

## Original Research Article

# Unmet needs for family planning and its socio-demographic correlates among women in the reproductive age group in central rural India

Ramesh Devidas Pawar<sup>1</sup>, Shital Pratapsingh Solanke<sup>2\*</sup>

<sup>1</sup>Department of Community Medicine, Government Medical College, Akola, Maharashtra, India

<sup>2</sup>Blood Transfusion Officer, District General Hospital, Buldhana, Maharashtra, India

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### \*Correspondence:

Dr. Shital Pratapsingh Solanke,

E-mail: [shitalsolanke@gmail.com](mailto:shitalsolanke@gmail.com)

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## ABSTRACT

**Background:** Unmet need is the discrepancy between reproductive intentions and birth control practices. If the unmet needs remained neglected it leads to population explosion which is one of the greatest threats to India's economic, social and political development. A community-based study was carried out in rural areas with the objective to find the prevalence of unmet need for family planning and its socio-demographic determinants among married women of reproductive age.

**Methods:** A community based cross sectional study was conducted between January to June 2019. After calculation of sample size 670 participants were selected by simple random sampling method. Predesign and semi structured Performa was used for data collection. Data was collected and analyse using Epi Info 7.

**Results:** Unmet needs of family planning among the study subject was 31.19% (57.58% for the spacer and 42.42% for limiter). It was significantly higher among the Muslim (66.67%) and Boudh (40.38) religion. It was higher among Illiterate (40.82%), women residing in joint families (72.16%). Unmet need of family planning was significantly associated with age of women, religion, educational status of women and their husbands, occupation, type of family, no of children the women have and age at marriage.

**Conclusions:** Unmet needs among married women in the reproductive age group was still high and was significantly associated with age of women, religion, educational status of women as well as their husband, occupation, type of family, number of children the women had and age at marriage.

**Keywords:** Prevalence of contraception in rural areas, Unmet needs, Unmet needs of contraceptive, Unmet needs of family planning

## INTRODUCTION

Unmet need is the discrepancy between reproductive intentions and birth control practices.<sup>1</sup> It refers to fertile women who either wish to postpone the next birth (spacers) or wish to stop child bearing.<sup>2</sup> An estimated 222 million women in low- and middle-income countries have unmet need for modern contraception.<sup>3</sup> As per census 2011 the population of India was 1,210,193,422

compared to a total of 1,028,737,436 in 2001. In absolute terms, the population of India has increased by more than 181 million during the decade 2001-2011.<sup>4</sup> Population explosion is one of the greatest threats to India's economic, social and political development. Although India was the first nation to have an official National Family Planning Programme in 1952, the target was on population control rather than health of the women.<sup>5</sup> Demographic changes are gradual and it takes years to be

evident. Small changes in childbearing trends today have huge implications for future population size.<sup>4</sup> Total fertility rate in India has declined to 2.5 children, mainly due to increased use of contraception in women. In spite of this, India is yet above the replacement level fertility, with contraceptive prevalence rate for married women being only 56% and total unmet need being 12.8% as per India National Family Health Survey (NFHS-3).<sup>6</sup> Nearly 10% of all pregnancies are mistimed and 11% of all pregnancies are unwanted in India. The proportion of unintended pregnancies can be brought down by proper utilization of family planning services.<sup>7</sup> In 1965-2009 periods, contraceptive usage has more than tripled from 13% of married women in 1970 to 48 % in 2009 and fertility rate has more than halved from 5.7 in 1966 to 2.4% in 2012 but the national fertility rate is still high enough to cause long term population growth.<sup>8</sup> The NFHS-3 survey (2005-2006) indicated that the unmet need for family planning in India was 12.8% with 6.2% for spacing and 6.6% for limiting (NFHS III Report 2005-06. Government of India and International Institute of Population Sciences).<sup>6</sup> The unmet need for spacing was 1.6 times more than that of limiting births.<sup>9</sup> NFHS-3 report (2006) showed that the rural women had a higher unmet need than urban women for spacing and limiting.<sup>6</sup> A community-based study done among married women in a rural settlement in Aurangabad (2001) showed that the prevalence of unmet need was 20%. The main reasons for this were low perceived risk of pregnancy (32.5%), lactation (31%) and ignorance (12%).<sup>10</sup> When most women with unmet need utilized the family planning programs, the demographic impact would be considerable, and the contraceptive prevalence would increase reducing fertility and bring down population explosion. There are very few community-based studies conducted to assess the unmet need of contraception among women in reproductive age group in Vidarbha Region of Maharashtra. Hence present community Based study was carried out with the objective to find the prevalence of unmet need for family planning and its socio-demographic determinants among married women of reproductive age in field practice area of Rural Health Training Centre, Government Medical College, Akola.

