

Use Of Family Planning Methods And Unmet Need Of Contraception Among Married Women In A Rural Area Of West Bengal:A Cross-Sectional Study

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Abstract:

Background:The alarming population growth and its adverse effects on the socio-economic development has always been a reason for concern over the past decades.Use of family planning methods and unmet need along with their determinants, if estimated, would help to increase the acceptance of family planning among the users and thus help to address the problem of population growth.

Objective: To assess the family planning use and the prevalence of unmet need along with their determinants among currently married women in the reproductive age group in a rural area of West Bengal.

Materials and Methods:A descriptive, observational, cross-sectional study was conducted among 121 currently married women residing in the rural setting of Daspara village of Amdanga Block in Barasat, North 24 Parganas district of West Bengal in January-February 2013.A pre-designed and pre-tested schedule was used for data collection.Proportions and Chi-square test has been used for statistical analysis.

Results: 66.9% women were using some method of family planning whereas 26.4% women were having an unmet need for contraception. The need for spacing and limiting were 15.7% and 10.7% respectively. Among the determinants of family planning significant association($p<.005$) was found with age,educational status of women and their husbands, socioeconomic status, age at marriage and age at first pregnancy. The determinants of unmet need revealed significant association ($p<.005$) with age, educational status of women and their husbands, socioeconomic status, age at marriage and age at first pregnancy.

Conclusion:Social factors like age, educational status of women and their husbands, socioeconomic status, age at marriage and age at first pregnancy are important determinants of both family planning use and unmet need. Thus proper counselling and IEC activities should be carried out to address this problem.

Keywords:Family Planning, contraception, unmet need.

I. Introduction

Unrestrained population growth has been said to have a deleterious effect on the socioeconomic advancement of people particularly in the developing countries.To overcome this problem, the Govt.of India launched an official FamilyPlanning Program long back in 1952 but inspite of spending a hugeamount of resourcesduring the last five decades, the program failed to achieve desired results[1]. Millions of women worldwide are sexually active but do not want to become pregnant either for the time being or never,but are not using any contraception. These women have an “unmet need” for family planning (FP) leading to unwanted or untimed pregnancies which has its adverse effects on the health and well-being of the women[2].The unmet need for family planning is 13 per cent in India and 8 percent in West Bengal according to the National FamilyHealth Survey-3 (NFHS-3)[3], whereas DistrictLevel Household and Facility Survey-3 (DLHS-3)[4], has found unmet need of contraception to be 21.3 per cent in India,with 7.9 per cent and 13.4 per cent for spacing andlimiting respectively.The number of married women with unmet need is quite high in India and the figure amounts to approximately 31 million[5].It has been seen that in our country,majority of women (86%) who want to limit or stop further pregnancies have their FP needs fulfilled,thoughonly 30% women could meet their needs of spacing childbirth[5].Due to these reasons unmet need for contraception is high among young women. The unmet need for contraception both for spacing as well as limiting pregnancies results in unintended pregnancies which ultimately results in unsafe abortions and increase the morbidity and mortality of women in the reproductive age group. Due attention should be given to thisproblem of unmet need for contraceptives and it has been set as an immediate objective underNational Population Policy (2000)[6].The perception of women regarding use of contraceptives as well as the extent to which Family Planning have been adopted by people should be assessed to find out the magnitude of the problem.Various studies have shown thatotherthan physical

access to services there are various social factors which are responsible for preventing the women from using Family Planning Methods[7,8,9].

There are a few community based studies assessing the unmet need of Family Planning particularly in West Bengal. This study was carried out among the eligible couples of Daspara village of Amdanga Block in Barasat, North 24 Parganas West Bengal in 2013 with the objective to determine prevalence of contraceptive use, its pattern, and also to find out the unmet need and identify the factors associated with them.

II. Materials And Methods

This community based cross-sectional study was conducted in the rural setting of Daspara village of Amdanga Block in Barasat, North 24 Parganas district of West Bengal in January-February 2013. The study group comprised currently married women in the reproductive age group who are permanent residents of Daspara village. There were 124 eligible couples and sampling was done by total enumeration. Two women were not available at the time of interview and one has attained menopause. Thus the sample size is 121. Operational definition of unmet need for spacing and limiting were taken according to DLHS 3[4]. Verbal informed consent was obtained from the respondents. Data collection was done using a pre-designed and pre-tested schedule. All the women were interviewed and information was collected regarding socio-demographic characteristics like age, religion, education, occupation, socio-economic status (B.G. Prasad), age at marriage and first pregnancy, contraceptive use, type of contraceptive, unmet need and its reasons. The data collected were tabulated and analysed using statistical software SPSS 21. Proportions and Chi-square test were used for analysis.

