

Original Research Article

A cross sectional study of contraceptive use and reasons for unmet needs among mothers attending immunisation clinic at tertiary care centre of central India

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ABSTRACT

Background: Unmet need of contraception remains a national problem. The study was conducted among the mothers attending immuno-prophylaxis clinic (IPC) at tertiary care centre of central India to determine the use of different types of contraception and assess the unmet need for contraception along with the reasons associated with the unmet needs of contraception. Aim and objective was to study the contraceptive use, reasons for unmet needs amongst the mothers attending IPC and some related factors.

Methods: This was a cross-sectional study conducted during the period from February-April 2016 at IPC in tertiary care setting. In this study 280 mothers attending IPC for Measles and DPT 1st booster of their child were enrolled. The sample population was selected by simple random sampling method. A pre-tested structured questionnaire was used to collect data from the respondents with written informed consent.

Results: This study shows that, 65% of mother told they were practicing any type of family planning method. Unmet need for contraception was 37.14 per cent. Among those having unmet need (n=104), fear of side effects (41.35%), infrequent sex (25%) were the common reasons for unmet need. Religion, age of marriage, age at 1st pregnancy, education, socioeconomic status, occupation of husband, counselling about contraceptives during ANC/PNC visits and resumption of menses were significantly associated with the use of contraceptives.

Conclusions: The unmet need for contraception was quite high. Most of the study subjects were not using contraception due to fear of side effects and lack of knowledge.

Keywords: Contraceptive use, Immuno-prophylaxis clinic, Unmet need

INTRODUCTION

In 2012, approximately 213 million pregnancies occurred worldwide, of which 190 million (89% of all pregnancies) occurred in the developing world and more than half of all pregnancies (56%) took place in Asia. Out of 213 million pregnancies, 85 million pregnancies, representing 40% of all pregnancies, were unintended.¹ As per report

of family planning in 2013 Ministry of health and family welfare Government of India, the number of unintended pregnancies in India was 45.71 lacs.² Unintended pregnancy and births have grave consequences to the mother and family and are global social and health burdens. This would result in potentially unsafe abortion even more likely. Use of family planning (FP) methods is the main strategy for prevention of unwanted

pregnancies. FP is critical in accelerating progress towards attainment of the sustainable development goals (SDGs). FP prevents unwanted pregnancies and associated consequences, maternal and under-5 deaths, and improves the health of both women and children. It is estimated that almost 2,72,000 maternal deaths reported worldwide and 86,366 maternal deaths occurring in India every year could have been averted by the use of FP methods.³

Many surveys conducted since the 1960's, revealed that substantial proportions of women wanted to stop or delay child bearing but are not practicing contraception. This incongruity is referred to as the unmet need for contraception. The concept points to the gap between women's reproductive intention and their contraceptive behaviour. It poses a challenge to national family planning Programme to achieve its goals in time.⁴ National family health survey- IV 2015-16 (NFHS) data in India, showed contraceptive use was around 60% and total unmet need among eligible couple was 12.9% and 5.7% for spacing births.⁵ Unmet need has a direct impact on the total fertility rate. Fertility is believed to decrease significantly if unmet needs are removed. From a policy perspective, reducing unmet need for family planning is important for both achieving demographic goals and enhancing individual rights.

Many postpartum women who are sexually active would prefer to avoid becoming pregnant. But they are not using any method of contraception probably because many of them lack access to, or do not wish to use contraceptive methods for the fear of side effects and highly vulnerable to unintended pregnancies. The non-acceptance may be due to various reasons like illiteracy and lack of knowledge, religious beliefs, and family's opposition etc.⁶

Understanding the current level of contraceptive use and its determinants is a key to reducing the proportion of unmet family planning needs. The present study was carried out with the objectives to estimate the magnitude of unmet need for family planning among married women of reproductive age and to identify factors associated with unmet need for family planning and contraceptive users, and to explore common reasons for unmet need for family planning.

Aim and objective

To study the contraceptive use and reasons for unmet needs among the mothers attending immuno-prophylaxis clinic (IPC) and to study some socio-demographic and obstetric factors related to contraceptive use.

METHODS

Study setting and design

An institutional based cross-sectional study was carried out at immuno-prophylaxis clinic (IPC) attached to

tertiary care centre during the period of three months from February to April 2016.

Study population and sample size

All eligible Mothers of reproductive age attending IPC for measles and DPT 1st booster of their child were the study subjects. As the daily average attendance of the immunisation clinic is about 60, the total number of attendees came out to be around 1500 in a month. A total of 280 mothers of children were included in the study. A study by Mahawar et al showed 26% prevalence of contraceptive use among mothers of infants.⁷ The estimated required sample size was calculated to be 271 assuming prevalence of contraceptive use as 26% among mothers of infants with 20% relative precision and 95% CI. The eligible study subjects were selected by simple random sampling method when they registered their child for immunization on the day of visit at tertiary care centre. Also, present study has assessed the unmet need for family planning among mothers in reproductive age group.

