

Article

Prevalence of contraceptives and unmet need for family planning: does geographical location play a role?

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Abstract: Coastal women are the most socio-economically disadvantaged clusters with low literacy and deprived economic and living conditions. The study aims at measuring contraception and unmet need for contraceptive need among married women in the reproductive age group. A cross-sectional study was carried out among 222 married women in a coastal area of Bangladesh. The majority of the respondents (33.8%) were 31 years and above with mean (\pm SD) age at marriage was 16.2 ± 2.3 years. Most (85.6%) of the study sample were housewives and maximum (84.7%) were literate. About half (50.9%) of them belongs to the single family and about two-thirds (60.4%) monthly family income between 5000 and 10000 Taka. The mean age of women at marriage was 16.2 ± 2.2 SD, out of which, about two third (63.9%) experienced marriage below 18 years. The average number of pregnancies was 1.9 ± 1.0 SD, out of which, 39.6% experienced two pregnancies. The current contraceptive prevalence rate among married women was 80.2%. The prevalence of unmet need for family planning was 13.5%. The major reason for non-use of contraception among women with unmet need was the husband's opposition.

Keywords: contraceptives; unmet need; family planning; geographical location

1. Introduction

Globally, the prevalence of contraceptive use has been increasing, but the unmet need for contraception still remains a problem (Alkema *et al.*, 2013). The contraceptive and non-contraceptive benefits of modern contraceptives reimburse the risks (Cleland *et al.*, 2012).

Use of contraception among married women in Bangladesh has increased gradually, from 8 percent in 1975 to 62 percent in 2014 (BDHS, 2014). In the last decade, contraceptive use has increased by 4 percentage points from 58 percent in 2004 to 62 percent in 2014, while the use of modern contraceptive methods increased by 7 percentage points from 47 percent to 54 percent during the same period. In the last three years, contraceptive use increased by 1 percentage point and modern method use by 2 percentage points, and traditional method use fell by 1 percentage point. Use of oral pills peaked in 2007 (29 percent) and stayed at 27 percent in 2011 and 2014. Injectable use continued to increase from 7 percent in 2007, to 11 percent in 2011, and to 12 percent in 2014 (BDHS, 2011; BDHS, 2014). The use of any long-acting and permanent methods of contraception increased by 1 percentage point between 2007 and 2011 and remained at 8 percent between 2011 and 2014 (NIPORT *et al.*,

2009; NIPORT *et al.*, 2013). Male sterilization and implant usage show signs of increase between 2007 and 2014, although the current levels of use are very low at 1 percent and 2 percent, respectively (BDHS, 2014). Among the underprivileged groups in Bangladesh, the coastal women are the most socioeconomically deprived groups, with low literacy and poor economic and living conditions (Roy *et al.*, 2015). Moreover, the coastal women have a very low contraceptive usage and high unmet need for family planning than the other groups (Ferdousi *et al.*, 2010). Unmet need for contraception is the percentage of fertile married women of reproductive age, who do not want to become pregnant and are not using contraception (Wubegzier and Alemayehu, 2011). In Bangladesh, the unmet need for contraceptives remains still high among the reproductive women. The unmet need has declined from 22 percent in 1994; 15 percent in 2004 to 17 percent in 2007 (BDHS, 2011). Unmet need increased from and then decreased to 14 percent in 2011 (BDHS, 2011). Unmet need for contraceptives in Bangladesh has decreased from 14 percent in 2011 to 12 percent in 2014 (BDHS, 2014). The Health, Population Nutrition Sector Development Program (HPNSDP) has set as a target, reducing unmet need for contraceptive services to 9 percent by 2016 (MOHFW, 2011).

Although there has been an expanding literature on various aspects of population, fertility, and family planning, there have been very few studies carried out among the coastal population. So, the present study focuses on to estimate the prevalence of contraceptives and unmet need for family planning with the differential use of contraceptives among coastal women. The study also examines several socioeconomic factors affecting the unmet need for family planning among the coastal women in Bangladesh.

2. Materials and Methods

2.1. Study design

Across-sectional community-based study was conducted targeting sexually active women of childbearing age in a coastal area of Assasuni Upazila falling under Satkhira District of Bangladesh. The study was conducted during the period from January to December 2016.