III. Results

Out of 121 respondents, 81 (66.9%) women were using some method of family planning. Out of remaining 40 women, 32 (26.4%) women were having an unmet need for contraception. The need for spacing and limiting were 15.7% and 10.7% respectively. 8 (6.7%) women were not using any family planning methods as they wanted to have children.

Majority of the study population (36.3%) were in the 25-29 years age group. 57% of the study population were Hindus while the remaining 43% were of Muslim religion. 50.4% of the women were from joint family. The educational status revealed 23.1% women were illiterate, 26.4% studied up to the primary level, 26.5% up to the secondary level and 24% women had studied up to higher secondary level and above. Similarly it was found that 20.7% of the husbands were illiterate, 21.5% had completed primary education, 28.9% had completed secondary education and another 28.9% had studied up to higher secondary level and above. Majority of the women (28.9%) belonged to Class 2 socio-economic status. The age of marriage of majority of women were 20-24 years (41.3%) while age at first pregnancy was 25-29 years (36.4%). 66.9% of the respondents were using some family planning methods. The use of family planning was highest (25.6%) in 25-29 years age group whereas it was only 1.6% in less than 20 years age group. Religion wise variation showed only 28.1% of Muslim women used family planning methods whereas it was 38.8% in case of Hindu women. Use of family planning was more prevalent in nuclear families (35.5%) than joint families (31.4%). The use of family planning was found to be highest in women and their husbands (24% and 27.2% respectively) who had studied up to Higher Secondary level and above and it was also highest among women belonging to class 2 socioeconomic status. Variation according to the age at marriage and age of first pregnancy revealed that the use of family planning was highest among women who were married at 20-24 years and women who had their first pregnancy at 25-29 years.

Among the determinants of family planning significant association ($p < .005$) was found with age, educational status of women and their husbands, socioeconomic status, age at marriage and age at first pregnancy (Table 1).

Table 1: Use of Family Planning Methods and its determinants among the respondents

Characteristic	Use of Family Planning Method		Total	Test of significance
	Yes	No		
Age (years)				$X^2=35.846$ $F=.000*$
<20	2(1.6)	7(5.9)	9(7.5)	
20-24	8(6.6)	17(14.0)	25(20.6)	
25-29	31(25.6)	13(10.7)	44(36.3)	
30-34	26(21.5)	3(2.5)	29(24.0)	
≥35	14(11.6)	0(0.0)	14(11.6)	
Total	81(66.9)	40(33.1)	121(100.0)	
Religion				$X^2=.100$ $P=.752$
Hindu	47(38.8)	22(18.2)	69(57.0)	
Muslim	34(28.1)	18(14.9)	52(43.0)	
Total	81(66.9)	40(33.1)	121(100.0)	
Type of family				$X^2=1.20$
Joint	38(31.4)	23(19.0)	61(50.4)	

Nuclear Total	43(35.5) 81(66.9)	17(14.1) 40(33.1)	60(49.6) 121(100)	P=.273
Education of woman Illiterate Primary Secondary H.S. and above Total	8(6.6) 16(13.2) 28(23.1) 29(24.0) 81(66.9)	20(16.5) 16(13.2) 4(3.4) 0(0.0) 40(33.1)	28(23.1) 32(26.4) 32(26.5) 29(24.0) 121(100.0)	X²=43.212 P=.000
Education of husband Illiterate Primary Secondary H.S. and above Total	2(1.7) 14(11.6) 32(26.4) 33(27.2) 81(66.9)	23(19.0) 12(9.9) 3(2.5) 2(1.7) 40(33.1)	24(20.7) 28(21.5) 36(28.9) 33(28.9) 121(100)	X²=62.571 P=.000
SES Class 1 Class 2 Class 3 Class 4 Class 5 Total	12(9.9) 32(26.4) 17(14.1) 12(9.9) 8(6.6) 81(66.9)	2(1.7) 3(2.5) 8(6.6) 11(9.1) 16(13.2) 40(33.1)	14(11.6) 36(28.9) 25(20.7) 24(19.0) 24(19.8) 121(100)	X²=26.242 F=.000*
Age at marriage <20 20-24 ≥25 Total	16(13.3) 36(29.7) 29(23.9) 81(66.9)	24(19.8) 14(11.6) 2(1.7) 40(33.1)	40(33.1) 50(41.3) 31(25.6) 121(100)	X²=23.615 P=.000
Age at 1 st pregnancy <20 20-24 25-29 ≥30 Total	4(3.3) 20(16.5) 41(33.9) 16(13.2) 81(66.9)	11(9.1) 22(18.2) 3(2.5) 4(3.3) 40(33.1)	15(12.4) 42(34.7) 44(36.4) 20(16.5) 121(100)	X²=33.312 F=.000*

