

Original Research Article

A study to assess unmet need for family planning and contraceptive choices among married women of reproductive age in rural Madhya Pradesh

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ABSTRACT

Background: The unmet need of family planning refers to the gap between reproduction intention of a couple and their contraceptive behavior. According to NFHS-4 the unmet need for family planning is 12.9 in India. The objectives of the study were to assess the unmet need for family planning and to find out the contraceptive choices among married women.

Methods: This cross sectional study was undertaken in the rural field practice area of Department of Community Medicine, Index Medical College, Indore, from October 2016 to March 2017. Total sample size calculated was 640. Systematic random sampling was used to select eligible couple a pretested, semi-structured questionnaire was administered to women of reproductive age (15-49 year) in local Hindi language after taking consent.

Results: Out of 640 participants 39 (6.1%) were desiring pregnancy, 454 (70.9%) using contraceptives while 147 (23%) had unmet need and among them 74 (11.6%) for limiting while 73 (11.4%) for spacing. Unmet need was found more in age group of 15-24 (35%), Muslims (48.6%), illiterates (45.9%), housewives (24.4%) and in poor socioeconomic status (53.4%). Overall contraceptive use was 70.9% and tubectomy (60.8%) was the most preferred method followed by male condom and OCP. Unmet need was higher among those who were not having male child ($p=0.00$, $X^2=42.2$). The main reasons for not using contraception was identified as family interference and cultural as well as religious restrictions.

Conclusions: The study conclude that still there is need to create awareness regarding importance of spacing method as well as limiting methods and to clear the myths regarding contraceptives not only in young couples but also in other family members.

Keywords: Unmet need, Family planning, Contraceptive choices, Married women

INTRODUCTION

Contraceptive use and unmet need for family planning are key to understand the profound changes in fertility and to improve reproductive health worldwide. The goal of ensuring universal access to sexual and reproductive health-care services, including for family planning, information and education, and of promoting the integration of reproductive health into national strategies

and programmes was reflected in the Millennium Development Goals and, more recently, in the Sustainable Development Goals under target 3.7.¹

The United Nations conference on human rights at Teheran in 1968 recognized family planning as a basic human right. The world conference of the international women's Year in 1975 also declared "the right of women to decide freely and responsibly on the number and

spacing of their children and to have access to the information and means to enable them to exercise that right.” Thus during the past few decades, family planning has emerged from whisper in private quarters to the focus of international concern as a basic human right, and a component of family health and social welfare.²

Worldwide in 2017, 63 per cent of married or in-union women of reproductive age were using some form of contraception, including any modern or traditional methods of contraception. Modern contraceptive methods constitute most contraceptive use. In 2017, 58 per cent of married or in-union women of reproductive age used a modern method of family planning worldwide, constituting 92 per cent of contraceptive users.³ In India according to NFHS-4 the prevalence of contraceptive use among women in the reproductive age is 53.5 percent.⁴

Many women who are sexually active would prefer to avoid becoming pregnant, but nevertheless are not using any method of contraception including use by their partner. These women are considered to have unmet need for family planning.²

After a live birth, the recommended interval before attempting the next pregnancy is at least 24 months in order to reduce the risk of adverse maternal, perinatal and infant outcomes.⁵ So that not only limiting the birth, spacing is also important to reduce the maternal, perinatal and infant morbidity and mortality.

At least 222 million women in developing countries have an unmet need for family planning. Each year there are 80 million unintended pregnancies and 40 million abortions worldwide.⁶ According to NFHS-4 the unmet need for family planning is 12.9 in India.⁴ While the unmet need for family planning has declined in most of the states, there is a need for considerable improvement in the coverage and quality of family planning services, especially in the seven large states of UP, Bihar, MP,

Rajasthan, Haryana, Assam and Gujarat. The total fertility rate for these states most lies in the range of 2.3-3.2 while in other states India has achieved <2.1 i.e. replacement level fertility.² Thus more efforts need to be put in these states.

Our study aims to find out the unmet need and contraceptive choices among women in rural Madhya Pradesh.