2.2. Participants

All currently married reproductive age (15–49) women who were living in Assasuni Upazila were included in this study. The criteria for exclusion were: Women not yet sexually active aged 15-49 years, women from another area and women of childbearing age who were mentally incapacitated. In each household, all eligible and consenting participants were enrolled into the study.

2.3. Sample size and sampling

The sample size was calculated using single population proportion formula. Assuming 12% (BDHS, 2014), unmet need, 5 % margin of error, 95 % confidence level, the total sample size was 163. The sample was selected through purposive sampling. Finally, a total of 222 eligible was included in the study.

2.4. Statistical methods

The study data were collected, checked, edited for consistency, processed and analyzed generally by means of SPSS program version 20.0. Data was summarized using frequency tables, means, and standard deviations. The cut point that was used for statistical significance was the P- value <0.05.

2.5. Ethical considerations

Participant's confidentiality and autonomy were respected during this study. The participants were well informed and were given enough time to freely decide to participate or not. Every eligible participant who was ready to participate signed an informed consent form giving us the go ahead to administer the questionnaire. Above all, an ethical clearance was obtained from the Institutional Review Board (IRB) of National Institute of Preventive and Social Medicine (NIPSOM).

3. Results

3.1. Background characteristics of the respondents

A total of 222 study subjects were participating in the study. The mean age of the respondents was 27.9 ± 6.2 S.D and the median age was 28 years ranging from 15-39 years. The highest proportion of the respondents (33.8%) were more than 30 years. The religion of most respondents was Muslim (58.6%) followed by Hindu (41.4%). About 84.7% of the respondents attended school, ranging from primary to secondary and above were educated up to high school or above; while the remaining (15.3%) were having no education at all. The maximum (85.6%) respondents were the housewife; while 14.4% women involved in farming and different

income generating activities. About half (50.9%) of the participants were from nuclear families and the rest half were from joint family. The monthly income of the majority of the respondents 60.4% was 5000-10000 Taka followed by 27.0% was <5000 Taka (Table 1).

Table 1. Background characteristics of the study participants (n=222).

Characteristics	Number	Percent
Age group		
≤ 20years	36	16.2
21 to 25 years	58	26.1
26 to 30 years	53	23.9
> 30 years	75	33.8
Mean; SD; Median; Range	27.9; 6.2; 28; 15-39	
Religion		
Muslim	130	58.6
Hindu	92	41.4
Educational status		
Illiterate	34	15.3
Literate	188	84.7
Occupation		
Housewives	190	85.6
Not-housewives	32	14.4
Family type		
Single family	113	50.9
Joint family	109	49.1
Monthly family income		
<5000 taka	60	27.0
5000-10000 taka	134	60.4
>10000 taka	28	12.6
Mean; SD; Median; Range	7427.9; 5924.0; 5000; 2000-40000	

Table 2. Reproductive history of the study sample.

Characteristics	Number	Percent
Age at marriage (n = 222)		
< 18 years	153	63.9
≥ 18 years	69	33.1
Mean; SD; Mode; Range	16.2; 2.3; 18; 11-26	
Number of pregnancy (n = 222)		
Never pregnant	8	3.6
One	69	31.1
Two	88	39.6
Three or more	57	25.7
Mean; SD; Mode; Range	1.9; 1.0; 2; 0-5	
Number of living children (n = 209)		
One	73	34.9
Two	94	45.0
Three	29	13.9
Four or more	13	6.2
Mean; SD; Median; Range	1.9; 0.8; 2; 1-4	

Table 3. Reasons for non-use of contraception with unmet need for family planning.