Unmet need for spacing methods includes proportion of currently married woman who either wish to postpone the next birth after two years or are currently not using any FP method. Unmet need for limiting methods includes proportion of currently married woman who do not want any more children but are not using a contraceptive method.⁸

Data collection

Mothers attending IPC for measles and DPT 1st booster of their child coming within study period and who consented for interview were included in this study till sample size was achieved. Total 280 mothers were interviewed. The information was collected by personal interview using pre-structured, pre- tested questionnaire regarding socio-demographic data, use of different types of contraception and unmet need of contraception.

Statistical analysis

Data collected were entered in Microsoft Excel spread sheet 2010 and then analyzed by using epi info stat calculator and Open-Epi. Chi-square test was used to determine associations between the utilization of contraceptive and socio-demographic and obstetric factors. Descriptive statistics were also calculated. The significance level was set at $p < 0.05$.

RESULTS

Mean age of participants was 26.96 ± 3.67 years (19-43 years). Out of 280 study subjects, 182 (65%) were using contraceptives (Figure 1). Among the contraceptive users most of them got information about contraceptives from health workers 71 (39.01%) followed by husbands 64 (35.16%), relatives 27 (14.84%) and friends 6 (3.30%).

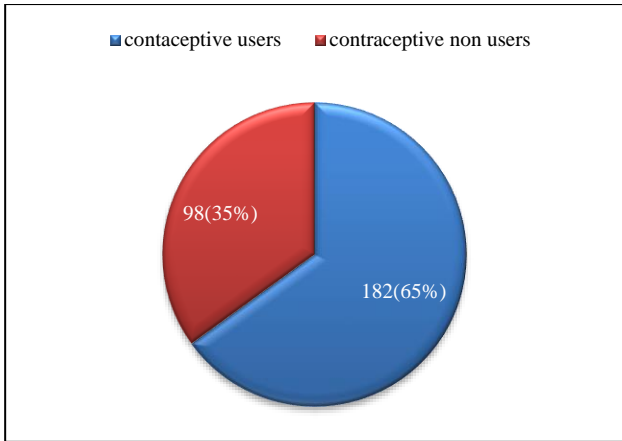


Figure 1: Distribution of study subjects by contraceptive use (n=280).

Most commonly used contraceptive method was barrier method (78%) followed by tubal ligation (41%), no one accepted vasectomy as contraceptive method (Figure 2).

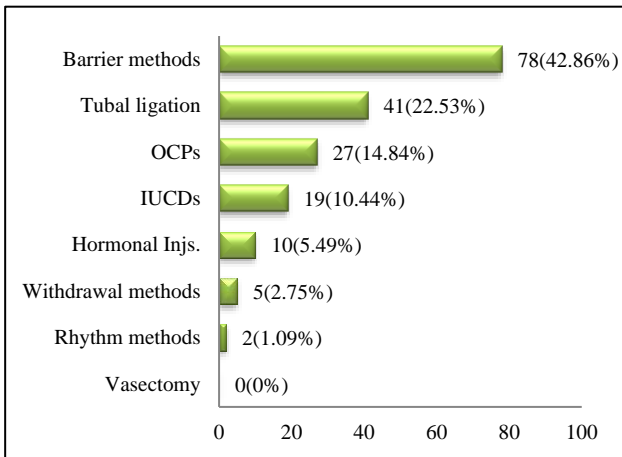


Figure 2: Distribution of study subjects by the use of different types of contraceptive methods (n=182).

Table 1: Distribution of the study subjects by unmet need of contraception.

Unmet need of contraception	Study subjects (n=280)	
	No.	%
Unmet need for Spacing birth	73	26.07
Unmet need for limiting birth	31	11.07
Total unmet need	104	37.14

Table 1 shows distribution of the study subjects by unmet need of contraception, 98 mothers were not using any contraceptive method. Seven mothers were using natural methods, among them one wanted child soon. So the total unmet need was 104 (37.15%). Most common reason for not using contraceptives was due to fear of side effects (Table 2).

Table 2: Reasons for unmet need for contraception (multiple response) (n=104).

Reasons for unmet need for contraception	N	%
Fear of side effects	43	41.35
Infrequent sex	26	25.00
Desire for a male child	19	18.27
Lack of knowledge about contraceptive methods	19	18.27
Lactational amenorrhea	7	6.73
Family's opposition (husband/in-laws)	7	6.73
Difficult to use contraceptives consistently	7	6.73
No need to use contraceptive methods	6	5.76
Difficulty in accessing contraceptive methods	3	2.88
MTP as a method of contraception	3	2.88
Religious constraint	2	1.92
Others	2	1.92

Factors associated with contraceptive use:

Contraceptive use was significantly lower in Muslims as compared to others. Out of 79 participants with age of marriage <20 years, 43 (54.43%) were using contraceptives and out of 201 participants with age of marriage ≥20 years, 139 (69.15%) were using contraceptives and this difference was statistically significant (Table 3).