METHODS

A cross sectional study was undertaken in the rural field practice area of Department of Community Medicine, Index Medical College, Indore which serves about 44386 population. The study was conducted over a period of six months from October 2016 to March 2017. The sample size for this study was calculated on the basis of total number of eligible couples. There were 6394 eligible couples in rural field practice area and we had taken 10% of that i.e. 640 as sample size. Systematic random sampling was used and after numbering, every 10th eligible couple was considered and women of that couples i.e. women of reproductive age group (15-49 years) were interviewed. A pretested, semi-structured questionnaire was administered in local Hindi language after taking consent from the participants. All divorcees, widows, pregnant women and those who had not given the consent were excluded. Data entry and analysis were done by using MS excel 2010 and Statistical software – SPSS 20.0.

RESULTS

As seen in Figure 1, out of 640 participants, 39 (6.1%) were desiring pregnancy, 454 (70.9%) using contraceptives while 147 (23%) had unmet need and among them 74 (11.6%) for limiting while 73 (11.4%) for spacing (Figure 1).

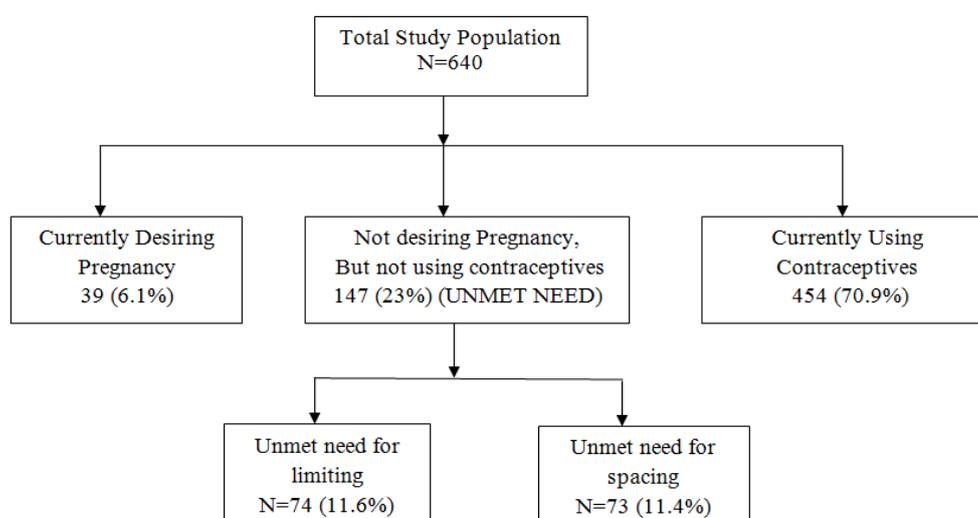


Figure 1: Unmet need for family planning and contraceptive use among married women.

Table 1: Univariate analysis of socio-demographic factors determining unmet need for family planning of study participants (value given in parenthesis is percentage).

Socio-demographic variables	Women with unmet need (n=147) N (%)	Women without unmet need (n=493) N (%)	Unadjusted odds ratio	95% CI	P value
Age (in years)					
15-24	89 (35)	165 (65)	1		
25-34	44 (15.1)	248 (84.9)	3.04	2.01-4.58	0.001
35 or more	14 (14.8)	80 (85.2)	3.08	1.65-5.7	0.0004
Religion					
Hindu	127 (21.5)	464 (78.5)	1		
Muslim	17 (48.6)	18 (51.4)	0.28	0.14-0.57	0.0004
Others	03 (21.4)	11 (78.6)	1.00	0.27-3.6	0.99
Education					
Illiterate	79 (45.9)	93 (54.1)	1		
Primary	39 (10.7)	326 (89.3)	0.69	0.40-1.21	0.2
Secondary	25 (40.3)	37 (59.6)	1.25	0.69-2.26	0.4
Graduate or more	04 (9.8)	37 (90.2)	7.85	2.6-23.0	0.0002
Occupation					
Housewife	113 (24.4)	350 (75.6)	1		
Working	34 (19.2)	143 (80.8)	1.35	0.88-2.08	0.1
Socioeconomic status (modified B.G. Prasad)					
01	06 (10.7)	42 (89.3)	1		
02	21 (11.7)	158 (88.3)	1.07	0.40-2.83	0.88
03	36 (14.7)	208 (85.3)	0.82	0.32-2.08	0.68
04	53 (51.5)	50 (48.5)	0.26	0.10-0.72	0.0092
05	31 (53.4)	27 (46.6)	0.12	0.04-0.33	0.0001