Characteristics	Number	Percent
Main reasons for not using contraceptives (n=44)		
Did not know*	11	5.0
Husband's opposition*	14	6.3
Opposition from other family member*	3	1.3
No menstruation after last child birth*	2	0.9
Want child	2	0.9
Currently pregnant	12	5.4

* Reason for unmet need

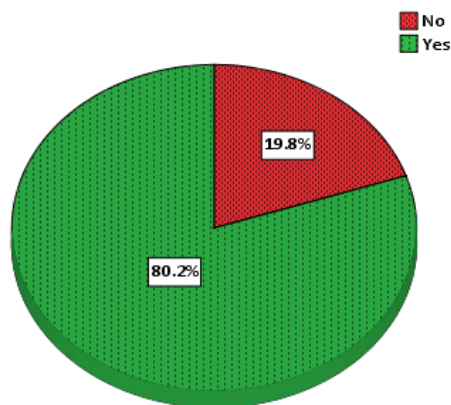


Figure 1. Prevalence of contraceptives among the study respondents.

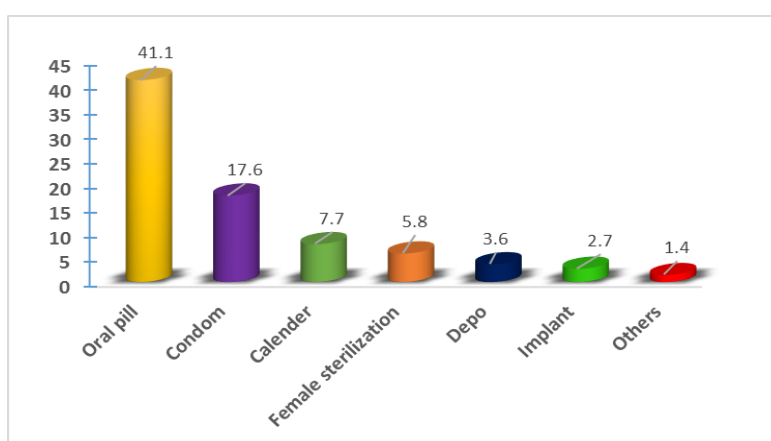


Figure 2. Percentage of contraceptive methods preferred by the study respondents.

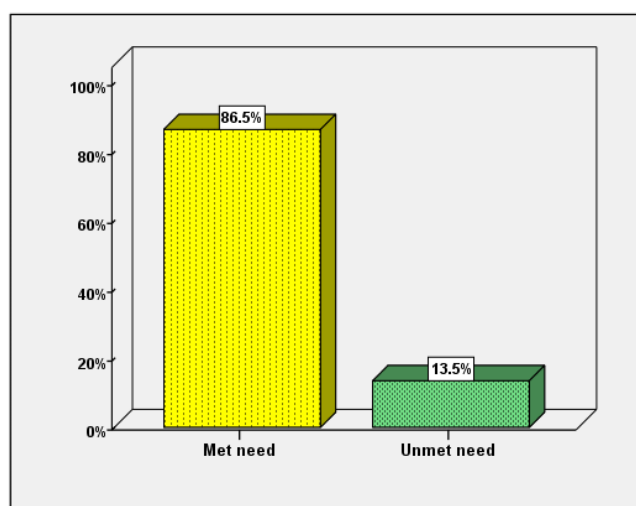


Figure 3. Unmet need for family planning.

3.2. Reproductive history of the participants

The mean age of women at marriage was 16.2 ± 2.2 SD, out of which, about two third (63.9%) experienced marriage below 18 years. The average number of pregnancies was 1.9 ± 1.0 SD, out of which, 39.6% experienced two pregnancies. Currently, 45.0% of the participants had two children, 34.9% participants had single alive children and 6.2% participants had four and more alive children (Table 2).

3.3. Prevalence of contraceptives

Out of the 222 respondents, the prevalence of contraceptive use was 80.2% and rest (19.8%) respondents currently did not use any type of contraceptives (Figure 1). Further analysis carried out on the married respondents of 178 women. Of these 41.1% were using oral pill, 17.6% Condon, 7.7% were using calendar method, 5.8% were using tubal ligation, 3.6% of the respondents were using short acting contraceptives mainly Depo-Provera, 2.7% were using implant and rest (1.4%) were using other methods of contraception (Figure 2).

3.4. Unmet need for family planning

Figure 3 illustrates the unmet need for family planning among the study respondents. It was estimated that 13.5% of the women had an unmet need for family planning. Here the unmet need comprises from the respondents who were not using any method of contraception due to husband's opposition, did not know, opposition from other family members and no menstruation after last childbirth, (6.3%; 5.0%; 1.3%; and 0.9%, accordingly) (Table 3).

