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### **Original Research Article**

## Profile of unmet needs of family planning in an urban slum of Ganjam district, Odisha, India: a cross-sectional study

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### ABSTRACT

**Background:** Unmet need for family planning refers to the percentage of fecund women of reproductive age either married or in union, women who either wish to postpone the next birth (spacers) or who wish to stop child bearing (limiters) but are not using a contraceptive method. This clearly indicates a gap between a woman's reproductive intention and current contraceptive behaviour. The objectives of the present study was to determine the prevalence of unmet need for family planning, to assess the association between socio-demographic characteristics and unmet need of family planning, to identify the reasons for unmet need.

**Methods:** It was a cross-sectional study conducted from June to August 2018 in Ankuli (UHTC). A total of 188 ever married women in the reproductive age group were selected by simple random sampling.

**Results:** Out of 188 women, 41 (21.8%) had no need for contraception and needs for family planning of 78 (41.5%) women had been met. The prevalence of unmet need for family planning was 36.7% consists of 24 (12.8%) spacing need and 45 (23.9%) limiting need. It was found that age, education of women, age at marriage, number of living children, contraceptive knowledge and inter-spousal communication were significantly associated with unmet need for family planning. The most common reason for not using any contraceptive method was fear of side effects (40.6%).

**Conclusions:** The unmet need for family planning was high and in order to reduce the gap, the program should address the above reasons.

Keywords: Contraception, Family planning, Limiting, Spacing, Unmet need

#### **INTRODUCTION**

Family planning practice is the right of women, which empower her to achieve her reproductive goal. A woman's ability to space her pregnancies has a direct impact on her health and wellbeing as well as on the outcome of pregnancy. Family planning prevents unintended pregnancies, reduces infant mortality and maternal mortality, helps to prevent HIV/AIDS, reduces adolescent pregnancies and slows population growth.<sup>1</sup> India was the first country in the world to have launched a National Programme for Family Planning in 1952. Over the decades, the programme has undergone transformation in terms of policy and actual programme implementation and currently being repositioned to not only achieve population stabilization goals but also promote reproductive health and reduce maternal, infant and child mortality and morbidity.<sup>2</sup> Unmet need for family planning refers to the percentage of fecund women of reproductive age either married or in union, women who either wish to postpone the next birth (spacers) or who wish to stop child bearing (limiters) but are not using a contraceptive method. This clearly indicates a gap

between a woman's reproductive intention and current contraceptive behaviour.<sup>3</sup> Unmet needs show how well national family planning programs are achieving the key mission of meeting the population's felt need for family planning. It is a valuable indicator for tracking progress towards the target of achieving Universal access to reproductive health. NFHS-IV 2015-2016 (National Family Health Survey) in India revealed that the unmet need of family planning was 12.9 % with 5.1% for spacing and 7.8% for limiting, while in the past decade it was 13.9 %.<sup>4</sup> According to NFHS-IV in Odisha the unmet need for family planning was 13.6% with 4.7% for spacing and 8.9% for limiting, while in past decade it was 16.0%.<sup>5</sup> In Odisha the unmet need for family planning decreased during the past two decades total number of women with unmet need remaining the same due to population growth. The number of unintended pregnancies can be brought down by increasing favourable factors and reducing factor which reduces the utilization of family planning services. The objectives of the present study was to determine the prevalence of unmet need for family planning, to assess association between socio-demographic characteristics and unmet need for family planning, to identify the reasons for unmet needs.

### **METHODS**

It was a community-based, cross-sectional study, carried out in an area covered under the Urban Health Training Center (UHTC), Ankuli of a MKCG medical college, Berhampur. The study was undertaken from June to August 2018. Sample size was calculated by the formula 4pq/l<sup>2</sup>. As per National Family Health Survey (NFHS-4), the unmet need for family planning in Odisha is 13.6%. Thus, p is 13.6. The allowable error was taken as 5%. So, the sample size obtained was 188. Simple random sampling of the house hold was done to obtain the desired sample size. The study population consisted of ever married women in the reproductive age group (15-49 years). Women residing in the area for less than six months, women who were seriously ill and those who were non-cooperative were excluded from the study. Separated /divorced women, widows, women pregnant due to contraceptive failure were also excluded from the study. Clearance was obtained from the institutional ethics committee. A door-to-door survey was done for collection of the necessary information from the selected household. From family with two eligible women, one was selected randomly. After getting the targeted study population, the objectives of the study were explained, and informed consent was taken from each study participants. Data was collected using predesigned, pretested and semi structured questionnaire in local language.