Out of 110 participants who had their first pregnancy at the age of <20 years, 63 (57.27%) were contraceptive user and out of 170 participants who had their first pregnancy at the age of 20 years and above 119 (70.00%) were contraceptive user and this difference was statistically significant (Table 3).

Out of 95 participants with education upto middle school 49 (51.58%) were contraceptive users and out of 185 participants with education high school and above, 133 (71.89%) were contraceptive users and this difference was statistically significant (Table 3).

Out of 154 participants whose husband belong to category of occupation skilled worker and above, 114 (74.03%) were contraceptive users as compared to others in which 134 (68.02%) were contraceptive users and this difference was statistically significant (Table 3).

Out of 68 participants who belonged to upper and upper middle classes 56 (82.35%) were contraceptive users and out of 212 participants who belonged to lower middle, upper lower and lower class 126 (59.43%) were contraceptive users and this difference was statistically significant (Table 3).

In present study, the proportion of contraceptive user was significantly higher among all other religion except Muslims, married woman aged 20 years and above, married woman who conceived after 20 years and above,

educated till high school and above, skilled worker and above, high socioeconomic class (I and II), mothers who sought counselling during ANC/PNC period and woman who resumed menses in postnatal period (p<0.05).

Table 3: Association of socio-demographic and obstetric factors with the use of contraceptives (n=280).

Characteristics	Contraceptive user N (%)	Contraceptive non-user N (%)	Total N (%)	Odds ratio (95% CI)	P value
Age-group (in years)					
<25	42 (59.16)	29 (40.84)	71 (25.36)	0.7138 (0.41-1.24)	0.2320
≥25	140 (66.99)	69 (33.01)	209 (74.64)		
Residence					
Urban	175 (65.54)	92 (34.46)	267 (95.36)	1.6304 (0.53-4.99)	0.3879
Rural	7 (53.85)	6 (46.15)	13 (4.64)		
Religion					
Others	180 (66.18)	92 (33.82)	272 (97.14)	5.8696 (1.16-29.66)	0.0161
Muslim	2 (25.00)	6 (75.00)	8 (02.86)		
Age of marriage (in years)					
<20	43 (54.43)	36 (45.57)	79 (28.21)	0.5328 (0.31-0.90)	0.0200
≥20	139 (69.15)	62 (30.85)	201 (71.79)		
Age at first pregnancy (in years)					
<20	63 (57.27)	47 (42.73)	110 (39.29)	0.5745 (0.35-0.95)	0.0292
≥20	119 (70.00)	51 (30.00)	170 (60.71)		
Duration of married life (in years)					
<5	91 (61.49)	57 (38.51)	148 (52.86)	0.7193 (0.43-1.18)	0.1918
≥5	91 (68.94)	41 (31.06)	132 (47.14)		
Education					
Upto middle school	49 (51.58)	46 (48.42)	95 (33.93)	0.4165 (0.24-0.69)	0.0007
High school and above	133 (71.89)	52 (28.11)	185 (66.07)		
Occupation					
Homemakers	135 (63.08)	79 (36.92)	214 (76.43)	0.6908 (0.37-1.26)	0.2261
Others	47 (71.21)	19 (28.79)	66 (23.57)		
Education of husband					
Up to middle school	48 (57.83)	35 (42.17)	83 (29.64)	0.6169 (0.36-1.04)	0.0711
High school and above	134 (68.02)	63 (31.98)	197 (70.36)		
Occupation of husband					
Skilled worker and above	114 (74.03)	40 (25.97)	154 (55.00)	2.4309 (1.47-4.02)	0.0005
Others	68 (53.97)	58 (46.03)	126 (45.00)		
Socioeconomic class					
I and II	56 (82.35)	12 (17.65)	68 (24.29)	3.1852 (1.61-6.29)	0.0006
Others	126 (59.43)	86 (40.57)	212 (75.71)		
Type of family					
Nuclear	99 (66.00)	51(34.00)	150 (53.57)	1.0992 (0.67-1.79)	0.7063
Joint and three generation	83 (47.43)	47 (52.57)	130 (46.43)		
Number of living children					
1	102 (61.45)	64 (38.55)	166 (52.29)	0.6773 (0.40-1.12)	0.1324
≥2 living children	80	34	114		
Counseling done about contraceptives during ANC/PNC visit					
Yes	134 (75.71)	43 (24.29)	177 (63.21)	3.5707 (2.12-5.99)	0.0000
No	48 (46.60)	55 (53.40)	103 (36.79)		
Mode of delivery					
Normal	102 (62.20)	62 (37.80)	164 (58.57)	0.7403 (0.44-1.23)	0.2419
Cesarean	80 (68.97)	36 (31.03)	116 (41.43)		
Currently breast feeding					
Yes	168 (64.86)	91(35.14)	259 (92.5)	0.9231 (0.36-2.37)	0.8678
No	14 (66.67)	7 (33.33)	21 (7.5)		

Continued.

