

Unmet need for family planning among married women of reproductive age group in rural and urban area of Shimla, India

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ABSTRACT

Background: The concept of unmet need points to the gap between some women's reproductive intentions and their contraceptive behavior. Unmet need for family planning (FP) is a concept that has influenced the development of FP programs for the past few decades. **Objectives:** The objective of this study was to determine the prevalence of "unmet need for FP" and its sociodemographic determinants among married women of reproductive age group. **Materials and Methods:** The study was a community-based, cross-sectional design among married women of the reproductive age group in Shimla. A sample of 1600 women in urban and rural settings has been studied using systematic random sampling. **Results:** The prevalence of unmet need for FP was found 10.3% (11.50% in rural area and 8.75% in urban area). Unmet need for spacing and limiting family was found 6.9% and 3.13%, respectively. Family opposition and fertility concern were the major reasons for unmet need for FP. Age, type of family, and higher education were found to be associated with high unmet need for FP. **Conclusion:** Unmet need for FP in the current study has been found better than national averages. Still considering better acceptance for health and family welfare services in this particular state of India, there are a lot of scopes for improvements.


KEY WORDS: Family Planning; Contraception Use; Reproductive Age Group; Unmet Need

INTRODUCTION

Women with unmet need are those who are fecund and sexually active but are not using any method of contraception and report not wanting any more children or wanting to delay the next child. The concept of unmet need points to the gap between women's reproductive intentions and their contraceptive behavior.^[1] The rising rates of contraceptive use over the past few decades have reduced the unmet need for family planning (FP) in most of the countries around the world. However, more

than 100 million women in less developed countries (approximately 17% of all married women) are still not using any form of FP measure despite wanting to avoid pregnancy.^[2-6]

India, the first country in the world to start a national wide FP program, is still not able to fulfill the unmet need of FP. According to DLHS-3 (2007-2008), more than one-fifth of the woman in reproductive age group has unmet need for FP in India, i.e. 21.3%.^[7] As per DLHS 4 (2012-2013), total unmet need for FP in Himachal Pradesh has increased to 20.6% (21.0% and 19.5% in urban and rural setting, respectively) from 14.9% in DLHS 3.^[8] Unmet need for spacing and unmet need for limiting have also been reported higher in Himachal Pradesh, i.e. 10.9% and 9.7%, respectively. Despite all the government's efforts, still 20.5% (DLHS 4) of the population in reproductive age group in Shimla has unmet need for FP, indicating that greater efforts are needed to understand and address the causes of the unmet need.

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Numerous studies reveal that a range of obstacles other than physical access to services prevents women from using FP.^[9-13] Concern regarding quality and harms of FP services, non-acceptance in family or community, inadequate information are some of the important reasons for the unmet need for FP. Understanding contraceptive use and unmet need for FP is a key for improving reproductive health worldwide.

The present community-based cross-sectional study is aimed to assess the prevalence of the unmet need for FP and its determinants among the married women in reproductive age group. Reasons for the unmet need for FP have also been assessed to suggest suitable measures improve the utilization of contraceptive methods.

MATERIALS AND METHODS

Study Setting

This study was done among married women of reproductive age group in urban and rural field practice area of Department of Community Medicine, Indira Gandhi Medical College and Hospital Shimla, Himachal Pradesh, India.

Study Design

This was a community-based cross-sectional study.

Study Period

The study period was 6 months (May to October 2016).

Study Participants

Married women in the age group of 15-49 years were included in the study.

Sampling

- A sample size of 1600 has been calculated considering the expected prevalence of 20.5% (DLHS 4), 5% level of significance, and relative precision of 10% and non-response rate of 5%.

Inclusion criteria

- Married women in the age group of 15-49 years residing for at least 6 months in the area and were willing to participate in the study.

Exclusion criteria

- Women not fulfilling inclusion criteria.
- Women with severe illness or debilitating conditions not in condition to participate in the study.

A sampling framework was prepared from eligible couple register maintained at UTHC and RTHC. Systematic random sampling design has been used for selecting eligible participants in proportionate to population size among the rural and urban areas.

Study Tool

A pre-designed, semi-structured, pre-tested questionnaire which contains demographic information of participants, their current FP practices, and reason for unmet need was used for data collection.

Ethical Consideration

Written informed consent was taken from all the participants after explaining the purpose of study. Confidentiality and anonymity of the information provided by participants have been ensured. All the participants were communicated about FP services available for them and related queries to increase their uptake.

Statistical Methods

Data were entered into Microsoft Excel and analyzed for calculating mean standard deviation, proportions and 95% confidence interval using the statistical software Epi Info v7. Association among various categorical variables has been determined using Chi-square test and $P < 0.05$ has been considered significant.

RESULTS

A total of 1600 married women in the reproductive age group had been studied in the current study (800 from rural and 800 from urban area). Mean age of the participants was 33.7 ± 6.3 years, ranging from 17 to 47 years of age.