### Inclusion criteria

• All currently married women who were not using any method of contraception but did not desire any

more children (limiters) or wanted to wait two or more years for the next child (spacers).

- Pregnant women with mistimed (spacers) or unwanted (limiters) pregnancy
- Amenorrhoeic women whose last delivery was mistimed (spacers) or unwanted (limiters).

### Statistical analysis

The data were entered and were analyzed using the statistical software SPSS version 16. Rates and proportion were calculated. Chi-square test was used for finding the association. A P-value of less than 0.05 was considered to be statistically significant.

### RESULTS

The mean age of the study population was  $29.19 \pm 6$ . 85 years. Out of 188 women, 48.9% were aged between 19 -30 years and 8% were in the age group of <18 years.

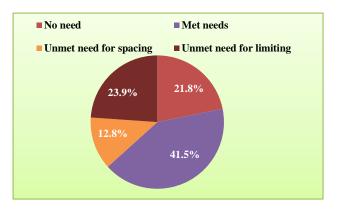
### Table 1: Socio-demographic profile of the respondents(n=188).

Variables	Frequency	%
Age of women		
<18 years	15	8
19-30 years	92	48.9
31-40 years	62	33
>41 years	19	10.1
Wife's education		
Illiterate	32	17
<10th	88	46.8
10-12th	52	27.7
Graduate and above	16	8.5
Husband's occupation		
Skilled	84	44.7
Unskilled	88	46.8
Professional	16	8.5
Age of marriage		
<18 years	46	24.5
18-25 years	77	41
26-29 years	59	31.4
>30 years	6	3.2
Socioeconomic status		
Upper and upper middle	26	13.8
Lower middle	27	14.4
Upper lower	103	54.8
Lower	32	17.0
Type of family		
Nuclear	103	54.8
Joint	85	45.2
No. of living children		
0-1	57	30.3
2	62	33
>3	69	36.7

17% women were illiterate. Early marriage i.e. marriage before 18 years of age was found in 24.5% women. Most

of the women belonged to the upper lower socioeconomic class i.e. 54.8% according to modified Kuppuswamy's socioeconomic scale. 54.8% women lived in nuclear family. 36.7% women had more than 3 children (Table 1).

Out of 188 women 41 (21.8%) had no need for contraception as they were planning for a child in near future. Family planning needs of 78 (41.5%) women had been met as they were using one or other family planning methods. The prevalence of unmet need was 36.7% with 24 (12.8%) for spacing and 45 (23.9%) for limiting (Figure 1).



## Figure 1: Distribution according to their need for contraception (n=188).

It was found that age, education of women, age of marriage, number of living children, contraceptive knowledge and discussion about contraceptive practice with husband were significantly associated with unmet need for family planning. The prevalence of unmet need in women aged <18yrs was higher i.e. 73.3% and it significantly decreased as the age of women increased. Similar trend was seen in case of education of women i.e. illiterate women had higher unmet need (62.5%). The unmet need was significantly higher among women who were married before the legal age of marriage (<18 years) as compared to those who were married after 18 years of age. The unmet need significantly decreased as the no. of living children increased.

The prevalence is 58.4% in women having 0 and 1 living children. Fewer unmet need (14.6%) was found in those having better contraceptive knowledge. Those women who discussed about contraceptive practice with their husband have lower unmet need i.e. 17.6% as compared to those who had no discussion about contraceptive practice with their husband (Table 2).

Table 3 describes that fear of side effect (40.6%) was found to be major reason followed by low perceived risk of pregnancy (29%) for unmet need of family planning. But 17% women stated opposition from family or partner as a reason for unmet need of family planning. Lack of knowledge and medical reasons were the reasons for unmet need of family planning in 8.7% and 4.3% of women respectively.

