also be explained by unmet need for family planning, which is equally important to explore the effectiveness of family planning programs in addressing issues related to contraceptive method use. These issues include method discontinuation and switching, method mix, and method failure. Despite Bangladesh's impressive gains in CPR, it is important to understand why, almost one-third of pregnancies are still unintended. Previous study revealed that media exposure significantly effects on family planning approval, increase the positive attitude on contraceptive, and significantly increase the knowledge on contraception and STDs diseases. Women education and mass media can also be considered as potential factors to influence the contraceptive use<sup>4</sup>.

Family planning programs of Bangladesh have generated much interest among researchers and policy makers globally because of their outstanding success in increasing the contraceptive prevalence rate (CPR)—even in the context of ล Muslim-majority country characterized by higher poverty, a lower literacy rate, and a lower level of women's autonomy<sup>5</sup>. The CPR in Bangladesh has increased to 62.4% in 2014 from a mere 8.0% in 19752. The remarkable increase in the CPR has not only contributed to the decline of the total fertility rate (TFR) to 2.3 children per woman in 2014, from 6.3 children per woman in 1975, but it has also facilitated large declines in maternal mortality (from 574 per 100,000 live births in 1990–91 to 170 in 2013) and infant mortality (from 88.0 per 1000 live births in 1993–94 to 38.0 in 2014) in Bangladesh<sup>6</sup>.

However, over the last few years, the increasing trend

in CPR in Bangladesh has become stalled (e.g., 61.0% in 2011, 62.4% in 2014 and 62.0% in 2017) and, consequently, the declining trend in TFR has also become stagnant at 2.3 children per woman from 2011 to  $2017^7$ .

### MATERIALS AND METHODS:

It was a descriptive type of cross sectional study, which was conducted from January 2019 to July2019. The study was carried out in some selected villages in Laksham, Cumilla. Study populations were married women in reproductive age. Purposive sampling was done. Sample size was 333. Two types of data collection instruments such as questionnaires and interview schedules were used to collect the primary data. Data were presented through descriptive ways, tabular presentation, graphical presentation and statistical presentation. After introductory conversation and obtaining consent from the respondent the relevant data were collected by face to face interview. All collected data were verified for its consistency, then it was compiled and analyzed by SPSS methods of computer.

### LIMITATIONS OF THE STUDY

The sample size of the study were not calculated according to any approved statistical formula, so sample size may not reflected the whole scenario of the country. The data collection and data analysis time is not sufficient for the study.

#### **RESULTS:**

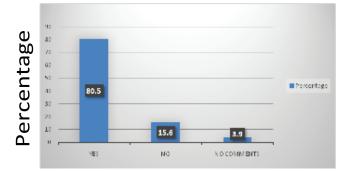
Table 1: Baseline characteristics of therespondents (n=333)

Characteristics	Group	Number	Percentage	
			%	
Age(tears)	Up to 19	34	10.2%	
	20 to 29	114	34.2%	
	30 to 39	102	30.6%	
	40 to 49	63	18.9%	
	50 and above	20	6.1%	
Sex	Male	47	14%	
	Female	286	86%	
Religion	Islam	330	99.1%	
	Hindu	03	0.9%	

Educational	Illiterate/ no education	26	7.8%
Qualification of spouse	Up to primary level	148	44.4%
-	Up to secondary level	155	46.5%
-	Above secondary level	04	1.3%
Educational	No education/illit erate	34	10.2%
qualification of respondent	Up to primary level	142	42.6%
	Up to secondary level	113	33.9%
-	Above secondary level	44	13.3%
	<5000	34	10.2%
Monthly	5000 to 10000	106	31.8%
family income(in taka)	10000 to 20000	159	47.7%
-	20,000 and above	34	10.3%
	Nil	23	6.9%
_	1	71	21.3%
_	2	63	18.9%
No of children	3	95	28.5%
	4	30	9.0%
-	5	23	6.9%
	6	22	6.6%
-	7	4	1.2%
	9	2	0.7%
	Farmer	37	11.1%
	House wife	218	65.46%
	Service	14	4.20%
Occupation of th	e		
respondent	Business	28	8.40%
	Maid	08	2.40%
	Servant		
	Day labor	22	6.60%
	Others	06	1.84%

Table shows that the mean ages of the respondents were 31.32 years, the respondents (86%) were married female and only 14%were married male. 99.1% of the respondents were Muslim. Majority of respondents (46.5%) received education up to secondary level, maximum 47.7% of the families were in monthly income level of 10,000 Tk–20,000Tk. 95 (28.5%) of respondents had 3 children; Most of the respondents (65.46%) were House wife.

# Figure-01: Distribution of respondents according to the use of contraceptive method for birth control



Maximum 80.5% of the respondents said that they used contraceptive method for birth control, 15.6% said that they did not used it and only 3.9% did not give any comments regarding it.

## Table-02:Distributionoftherespondentsaccording to their contraceptive methods (n=333)

Contraceptive	Number of	
method	respondents	Percentage
OCP	208	62.5
IUCD	10	3.0
Norplant	2	0.6
Injection	57	17.1
Barrier method	13	3.9
Terminal	5	1.5
No comments	38	11.4
Total	333	100.0

62.5% of the respondents used OCP, 17.1% used injectable contraceptive method, 11.4% do not comments about the use of contraceptive method.

Table-3: Distribution of respondents according totheirdiscontinuationOfthepreviouscontraceptive method (n=333)

Method discontinue or not	Number of Respondents	Percentage
Yes	156	46.8
No	139	41.7
No comments	38	11.4
Total	333	100.0

The table shows that maximum (46.8%) of the respondents discontinue the previous method and 41.8% of the respondents do not discontinue the contraceptive during their child bearing period.