Objective of this study was to study the prevalence of unmet needs and its socio-demographic correlates among women in reproductive age group in rural areas.

## METHODS

Present study was a cross sectional study conducted in the field practice area of Rural Health Training Centre Barshi Takali in the department of community medicine Government Medical College, Akola between January to June 2019. The Barshi Takali village has a population of 21,817 of which 11,139 are males while 10,678 are females as per population census 2011. Reference population for the study was couples residing in the Barshi Takali village. The study population included

married women aged 15-44 years and presently living with their spouses.

## Sampling method and sample size

There are about 4,603 houses in Barshi Takali village. According to NFHS-III the unmet need for family planning was 13% and relative precision of 20%, the sample size for the study was calculated by using formula  $4pq/l^2$  and it came out to be 670. Rural Health Training Centre Barshi Takali has list of women in the reproductive age group residing in the field practice area. We use simple random sampling method for the selection of participants. 670 women in reproductive age group were randomly selected for the study purpose using random number table. Informed consent was taken from the participants.

Exclusion criteria were women not willing to participate were excluded from study. Women other than reproductive age (15-44) group were excluded from the study.

## Study tool

The study tool was a predesigned semi structured questionnaire in which questions about basic demographic factors like age, sex, residence, education, occupation etc were included and some specific questions like age at marriage, unmet needs, and reasons for unmet needs were included.

## Statistical analysis

Data Entry and analysis was done using statistical software Epi Info 7 and appropriate statistical test was applied to study the association between and dependent and independent variables

## Ethical approval

Ethical Approval from institutional ethical committee was obtained. Informed consent from study participants was taken and participants not willing were excluded from study. Confidentiality about the participants was maintained.

## RESULTS

Among the study subjects most of the participants (43.28%) were belongs to 20-24 years of age group and 31.79% were belonging to 25-29 years of age group. Majority of the participants were Hindu (66.57%) followed by Muslim religion (17.91%) and more than half of them were literate. 72.02% women's husband was literate. 55.07% of the women participating in the study were working. More than 37% participants were belonging to class IV and V according to modified BG Prasad's socio-economic status classification. Majority were living in the nuclear family. Age at marriage was <18 years in 25.97% of the participants.

**Table 1: Distribution of participants according demographic factors (n=670).**

Socio demographic factors	N	%
<b>Age of women (yrs)</b>		
15-19	43	6.42
20-24	290	43.28
25-29	213	31.79
30-34	76	11.34
>35	48	7.16
<b>Religion</b>		
Hindu	446	66.57
Muslims	120	17.91
Boudh	104	15.52
<b>Education</b>		
Illiterate	294	43.88
Literate	376	56.12
<b>Husband's education</b>		
Illiterate	187	27.91
Literate	483	72.09
<b>Occupation</b>		
House work	301	44.93
Working (labourer, farming)	369	55.07
<b>Husbands occupation</b>		
Working (labourer, farming)	542	80.90
Service or self employed	128	19.10
<b>Socio-economic status</b>		
I	12	1.79
II	50	7.46
III	351	52.39
IV	36	5.37
V	221	32.99
<b>Family type</b>		
Nuclear	415	61.94
Joint	255	38.06
<b>Age at marriage (yrs)</b>		
≤18	174	25.97
≥18	496	74.03

**Table 2: Unmet need of family planning among study participants.**

Unmet need	Frequency	%
<b>Yes</b>	209	31.19
<b>No</b>	461	68.81

Unmet needs of family planning among the study subject was 31.19%. It was 57.58% for the spacer and 42.42% for limiter. It was significantly higher among the Muslim religion (66.67%) followed by Boudh (40.38%). Unmet need of family planning was found to be higher among the Illiterate (40.82%) than literate (23.40%). Husband's education was found to important factor while considering the unmet needs. Unmet need of family planning was higher among the women whose husbands were illiterate. Unmet needs were higher among women residing in joint families (72.16%) as compared with nuclear families (6.02%). Unmet needs were higher among the class IV and V socio-economic group (59.14%) compared with I-III (61.64%). Unmet need was also found to be higher among women who have more than 2 children. Knowledge about contraceptive practices was also found to be lower among unmet need women compared (19.35%).