# Table 2: Association between unmet need for familyplanning and socio-demographic characteristics of thestudy participants (n=188).

Unmet needs of family					
Variables	planning P value				
v al lables	Abse	bsent Present		I value	
	No.	(%)	No.	(%)	
Age of women					
<18 year	4	26.7	11	73.3	
19-30 year	58	63.0	34	37.0	0.011*
31-40 year	42	67.7	20	32.0	
>41 year	15	78.9	4	21.1	
Education of					
women					
Illiterate	12	37.5	20	62.5	
<10th	59	67.0	29	33.0	
10-12th	36	69.2	16	30.8	0.010*
Graduate and					-
above	12	75.0	4	25.0	
Husband's					
occupation					
Skilled	48	57.1	36	42.9	
Unskilled	59	67.0	29	33.0	0.241
Professional	12	75.0	4	25.0	
Age of marriage	12	7510	-	2010	
<18 years	18	39.1	28	60.9	
18-25 years	53	68.8	24	31.2	
26-29 years	44	74.6	15	25.4	0.001*
>30 years	4	66.7	2	33.3	0.001
Socioeconomic	+	00.7	2	55.5	
status					
Upper and					
upper middle	17	65.4	9	34.6	
Lower middle	17	63.0	10	37.0	0.962
Upper lower	66	64.1	37	35.9	0.902
Lower	19	59.4	13	40.6	
Type of family	17	57.4	15	40.0	
Nuclear	63	61.2	40	38.8	
Joint	56	65.9	29	34.1	0.504
No. of living	50	03.9	29	54.1	
children	25	42.0	30	56.1	
0-1		43.9	32	56.1	0.001*
2	43	69.4	19	30.6	
$\geq 3$	51	73.9	18	26.1	
Contraceptive					
knowledge	21	265	54	62 5	
Poor	31	36.5	54	63.5	0.000*
Good	88	85.4	15	14. 6	
Discussion with husband					
No	77	56.2	60	43.8	0.001*
Yes	42	82.4	9	17.6	0.001
100	14	02.7	/	17.0	

Reasons	No. (%)
Fear of side effect	28 (40.6)
Lack of knowledge	6 (8.7)
Opposition from family or partner	12 (17.4)
Little perceived risk of pregnancy	20 (29)
Medical reasons	3 (4.3)

Table 3: Reasons for unmet need of family planning(n=69).

### DISCUSSION

In the present study 36.7% women had an unmet need for family planning with 12.8% for spacing and 23.9% for limiting. The unmet need observed in this study is higher than Annual Health Survey 2012-13 report, where the unmet need for family planning in Ganjam district of Odisha is 22.9% with 11.3% for spacing and 11.6% for limiting.<sup>6</sup> Higher unmet need was also seen in studies by Pal et al in Lucknow, Begum et al in Mumbai and Valekar et al in Pune where it was 53.1%, 40.6% and 42% respectively.<sup>7-9</sup> However in studies by Raveendran et al in Karnataka, Jesh et al in Kerala and Nazir et al in Haryana unmet needs for family planning were 16.7%, 21.2% and 7.5% respectively.<sup>10-12</sup> Thus authors see that there is a considerable variation in unmet need due to social and cultural differences.

The unmet need was highest among women <18 years of age i.e. 73.3% and it decreased with increase in age. Similar results were seen in studies conducted by Pal et al in Lucknow and Begum et al in Mumbai, where the unmet needs decreased with increase in age.<sup>7,8</sup> However in studies conducted by Patel et al and Vasudevan et al it was higher in women aged 25-34 years.<sup>13,14</sup> In another study by Singh et al unmet need was highest in 35-44 years age group.<sup>15</sup> Nazish et al concluded that women below 35 years of age had higher unmet need for family planning in comparison to those above 35 years.<sup>16</sup> This can be attributed to the fact that the young couples do not have sufficient knowledge of various contraceptive methods available.