Table 1 shows univariate analysis of socio-demographic factors determining unmet need for family planning of study participants. Out of 640 women 147 (22.9%) had unmet need for family planning. Highest unmet need was observed in age group of 15-24 i.e. 35%. Unmet need was more among Muslims (48.6%), illiterates (45.9%) and housewives (24.4%). As socioeconomic status decreases unmet need increases. The unmet need was highest in class IV (51.5%) and class V (53.4%) of modified B.G. Prasad socioeconomic status classification (Table 1).

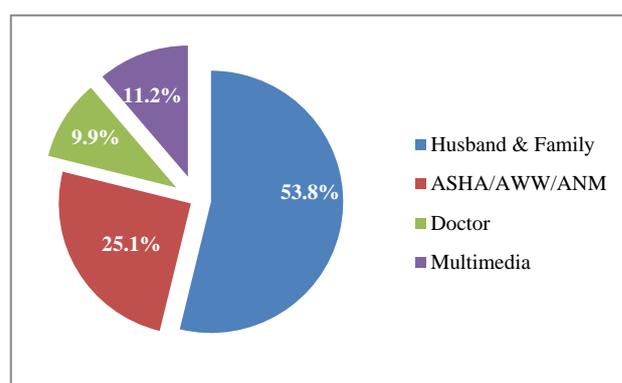
Table 2: Awareness of modern methods of family planning among study participants.

Awareness of modern methods of family planning	Total (N=640)	Percentage (%)
Yes	545	85.2
No	95	14.8

As evident by Table 2 majority of the women i.e. 545 (85.2%) were aware regarding modern methods of contraception (Table 2).

Figure 2 shows sources of information regarding modern contraceptive methods among those women who were aware about it. Most common sources of information

were husband and family members i.e. 53.8% followed by ASHA/ANM/AWW (25.1%), multimedia (11.2%) and doctors (9.9%) (Figure 2).

**Figure 2: Source of information regarding contraceptive methods.**

As shown in Table 3 total 454 women were using contraceptive methods and among these methods tubectomy (60.8%) was the most preferred method followed by male condom and OCP i.e. 17.6% and 13.5% respectively. IUCD is adopted by 2.2% while vasectomy was not accepted at all. Out of 454 users 27 (5.9%) used traditional methods like rhythm method and lactational amenorrhea (Table 3).

Table 3: Contraceptive choices among currently users.

Contraceptive choices among currently users	Total (N=454)	Percentage (%)
Tubectomy	276	60.8
Male Condom	80	17.6
OCP	61	13.5
IUCD	10	2.2
Vasectomy	0	0.0
Traditional Methods	27	5.9

Table 4: Unmet need for family planning in relation to presence of male child in family.

Unmet need for family planning	Male child Present n (%)	Male child Absent n (%)	Total
Yes	45 (30.6)	102 (69.4)	147
No	301 (61.0)	192 (38.9)	493
Total	346	294	640

P=0.00 $X^2=42.2$ df=1.

Table 5: Contraceptive use among participants in relation to family members acceptance.

Contraceptive use	Acceptance by family members for contraceptive use N (%)	Non acceptance by family members for contraceptive use N (%)	Total
Yes	259 (57)	195 (43)	454
No	88 (47.3)	98 (52.7)	186
Total	347	293	640

P=0.02 $X^2=5.03$ df=1.

Table 6: Reasons for not using contraceptives among those who had unmet need.

Reasons	Total (N=147)	Percentage (%)
Poor health service	7	4.8
User related (health concern, fear of fertility loss)	58	39.5
Contraceptive related (affordability, side effect)	17	11.5
Environment and family related (Family, cultural, religious)	65	44.2

DISCUSSION

In present study we found that out of 640 women of reproductive age group 147 (23%) of women had unmet need for family planning, in which 11.6% was for limiting 11.4% for spacing. This is quite higher than that of national and state figures i.e. 12.9% and 12.1% as per NFHS 4.⁴ Our findings are in line with findings of studies done by Srivatava et al, Andurkar et al and Veena et al i.e. 21.7%, 20.54% and 23.3% unmet need respectively.⁷⁻⁹ Inconsistent findings were reported by Lekshmi et al, Nazir et al and Malini et al i.e. 49.8%, 9.1% and 39% respectively.¹⁰⁻¹² As these studies were done at Karnataka, Ambala and Tamil Nadu respectively, it shows unmet need for family planning has high diversity in different states.