Women suggested few reasons behind unmet need as shown in Table 5. Unmet need of family planning was significantly associated with age of women, religion, educational status of women as well as their husband, occupation, type of family, no of children the women have and age at marriage.

**Table 3: Types of unmet needs of family planning among study subjects.**

Unmet needs	Frequency	%
<b>Spacer</b>	38	57.58
<b>Limiter</b>	28	42.42
<b>Total</b>	66	100.00

**Table 4: Relationship of unmet needs with various socio-demographic factors.**

Socio-demographic factors	Met need (n=461)	Unmet need (n=209)	Total (n=670)	P value	Chi square value
<b>Age of women (yrs)</b>					
15-24	219 (47.72)	118 (56.46)	337 (50.30)	<0.05 (0.03175)	4.612 at df1
≥25	242 (52.28)	91 (43.54)	333 (49.70)		
<b>Religion</b>					
Hindu	357 (77.44)	89 (42.58)	446 (66.57)	<0.5 <0.0000001	100.1 at 2 df
Muslim	40 (8.68)	80 (38.28)	120 (17.91)		
Boudh	62 (13.32)	42 (20.14)	104 (15.52)		
<b>Education</b>					
Illiterate	174 (37.74)	120 (57.42)	294 (43.88)	<0.05 (0.000001338)	23.37 at 2 df
Literate	288 (62.26)	88 (42.58)	376 (56.12)		
<b>Husband's education</b>					
Illiterate	92 (19.98)	95 (45.45)	187 (27.91)	<0.0000001	46.47 at 2 df
Literate	369 (80.02)	114 (54.55)	483 (72.09)		

Continued.

Socio-demographic factors	Met need (n=461)	Unmet need (n=209)	Total (n=670)	P value	Chi square value
Occupation					
House hold work	194 (64.45)	107 (35.55)	301 (44.93)	<0.05 (0.02801)	4.828 at 2 df
Productive work	267 (72.36)	102 (27.64)	369 (55.07)		
Husband's occupation					
House hold work	365 (67.34)	177 (32.66)	542 (80.90)	>0.05 (0.09263)	2.828 at 2 df
Productive work	96 (75.78)	32 (24.22)	128 (19.10)		
Type of family					
Nuclear	390 (93.98)	25 (6.02)	415 (21.64)	<0.05 (0.0000001)	321.8 at 2df
Joint	71 (27.84)	184 (72.16)	255 (78.36)		
Socio-economic status					
I-III	356 (86.20)	57 (13.8)	413 (61.64)	<0.05 (0.0000001)	151.7
IV and V	105 (40.86)	152 (59.14)	257 (38.36)		
Age at marriage					
<8 years	92 (52.87)	82 (47.13)	174 (25.97)	<0.05 (0.000000135)	27.8
≥18 years	369 (74.40)	127 (25.60)	496 (74.03)		
No of living children					
≤2	290 (78.59)	79 (21.41)	369 (55.07)	<0.05 (0.0000001)	35.63
>2	171 (56.81)	130 (43.19)	301 (44.93)		
Knowledge about contraceptives					
Yes	396 (80.65)	95 (19.35)	491 (73.28)	<0.05 (0.0000001)	120.2 at 2 df
No	65 (36.31)	114 (63.69)	179 (26.72)		

**Table 5: Reasons for unmet needs of family planning (n=209).**

Reasons	N	%
Cost	33	15.79
Desire to have more children	59	28.23
Fear of side effects	20	9.57
Inconvenience/decrease pleasure	27	12.92
Lack of information	30	14.35
Oppose from partner	28	13.40
Religious belief	12	5.74