Characteristics	Contraceptive user N (%)	Contraceptive non-user N (%)	Total N (%)	Odds ratio (95% CI)	P value
Resumption of menses					
Yes	180 (67.42)	87 (32.58)	267 (98.93%)	11.3793 (2.48-52.46)	0.0001
No	2 (15.38)	11 (84.62)	13 (1.07%)		
Gender of last child					
Male	92 (66.19)	47 (33.81)	139 (49.64%)	1.1092 (0.68-1.81)	0.6792
Female	90 (63.83)	51(36.17)	141 (50.36%)		

While age of woman, duration of married life, Residence, occupation, education of husband, type of family, no. of children, mode of delivery, currently breastfeeding the child, gender of last child were not associated with contraceptive use (Table 3).

DISCUSSION

Contraception is an important aspect of reproductive health and plays a major role in the prevention of unwanted pregnancy. The prevalence of contraceptive use among mothers of under-five attending immunoprophylaxis clinic at tertiary care centre is quite impressive. In the present study, 182 (65.00%) subjects were currently using contraceptive measures. out of 182 (65.0%) contraceptive users, 141 (77.00%) were adopted temporary methods and 41 (23.00%) were adopted permanent methods of contraception. The results are similar to data from NFHS-4 which reported contraceptive use around 60%.⁵ Study done by Bhasin et al on prevalence of usage of different contraceptive methods in East Delhi found that condom was the most common method (33.4%) of contraception followed by tubectomy (27.3%), oral pills (16.6%) and intrauterine device (15.7%).⁹ In our study barrier method 84 (46%) was the most common temporary method used followed by Oral pills by 27 (15%), intrauterine devices by 19 (10%) and hormonal injections by 10 (6%).

Present study revealed that the unmet need for family planning of women in the reproductive age-group was 37.14%, which comprises 26% for spacing and 7% for limiting. Recent data from the fourth round of the National Family Health Survey (NFHS-IV) conducted during 2015-16 show that approximately 13% of couples of reproductive ages wanted to stop childbearing or delay the next birth but did not get the contraceptive services they desired to have.⁵

Study on unmet need of contraception in Puducherry by Sulthana et al shows that Unmet need for contraception was 27.3% and most common reason for unmet need was lack of knowledge (50%).¹⁰ Similar to that in our study unmet need for contraception was 37.14% but the common reason for unmet need was fear of side effects (41.35%).

In the present study, amongst contraceptive users in 109 (60.10%) study subjects, decision about contraceptive

was made jointly by husband and wife whereas in 45 (25%) subjects, decision was made by husbands only. Only 27 (14.36%) of the study subjects independently made decision about contraception. This indicates that, the role of women is secondary to the husband in decision making about the use of contraception.

Study done by Prateek et al found that age, religion, education, socioeconomic status, age at 1st pregnancy and education of husband were significantly associated with contraceptive use.¹¹ In our study religion, age of marriage, age at 1st pregnancy, education, socioeconomic status, occupation of husband, counselling about contraceptives during ANC/PNC visits and resumption of menses were significantly associated with the use of contraceptives. Study done by Maulik et al found that variables like age, caste, family type, education of husband, age at marriage were all found to be significant determinants of current use of contraceptives.¹²

CONCLUSION

The unmet need for contraception was quite high in this study and male participation was found to be very poor as reflected by zero rate of male sterilization. Most of the study subjects were not using contraception due to fear of side effects and lack of knowledge about contraceptive methods and also due to opposition from husband and mother in law.

Recommendations

This study recommends that Information and education regarding various methods of contraception, benefits of spacing birth and advantages and side effects of all methods should be explained to the women right from antenatal and postnatal visits till immunization sessions and not to miss even a single opportunity. Efforts should be made to promote male sterilization which is cheap, safe and easily done. Family members especially husbands and mother-in-laws should be involved while giving health education as they are the decision makers.

In order to meet the gap in contraceptive use, program managers must scale-up the programme activities ensuring involvement of religious and community leaders. To help encourage adoption of contraceptives and reduce fertility, the government should emphasize education for women, promote employment

opportunities, and improve women's role in the decision making. Social marketing should be used in expanding the choices, awareness and expandability of contraceptives.

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