In present study it was found that unmet needs for family planning significantly decreased with improvement of educational status. Similar results were reported in studies by Vohra et al and Relwani et al where the unmet need decreased with improvement of educational level.<sup>17,18</sup> However in a study by Prasad et al in Kanchipuram district of Tamil Nadu, women who were educated above high school had higher unmet needs (36.7%) than women who had an education level of middle school and below (27%).<sup>19</sup> Observation in present study contradicts that of the study of Valekar et al and Rasheed et al who reported no significant association between unmet needs for family planning and educational level of women.<sup>9,16</sup> It may be concluded that educating women and empowering them will greatly reduce the burden of unmet need for family planning.

Of the women who were married before the legal age of marriage, 60.9% had unmet need for family planning. It was lower for those who had married after 18 years of age and this association was found to be significant. Our finding was supported by Bhattathiry et al where unmet needs decreased as the age at marriage rose.<sup>20</sup> However there was no significant association between age of marriage and unmet need in a study conducted by Prasad et al.<sup>19</sup> In present study occupation of husband, socioeconomic status of women and type of family were not found to be significantly associated with unmet needs.

It was reported that the unmet need for family planning was lowest among those who had more than three living children (26.1%) as compared to those with two living children (30.6%) and one or no living child (56.1%). There was a significant association between number of living children and unmet needs. This finding in present study was in accordance with many other studies.<sup>7-10,17-20</sup> It may be due to the fact that those women who already had three or more than three living children would like to restrict childbearing and adopt any contraceptive methods while those with one or no child might not have achieved their desired family size thus, not so receptive to the use of family planning measures.

In the present study unmet need was significantly higher in women with poor contraceptive knowledge (63.5%) as compared to women with good contraceptive knowledge (14.6%). It was also found that women who had discussion with their husbands on family planning were less likely to have unmet needs for family planning (17.6%) than women whose husbands were not involved (43.8%). This difference was statistically significant. This has been consistently reported by most of the other studies done in India.<sup>7,12-16,20</sup> Thus it can be concluded that inter-spousal communication is a significant determinant for reducing unmet needs for family planning.

Present study found that the commonest reason for nonusage of contraceptive methods were fear of side effect (40.6%) and lower perceived risk of pregnancy (29%).Vasudevan et al in their study found that client related factors like lack of knowledge, shyness and fertility problems (46%) as the common reasons for nonusage of contraception by those with unmet need.<sup>14</sup> Nazir et al reported that family inhibition, cost of contraception, concern about infertility and unhappiness with healthcare services were significantly associated with unmet need.<sup>12</sup> Singh et al reported that the commonest reason for nonusage of contraceptive methods was fear of side-effects (37.5%) followed by in-laws disapproval (21.9%) which is similar to present study.<sup>15</sup>

### CONCLUSION

In the present study, unmet need for family planning was higher than the national and state statistics. Younger age, lower level of education, early marriage, poor contraceptive knowledge and no inter-spousal communication regarding family planning practice were identified as the significantly contributing factors for higher unmet needs. The most common reason for not using any contraceptive method among women with unmet need was fear of side effects followed by lower perceived risk of pregnancy.

### Recommendations

The health care provider at grass root level should motivate the couple and provide appropriate information regarding various contraceptive methods. They should also highlight the benefits of family planning at VHND sessions and during home visits. Simultaneously they should counsel properly about the fear of side effect which is the major obstacle in acceptance of family planning measures. Efforts should be made to improve literacy of women and to empower them; this will lead to good contraceptive knowledge which in turn will decrease the burden of unmet needs. Attention should be paid for ensuring universal adherence to the legal age for marriage. The family planning programme should focus on men as well, as they often play an important and dominant role in the decision pertaining to the family size and the use/non-use of family planning methods. As it is seen more unmet need among nuclear family, spousal communication for making decision regarding family planning are important determinant and should be encouraged as this will bridge the gap between met and unmet need. More emphasis should be given to provide contraceptive information through the mass media.

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Institutional Ethics Committee

Conflict of interest: None declared Ethical approval: The study was approved by the

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