## DISCUSSION

In present study 97.9% women and 98.3% male were aware about one or other methods of family planning. Similar results have been observed in NFHS-III where 98% males and 99% females between the age group 15-49 years were aware about one or other contraceptive method.<sup>6</sup> But contraceptive prevalence rate was found to be quit less which indicates a gap between knowledge and actual practice. Similar results were observed in the study conducted by Ansari et al.<sup>11</sup>

The unmet need of family planning found in our study was 31.19%. It was 57.58% for the Spacer and 42.42% for limiter. The unmet need of family planning found in our study was less compared with other studies conducted by Srivastava et al, 21.7%, 21%, 7%, 17% and 25% respectively.<sup>21</sup> Unmet need for family planning among currently married women is 13 percent, in NFHS-3. Unmet need of family planning was found to be higher among Younger women (age 15-24 yrs) have a greater unmet need for spacing than for limiting. Percentage of

unmet need in our study was less than 45.1% and 52.4% Patil et al and Mekonnen et al respectively.<sup>12,13</sup> The difference in different studies may be due to the different study setting and sample size. In our study unmet need is high (35.01%) among younger women between age group (15-24 yrs) especially for the spacing purposes but at the latter age means after thirty or above the level of unmet need for limiting is much higher than spacing. Similar results were observed in study conducted by Ansari et al.<sup>11</sup>

Religion and unmet needs: when we consider the unmet need according the religion it was highest among the Muslim (66.67%) religion followed by Boudh religion (40.38) and difference between unmet need of family planning and religion of found to be statistically significant ( $p < 0.05$ ) as shown in Table 4.

### Type of family and unmet needs

In present study unmet needs were higher among women residing in joint families (72.16%) as compared with nuclear families (6.02%) and it was significantly associated with type of family ( $p < 0.05$ ). similar findings were observed in the study conducted by Verma et al.<sup>14</sup> Study by Yadav et al found that the unmet need was more (47.53%) for females belonging to joint family than the nuclear family (38.63%).<sup>15</sup> Results of our study were consistent with other studies.

### Unmet need of family planning and income

Unmet needs were higher among the class IV and V socio-economic group (59.14%) compared with I-III



(61.64%).<sup>16</sup> The most common reason for unmet need for contraception mentioned in our study were desire to have more children (28.23%), lack of information (14.35%), cost of the contraceptives (15.79%), oppose from partner (13.40%). Khan et al had reported lack of knowledge (18%) as the main reason for unmet need for contraception in their study.<sup>17</sup> Patel et al had also reported a similar observation.<sup>18</sup>

Sajid et al in their study had also reported that 20.83% women were worried about side effects, 16.67% considered it as against religion, 11.67% wanted more children, 6.67% had no knowledge about source of information and 8.33% were opposed to family planning because of their husbands influence in choosing the contraceptive method.<sup>19</sup> In the present study significant statistical association was observed between the unmet need and women of 15-24 years of age group ( $p < 0.005$ ), illiterate women ( $p < 0.01$ ), Muslim women ( $p < 0.001$ ), illiteracy of her husband ( $p < 0.001$ ), women who married below 18 years of age ( $p < 0.005$ ), women living in joint families ( $p < 0.001$ ) and women having lack of knowledge about contraception ( $p < 0.001$ ). No significant association was observed between unmet need and occupation of women and occupation of their husbands and SE status. Similar results had observed in study conducted by Chakraborty et al where unmet need of contraception were significant with age of women, education of women, education of their husbands, joint family type, age of women at marriage and age at first pregnancy.<sup>16</sup> Similarly unmet need of contraception were significantly associated with education of women, religion, family income and media awareness.<sup>20</sup> Akansha et al had also found the significant association of unmet needs of contraception with illiterate women, Muslim women, illiteracy of her husband, in women doing household work, women who married below 18 years of age and women having lack of knowledge about contraception.<sup>2</sup>

## CONCLUSION

Unmet needs of married women in reproductive age group was high and was significantly associated with age of women, religion, educational status of women as well as their husband, occupation, type of family, no of children the women have and age at marriage.

### Implication

Understanding the size of unmet need for contraception and the characteristics of women with unmet need can help planners strengthen programs will help to reduce the number of unwanted pregnancy and reduce the birth. The higher percentage of unmet need in our study may be attributed to low education, socioeconomic status, less aware regarding health seeking behavior and have limited access to family planning services.

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