*As more than 2 cells have an expected count less than 5, Fischer's exact test was used for analysis. Among 81 women who were using some methods of family planning, 29.6% were using condoms, 24.6% were using OCPs, 14.8% were using Copper Ts, 6.1% of the husbands had undergone vasectomy whereas 9.8% of the women had undergone tubectomy and 15.1% of women were using natural methods. (Table 2)

Table 2: Distribution of study subjects according to type of contraceptives used (n=81)

Type of contraceptive	No. of respondents	Percentage
Condoms	24	29.6
OCPs	20	24.6
IUDs	12	14.8
Vasectomy	5	6.1
Tubectomy	8	9.8
Natural methods	12	15.1
Total	81	100

Unmet need was found among 26.4% of the respondents. It was highest (10.7%) in 20-24 years age group whereas women >35 years age group did not have any unmet need. Religion wise variation did not reveal any difference and unmet was found to be 13.2% both in Hindu as well as Muslim women. Unmet need was more in joint families (15.7%) than in nuclear families (10.7%). Unmet was found to be highest in women and their husbands (13.2% and 15.7% respectively) who were illiterate. Unmet need was highest among women belonging to class 5 socioeconomic status (11.5%). Variation according to the age at marriage and age of first pregnancy revealed that unmet need was highest among women who were married at <20 years and women who had their first pregnancy at 20-24 years.

The determinants of unmet need revealed significant association (p<.005) with age, educational status of women and their husbands, socioeconomic status, age at marriage and age at first pregnancy (Table 3).

Table 3: Unmet need and its determinants among the respondents

Use Of Family Planning Methods And Unmet Need Of Contraception Among Married Women I...

Characteristic	Unmet need		Total	Tests of significance
	Yes	No		
Age(years)				
<20	6(5.0)	3(2.5)	9(7.5)	X²=25.088 F=.000*
20-24	13(10.7)	12(9.9)	25(20.6)	
25-29	10(8.2)	34(28.1)	44(36.3)	
30-34	3(2.5)	26(21.5)	29(24.0)	
≥35	0(0.0)	14(11.6)	14(11.6)	
Total	32(26.4)	89(73.6)	121(100.0)	
Religion				
Hindu	16(13.2)	53(43.8)	69(57.0)	X ² =.876 P=.349
Muslim	16(13.2)	36(29.8)	52(43.0)	
Total	32(26.4)	89(73.6)	121(100.0)	
Type of family				
Joint	19(15.7)	42(34.7)	61(50.4)	X ² =1.398 P=.237
Nuclear	13(10.7)	47(38.9)	60(49.6)	
Total	32(26.4)	89(73.6)	121(100)	
Education of woman				
Illiterate	16(13.2)	12(9.9)	28(23.1)	X²=32.092 P=.000
Primary	13(10.7)	19(15.7)	32(26.4)	
Secondary	3(2.5)	29(24.0)	32(26.5)	
H.S. and above	0(0.0)	29(24.0)	29(24.0)	
Total	32(26.4)	89(73.6)	121(100.0)	
Education of husband				
Illiterate	19(15.7)	6(5.0)	24(20.7)	X²=47.918 P=.000
Primary	9(7.5)	17(14.0)	28(21.5)	
Secondary	2(1.6)	33(27.3)	36(28.9)	
H.S. and above	2(1.6)	33(27.3)	33(28.9)	
Total	32(26.4)	89(73.6)	121(100)	
SES				
Class 1	2(1.7)	12(9.9)	14(11.6)	X²=22.241 F=.000*
Class 2	2(1.6)	33(27.3)	36(28.9)	
Class 3	6(5.0)	19(15.7)	25(20.7)	
Class 4	8(6.6)	15(12.4)	24(19.0)	
Class 5	14(11.5)	10(8.3)	24(19.8)	
Total	32(26.4)	89(73.6)	121(100)	
Age at marriage				
<20	18(14.9)	22(18.2)	40(33.1)	X²=13.604 P=.001
20-24	12(9.9)	38(31.4)	50(41.3)	
≥25	2(1.6)	29(24.0)	31(25.6)	
Total	32(26.4)	89(73.6)	121(100)	
Age at 1 st pregnancy				
<20	9(7.4)	6(5.0)	15(12.4)	X²=25.992 F=.000*
20-24	18(14.9)	24(19.8)	42(34.7)	
25-29	3(2.5)	41(33.9)	44(36.4)	
≥30	2(1.6)	18(14.9)	20(16.5)	
Total	32(26.4)	89(73.6)	121(100)	

*As more than 2 cells have an expected count less than 5, Fischer's exact test was used for analysis