### Figure 2: Distribution of respondents according to the causes of discontinuation of contraceptives

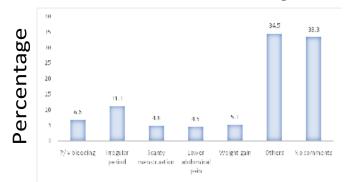


Fig 2 shows that a big group of respondents tried to hide themselves, 33.3% respondents did not give any comments about their causes of discontinuation of contraceptive methods. 34.55 of the respondents were answered for other causes they discontinue the contraceptive methods. 6.6% complained about p/v bleeding, 11.1% said for irregular period, 4.8% said for scanty menstruation, 4.5% said for lower abdominal pain and 5.1% said for weight pain.

Table-4: Distribution of respondents according to their opinion about the Contraceptive method used (n=333)

Opinion of the method	Number of Respondents	Percentage	
Satisfactory	228	68.5	
Not satisfactory	53	15.9	
Confused	9	2.7	
No comment	9	2.7	
Do not get answer	34	10.2	
Total	333	100.0	

The attitude of the birth control situation of rural peoples are so conscious, because maximum (68.5%)

of the respondents achieved the satisfactory level for using the birth control methods.

Causes of adoption	Number of Respondents	Percentage
Felt need	120	36.0
Motivated by health workers	62	18.6
Influenced by family members	84	25.2
Motivated by media	03	0.9
Others	47	14.1
No comments	17	5.1
Total	333	100.0

Tab	Table-5: Distribution of respondents according to				
the	reason	behind	the	adoption	of contraceptive
me	thod (n=	=333)		-	-

Table shows that maximum (36%) of the respondent adopt with the contraceptive method for their self-realization or feel need to use it.

### **Regression Model-01: Regression model of number children Vs. education level and monthly income**

	Unstandardized Coefficients		Standardized Coefficients		
Model	В	Std. Error	Beta	Т	Sig.
(Constant)	4.143	.411		10.077	.000
Educational qualification of the respondents	899	.138	341	-6.498	.000
Monthly Income of the respondent	.276	.111	.130	2.477	.014

a Dependent Variable: Number of Children Dependent variable y = the number of children, Independent variables  $x_1 =$  Educational qualification of the respondent

 $x_2$  = Monthly income of the respondents' spouse.

$$y = a + b_1 x_1 + b_2 x_2$$
  
= 4.143 - 0.899 x\_1 + 0.276 x\_2

The mode indicate that the number of children are positively influenced through the house hold income (x2) with p value (p<0.05) but educational qualification is negatively influenced for the dependent variable (y) or the number of children with p value ((p<0.00)). The education qualification and monthly income are statistical significant for birth control.

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### **Discussion:**

The study area was Laksham Upzilla in Comilla District. The total number of respondents were 333. The respondent's maximum age was 70 years (male) and minimum age was 16 (female). All the respondents were married. Maximum (114) of the respondents ages lies between 20-29 years. Among the respondents 86% were married female and 14% were married male. Most of the respondents were house wife. The number of children are positively influenced through the monthly income with p value(p<0.05) but educational qualification is negatively influenced with p value ((p<0.00)).

The survey results also given the important message regarding the use of contraceptive for birth control of the rural area. 80.5% respondents used the contraceptive method for birth control, 16.6% respondents did not use any contraceptive method. According to<sup>3</sup> Huda, F.A, Robertson, Y, Chowdhuri, S. et al. (2014) Oral pill is the most widely used (27%) method, followed by injectables (12.4%), condoms (6.4%), female sterilization (4.6%), male sterilization (1.2%), implants (1.7%), and IUDs (0.6%). The present survey results indicated that the targeted area's respondents were so census about their health and family situation. They used the different types of contraceptive methods for birth control, such as 62.5% of the target peoples were used OCP methods, 17.1% used injection, 3.0% used IUCD, 3.9% Barrier methods, only 0.6% used Norplant, 1.5% used terminal. According to B. Ozumba, et.al., 1998 Norplant was concentrated among high-parity women, and the proportion of Norplant users was highest among women aged 30 to 34 years<sup>8</sup>. Comparing Norplant and IUD users, we found Norplant users to be significantly less highly educated with 51% of Norplant users having tertiary education compared to 25% of new IUD users and found a pregnancy rate of 0.23 per 100 woman-years. The duration of using contraceptive methods of the respondents explained that 37.8% used less than 10 years, 30.6% used less than 20 years, and 23.4% used less than 30 years .9-10-11 The world Health report of Bangladesh (2003) focus that the contraceptive prevalence rate (CPR) has increased six-fold, from 8% in the mid-1970s to 54% in 2000<sup>12</sup>.

The cause of discontinue the use the contraceptive methods for birth control in the survey area were different problems, where as 6.6% did not used for P/v bleeding, 11.1% for irregular period , 4.8% for scantly menstruation, 4.5% for weight gain. It was important that the major portion (67.8%) of the respondent hidden themselves regarding given the comments. They simply marked in the questionnaires through others & no comments. Maximum (46.8%) of the respondents supported that they discontinue the used of contraceptive methods for birth control activities. The birth control scenario of the survey areas was not so harmful, because most of the respondents (68.5%) given the opinion that the level of satisfaction level was high, 27% were confused and 10.2% did not given any comments on.

### **CONCLUSION:**

Although success of the family planning program in Bangladesh has been widely acclaimed, many challenges still remain. Inter-spousal communication should be encouraged during family planning counseling to ensure the most appropriate contraceptive methods for couples.

### **CONFLICT OF INTEREST:**

There is no conflict of interest among the authors

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