Table 1 shows the demographic characters of study participants. Participants were uniformly distributed in different age groups, except for age group < than 20 years of age which included only 3.44% (n-55) of total participants. 62% (n-992) of the participants were living in a joint family. 46.4% (n-742) of participants had two children while 6.6% (n-106) were still to conceive. Only 1.2% (n-19) of them was illiterate while 77.9% (n-1247) had minimum high school education. 73% (n-1168) of women were homemakers. 29.4% (n-470) belongs to lower socioeconomic class (SEC) according to modified B.G. Prasad classification. Spouses of 1.4% (n-22) of participants were illiterate while 74% (n-1247) had at least high school education (Table 2).

Majority of the participants had knowledge about permanent methods of sterilization (98% and 88.5% for male and female sterilization, respectively). 78% had knowledge about hormonal pill while 67% knew about intrauterine devices (IUD). Male condom was the most known method

Table 1: Demographic characteristics of study participants

Characteristics	Frequency (%)
Age groups (years)	
<20	55 (3.44)
21-25	245 (15.3)
26-30	362 (22.6)
30-35	317 (19.8)
36-40	348 (21.8)
>40	273 (17.1)
Type of family	
Joint	992 (62)
Nuclear	608 (38)
Parity	
0	106 (6.6)
1	349 (21.8)
2	742 (46.4)
3	363 (22.7)
≥4	40 (2.5)
Education	
Illiterate	19 (1.2)
Primary (V)	91 (5.7)
Elementary (VIII)	243 (15.2)
High school (X)	470 (29.4)
Intermediate (XII)	339 (21.2)
Graduate	292 (18.2)
Postgraduate	146 (9.1)
Occupation	
Homemaker	1168 (73)
Working	432 (27)
Spouse education	
Illiterate	22 (1.4)
Primary (V)	118 (7.4)
Elementary (VIII)	274 (17.1)
High school (X)	371 (23.2)
Intermediate (XII)	271 (16.9)
Graduate	339 (21.2)
Postgraduate	205 (12.8)
Spouse occupation	
Unemployed	19 (1.2)
Unskilled	163 (10.2)
Semiskilled	173 (10.8)
Skilled	122 (7.6)
Clerical/shopkeeper/farmer	675 (42.2)
Semi-professional	154 (9.6)
Professional	294 (18.4)
SEC (modified Prasad scale)	
Class I	312 (19.5)
Class II	472 (29.5)
Class III	346 (21.6)
Class IV	291 (18.2)
Class V	179 (11.2)

SEC: Socioeconomic class

Table 2: Knowledge about contraception methods (n-1600)

Contraception methods	Frequency (%)
Male sterilization	1571 (98.2)
Female sterilization	1416 (88.5)
Hormonal pills	1258 (78.6)
IUD	1077 (67.3)
Injectables	690 (43.1)
Implants	134 (8.4)
Condoms	1579 (98.7)
Female condoms	232 (14.5)
Diaphragm	29 (1.8)
Foam or jelly	40 (2.5)
Lactation amenorrhea	477 (29.8)
Rhythm methods	142 (8.9)
Withdrawal	125 (7.8)
Emergency contraception	454 (28.4)

IUD: Intrauterine devices

of contraception (98.7%) though knowledge about female condom was very low (14.5%). Only 28.4% women were aware of emergency contraception.

Figure 1 shows need for FP among study participants in current study. Unmet for contraception or FP was found among 10.13% (n-162) women. Need for family limiting and spacing was 3.23% and 6.9%, respectively.

Table 3 shows distribution of unmet need among study participants. Unmet need for FP among married women was 11.5% and 8.8% in rural and urban area, respectively. Unmet need was highest among age group less than 20 years (38.2%) followed by age group 21-25 years (20.4%). Unmet need for FP has been found to follow a decreasing trend with age. Unmet need among women living in joint family (11.9%) was found significantly higher in comparison to those who were living in nuclear family (7.2%). Education level has been found significantly associated with unmet needs. Unmet needs were highest among illiterate women (26.3%) in the current study. Unmet need for FP among homemakers (11.6%) was found significantly higher. Spouse education and occupation have been found significantly associated with unmet need for FP. Highest unmet need was found among women with illiterate (36.4%) and unemployed spouses (31.6%). Unmet need was highest for women with zero parity though no significant difference was observed with increase in parity. Similarly, no significant difference was observed in unmet need among different SEC.

Most common reason given by the women was fertility concern (96.2%), followed by lack of knowledge (90.6%). Other important reasons concluded were inconvenient for use (86%), family opposition (85%), and concern of side effect (74%). More than half of them (55%) also mentioned lack

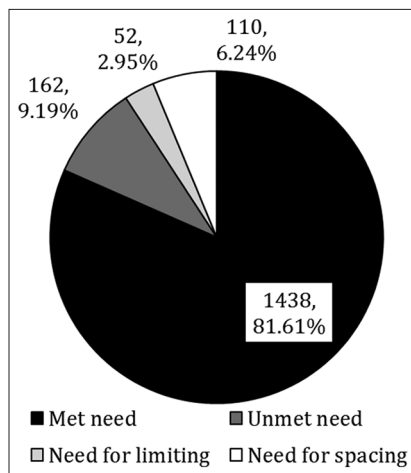


Figure 1: Need for contraception/family planning among study participants (n=1600)

of access for these services as one of the reasons for unmet need.