Table 4 shows significant relationship between unmet need and presence of male child in the family. It was observed that 69.4% of women who had unmet need, did not have a male child while 30.6% women with unmet need had a male child ($p=0.00$, $X^2=42.2$) (Table 4).

Table 5 shows the relationship between contraceptive use and acceptance of it by family members. Out of 454 contraceptive users 259 (57%) had family acceptance and 195 (43%) had not so and out of 186 non contraceptive users 88 (47.3%) had family acceptance and 98 (52.7%) had not ($p=0.02$, $X^2=5.03$) (Table 5).

Table 6 shows reasons for not using contraceptive among those who had unmet need. Out of 147 women majority i.e. 58 (44.2%) stated that there were family interference and cultural as well as religious restrictions. About 58 (39.5%) had health concern and fear of permanent loss of fertility. Contraceptive related problems like cost, side effects were reported by 11.5% and only 7% reported poor health services (Table 6).

In our study there is almost equal unmet need for limiting (11.6%) as well as for spacing (11.4%) while other studies showed noticeable difference between these like Veena et al reported it 19% for spacing and 4.3% for limiting, Malini et al stated spacing as 12% and limiting as 27% while as per Sulthana et al unmet need for spacing and limiting is 4.9 and 22.5 respectively.^{9,12,13}

As per our study unmet need was highest among younger age group 15-24. The findings are consistent with findings of Dheeraj et al, Veena et al, and Prasad et al.^{7,9,14} Reason behind this may be family interference in decision of newly married couple. As in rural India, after the marriage of their children parents want grandchildren as early as possible without knowing the wish of couple. Other reasons like fear of side effects and permanent loss of fertility without having any children at younger age also contributes. Nazir et al found it higher in 40-44 year

of age group.¹¹ Unmet need is more common amongst illiterates. They might be easily influenced by family members decision of not to use contraceptives while educated women wanted to become pregnant by choice not by chance. Our findings are in line with study of Singh et al.¹⁵

In present study awareness regarding modern methods of family planning was found to be 85.2%. According to NFHS -4 99% couples know about atleast one modern method of contraception.⁵ Ramaiah et al reported it as 81%.¹⁶ Study done by Veena et al stated that 70.1%,⁹ while Prateek et al found it 52.2%.¹⁷ More awareness in our study may be due to more involvement of ASHA/AWW/ANM in health education over the years. In our study overall contraceptive use was found to be 70.9% and among them 65% were used modern methods while 5.9% still believed in conventional methods. Among all contraceptive choices tubectomy was the most preferred choice (60.8%) followed by male condom and OCP i.e. 17.8% and 13.5% respectively. According to NFHS-4 similar pattern of preference was seen.⁴ The findings are at par with the study of Sulthana et al which stated tubectomy 42.3% and condom 10.5% were most preferred choices.¹³ In present study vasectomy was not adopted at all. It shows poor acceptance for vasectomy in rural India. Sulthana et al also reported similar results.¹³ According to NFHS-4 vasectomy was the least preferred method.⁴

Significant association was observed between unmet need and absence of male child ($p < 0.05$). It has been observed that unmet need was more among those women who were not having male child in their family i.e. 102 (69.4%) while 301 (61%) participants who had male child, restricted their childbearing by adopting contraceptive methods. Those who had two or more children with at least one male child preferred tubectomy, while couples having girl child only, were confused whether to take one more chance or not because they needed at least one male child to carry the name of family. Singh S et al also reported that unmet need for family planning was high among those who had more daughters.¹⁵

CONCLUSION

The study conclude that still there is need to create awareness regarding importance of spacing method as well as limiting methods and to clear the myths regarding contraceptives not only in young couples but in other family members also. To achieve replacement level of fertility further motivation is needed. As a preference for the male child contributes to unmet need for family planning, some efforts must be taken in direction of women empowerment and gender equality.

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