4. Discussion

The findings derived from data analysis leave some scope for discussion to arrive at a conclusion. An attempt has been made in this study to examine the proportion of women who are not practicing contraception and having unmet needs for the family planning. Findings of the study indicate that nearly 14% of the married women of reproductive age have an unmet need for family planning (FP) in a coastal area. It was also observed from the study that statistics do not reveal true picture of unmet needs and is providing an underestimation of the true demand for FP resulting in demand and supply side gaps.

Out of 222 women of reproductive age group, 80 percent couples were using contraceptives. The most popular contraceptive method of this study is the pills (41 percent) followed by about 18 percent condom and about 6 percent permanent methods. This is similarly reported by other studies conducted by Ferdousi *et al.*, 2010 and Kandel, 2012. These may be probably due to the fact that it is effective and reliable and more advertised among young unmarried women, which constitute the bulk of the respondents in this study. In BDHS surveys, overall 62 percent of currently married Bangladeshi women age 15-49 are currently using a contraceptive method, and 54 percent use modern methods. The pill is by far the most widely used method (27 percent), followed by injectable (12 percent). Eight percent of currently married women use a long-acting or permanent method such as female or male sterilization, implants, and IUDs (BDHS, 2011; BDHS, 2014). Traditional methods are used by 8 percent of women, of which the majority (6 percent) use periodic abstinence (Choudhury, 1984).

The present study found about 14 percent unmet need for family planning, which is much higher than the national figures. Above findings are comparable to the nationwide survey of Bangladesh (BDHS, 2011; BDHS, 2014). According to Bangladesh Demographic and Health Survey, unmet need decreased from 14 percent in 2011 to 12 percent in 2014 (BDHS, 2014). However, it is inconsistent with previous research findings. (Roy *et al.*, 2015; Ferdousi *et al.*, 2010).

In 2012, the prevalence of unmet need for family planning among married women in Rural India was 23.9% (Lata *et al.*, 2012). The discrepancy in the results could be explained by sample variation, the highly urbanized nature and efforts to improve the family planning delivery services all of which have contributed to increasing the potential demand for family planning over the years.

Our result was however very low compared to that reported in Urban Ethiopia, where the prevalence of unmet need for family planning was 52.4% (Mekonnen and Worku, 2011) and in Uganda, unmet need of FP was 34.2% (Kisaakye, 2013).

The present study also aimed to explore the reason of unmet need for family planning among the 222 women who had an intention to use any method but in reality, they were not using the same. On inquiry about this gap, about 5 percent could not specify any reason, some 6.3 percent mentioned that opposition from husband, 1.3 percent opposition from other family members, like father-in-law or mother-in-law did not allow them to use any contraceptives and about 1 percent had no menstruation after last childbirth. As the present study was conducted with a structured questionnaire, it did not have the scope to further probe into the reasons. However, it may be assumed that a good proportion of these coastal women who did not specify a particular reason for their unmet need might have belonged to that category where the decision about adopting family planning measures came from their husbands or their in-laws. Many studies, including the present one, have also revealed that apart from the external influences at the socio-cultural and policy levels that affect a women's contraceptive behaviour, factors influencing unmet contraceptive need vary at the individual as well as the regional level and are of practical significance in the light of policy implications.

Unmet need for family planning is one of the major indicators for monitoring family planning programs is therefore supposed to be kept as low as possible and if possible, eliminated if the post-2015 sustainable development target on maternal mortality is to be met. It is but clear that much is still to be done in the domain of objective based sensitization to modify and correct the attitudes of non-users towards contraception.

5. Conclusions

Following our findings, we conclude that: The prevalence of unmet need for family planning in the coastal area is still very high. The government should improve in counseling strategies while integrating the participation of both sexes in sensitization campaigns on family planning and its methods. Health care providers should be trained to be able to offer counseling services to all clients in order to improve their acceptance of contraceptives. Young unmarried women should be targeted to inculcate early in them a positive attitude towards family planning methods, including emergency contraceptive pills to prevent unwanted pregnancy and unsafe abortion

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Conflict of interest

None to declare.

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