DISCUSSION

In the current study done among 1600 married women in urban and rural area of Shimla, total unmet need for FP was found 10.13%. Unmet need was higher among rural women (11.5%) in comparison to urban women (8.8). Unmet need for limiting and spacing was 3.23% and 6.9%, respectively. In this study age, education level of women and their spouses and the occupation as homemaker were found significant factors associated with unmet need for FP. Common reasons given by women for unmet need were fertility concern, lack of knowledge, inconvenient for use, family opposition, and concern of side effect.

Unmet need was lower in comparison to the estimate given by DLHS 4 (2012-13) for Himachal Pradesh, according to whom total unmet need was 20.6% (21.0% in rural and 19.5% in urban women).^[8] Results from similar studies elsewhere in India differ from our study, i.e. 44% in a tribal area of Maharashtra,^[14] 41.6% in Haryana,^[15] 25.4% in a resettlement colony of New Delhi,^[16] and 21.7% in Gwalior.^[17] Even studies from other countries had reported high unmet need, i.e., 22.4% in Bangladesh,^[18] 16.3% in Jordan,^[19] 17.4% in Iran,^[20] and 20% in Ethiopia.^[21] Lower needs in our study can be attributed to the easy accessibility and availability of these services, being residing in or near capital city of State. Awareness level was similar to the national figures. Majority of the participants were aware about permanent methods of sterilization and male condom. Awareness about hormonal pill and IUD was found fairly well.^[22] Other studies have identified factors such as gender preference, lower level of education, women's occupation as homemaker, number of children ever born and age, and associated unmet need.^[14-20] Previous studies have identified certain factors as a reason for not using contraceptive such

Table 3: Distribution of unmet need among study participants

Characteristics	Total	Frequency (%)	P value
Area			
Urban	800	70 (8.8)	0.06
Rural	800	92 (11.5)	
Age distribution			
<20	55	21 (38.2)	<0.01
21-25	245	50 (20.4)	
26-30	362	38 (10.5)	
30-35	317	25 (8.2)	
36-40	348	18 (5.2)	
>40	273	9 (3.3)	
Type of family			
Joint	992	118 (11.9)	0.002
Nuclear	608	44 (7.2)	
Parity			
0	106	15 (14.2)	0.40
1	349	39 (11.2)	
2	742	75 (10.1)	
3	363	30 (8.3)	
≥4	40	3 (7.5)	
Education			
Illiterate	19	5 (26.3)	0.08
Primary (V)	91	18 (19.8)	
Elementary (VIII)	243	26 (10.7)	
High school (X)	470	45 (9.6)	
Intermediate (XII)	339	33 (9.7)	
Graduate	292	23 (7.9)	
Postgraduate	146	12 (8.2)	
Occupation			
Homemaker	1168	136 (11.6)	<0.01
Working	432	26 (6.0)	
Spouse education			
Illiterate	22	8 (36.4)	<0.01
Primary (V)	118	19 (16.1)	
Elementary (VIII)	274	28 (10.2)	
High school (X)	371	33 (8.9)	
Intermediate (XII)	271	21 (7.7)	
Graduate	339	35 (10.3)	
Postgraduate	205	18 (8.8)	
Spouse occupation			
Unemployed	19	6 (31.6)	<0.01
Unskilled	163	26 (16.0)	
Semiskilled	173	22 (12.7)	
Skilled	122	16 (13.1)	
Clerical/shopkeeper/farmer	675	56 (8.3)	
Semi-professional	154	14 (9.1)	
Professional	294	22 (7.5)	

(Contd...)

Table 3:(Continued)

Characteristics	Total	Frequency (%)	P value
SEC			
Class I	312	21 (6.7)	0.16
Class II	472	52 (11.0)	
Class III	346	35 (10.1)	
Class IV	291	30 (10.3)	
Class V	179	24 (13.4)	

SEC: Socioeconomic classes

as concern for side effect, family and spouse opposition, and lack of information.^[14-20]

The current study provides important supplementary information regarding unmet need for FP which has been gathered using sound methodology by experienced researcher. Potential biases during study were kept to minimal level by using appropriate technique. The study has been limited only to married women residing in rural and urban field practice area of the Department of Community Medicine. Including all women of reproductive age group from wider universe could have given the current study better generalizability.

Unmet need for FP in the current study has been found better than national averages and from other similar studies. Still considering better acceptance for health and family welfare services^[23] in this particular state of India, there are a lot of scopes for improvements. Service providers are still not able to provide comprehensive information regarding various available options and their utilities for different beneficiaries. Young age women are still apprehensive regarding FP services. Strata with lower education are still unaware and reluctant to use one or more available options for FP. Family opposition still plays a role in hindrance to provide universal family welfare services to all. Himachal Pradesh, though has achieved replacement level for population stabilization (total fertility rate = 1.71), still needs an environment which ensures women to have control over their fertility.

CONCLUSION

Unmet need for FP in the current study has been found better than national averages. Still considering better acceptance for health and family welfare services in this particular state of India, there are a lot of scopes for improvements.

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