Among the reasons for unmet need 18.7% women had lack of information about contraceptives, 25% had opposition from family, 34.3% did not use contraceptive due to fear of side effects, 6.2% cited irregular supply of contraceptive as the main reason whereas 15.8% had religious and cultural barriers to use of family planning methods. (Table 4)

Table 4: Reasons for unmet need (n=32)

Reasons	No.	Percentage(%)
Lack of information	6	18.7
Opposition from husband	8	25.0
Fear of side effects	11	34.3
Irregular supply	2	6.2
Religious and cultural factors	7	15.8
Total	32	100

IV. Discussion

Family planning methods have been adopted by 66.9% of respondents in the present study. The contraceptive use was found to be 55.2% by NFHS-3 India [3], whereas it was 56.3% by Renjhen et al [10] and 44.2% by Shrivastava et al [11]. A study conducted by Bisoi et al in Howrah district of West Bengal [12] found couple protection rate to be 62.3% whereas Haldar et al. [13] found contraceptive practice among currently

married women by any method was (66.70% and 59.90%) in two districts which was higher than NFHS-3 India [3] (56.3%) and other studies [10,11] but less than NFHS-3 of West Bengal [3] which is 71.2%.

In the present study use of family planning methods was found to be higher among women aged 25-29 (25.6%) years and women aged 30-34 years (21.5%). According to NFHS-3 India, [3] women of higher age group used family planning methods more than that of lower age group. A study by Mohanan et al. [14] also found that use of family planning methods were common in women of higher age group. Use of family planning methods were observed to increase with education status of women as well as their husbands as per the findings of the present study. Family planning methods were more commonly used among women belonging to class 2 and class 3 socio-economic status. Mohanan et al. [14] also found that income had a significant influence on adoption of family planning methods. However, education level was not found to have any important role in the use of family planning methods. NFHS 3 India, [3] revealed women of higher socio-economic class used family planning methods more than women of lower socio-economic class. Higher literacy level and a high SES makes a woman more aware about the importance of spacing and limiting births and thus avoid unwanted pregnancies by use of proper contraceptive methods. The increased prevalence of use of family planning methods among the Hindus as compared to Muslim community as found in the present study is similar to that reported in NFHS 3, India [3] and the study by Mohanan et al. [14] where more Hindus were using family planning methods as compared to Muslims.

In the present study, majority of women (54.2%) were using spacing methods, 29.6% were using condoms and 24.6% were using OCPs, 4.8% were using Copper Ts, 6.1% of the husbands had undergone vasectomy whereas 9.8% of the women had undergone tubectomy and 15.1% of women were using natural methods. Prevalence of spacing method was only 10.2% and OCP use 3.1%, as per the findings of NFHS-3, India [3]. In the study conducted by Halder et al. [13] spacing method was used by 22.3% of study subjects, whereas it was 43.41% by Chankapa et al. [15] and 7.5% by Rao et al. and Kumar et al. [16,17]. Chankapa et al. [14] found that condoms were used by 16.27% subjects, 15.77% and 4.87% had undergone tubectomy and vasectomy respectively and 4.19% subjects were using Cu-T.

In the present study, the unmet need for family planning was 26.4%. According to the findings of NFHS-3, the overall unmet need for family planning in West Bengal was 8% [3] and in India 12.8% [18]. The high figures in this study may be due to lack of knowledge, ignorance, social obstacles and inaccessibility to health care facilities in rural area. Similar studies conducted in different settings found that the unmet need for family planning was 44% in a tribal area of Maharashtra [19], 41.6% in Haryana [20], 25.4% in a resettlement colony of New Delhi [21], and 21.7% in Gwalior [22].

It was found from the present study that unmet need for family planning was higher among illiterate women and also husbands who were illiterate, joint families, lower age group (20-24 years) and also women who were married at an early age. These observations were similar to the findings of earlier studies [2,23,24]. The reasons for unmet need as per the present study were lack of information, fear of side effects, opposition from husband, irregular supply, religious and cultural factors. These findings also corroborate with the observations of earlier studies [24,25]. 34.3% women cited fear of side effects as the major reason for not using any contraceptives. This finding is similar to the findings of another study conducted in Imphal, Manipur [26] where it was found that majority of women (29.9%) do not use contraceptives due to concern about adverse effects.

Thus proper information, education, communication along with counselling may help to reduce the problem of unmet need. Improving the literacy rate and increasing the age of marriage is expected to yield better results in the long term.

V. Conclusion

The unmet need for family planning is quite high in the present study. The reasons for unmet need as per the present study were lack of information, fear of side effects, opposition from husband, irregular supply, religious and cultural factors. Among these fear of side effects and opposition from husband were the main reason for non-acceptance of family planning methods. Thus proper counselling of the couples should be done together and the women should be made aware of the various contraceptive methods available, their safety and their use in order to reduce the problem of unmet need.

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