

# Assessment of Unmet Need for Family Planning and its Association with Reproductive Behaviour of Women in Rural Jaipur

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## ABSTRACT

**Introduction:** The concept of unmet need refers to a gap between someone's stated fertility preferences and his or her contraceptive use at a given point of time. The concept can serve as a basis for identifying subgroups that are in need of programmatic action. Thus, estimation of unmet need is a powerful concept for family planning programmes. The aim of present study was to estimate the unmet need for family planning and its association with reproductive behaviour of women with the unmet need.

**Materials and methods:** A community based cross sectional study was carried out among rural women in Jaipur. Total 550 women were interviewed by systematic random sampling and a pre-designed and pre-tested questionnaire was used to record the informations. The data were entered into Microsoft Excel 2010 spreadsheets and analyzed using "Chi square test" of significance to find out association between unmet need and reproductive behaviour of women.

**Results:** In the present study, 17.82% women of reproductive age group had an unmet need for family planning, of which 12% had unmet need for limiting and 5.82% for spacing the births. The unmet need was significantly associated with age at marriage, duration of active married life, age at first child birth, total number of living children and total number of male and female children. Lack of motivation (41.84%), various obstacles (35.71%) and lack of information (22.45%) were the major reasons for unmet need.

**Conclusion:** Our study showed a higher unmet need in the study area as compared to national and state average, showing a need for an effective education campaign and awareness programme among the study population.

**Keywords:** Assessment, contraceptives, family planning, reproductive behaviour, unmet need.

## INTRODUCTION

Studies in less developed countries have shown an inconsistency in women's responses regarding contraceptive use. A significant number of women say that they do not want another child but are not using any method of contraception. These women refer to having "unmet need" for family planning. The concept of unmet need refers to a gap between women's stated fertility preferences and contraceptive use at a given point.<sup>1,2</sup>

Estimation of unmet need is a powerful concept for family planning programmes. The concept can serve as a basis for identifying subgroups that are in need of programmatic action. The level of unmet need in a country is not static but always in a flux, depending on the interplay of two factors – fertility desires and contraceptive use. Unmet need rises as more women would like to control their fertility but for var-

ious reasons are unable to do so, and it falls as more women start practicing contraception.<sup>2,3</sup>

Despite good interventions and concerted efforts, unmet need for family planning in Rajasthan is 14.6%, which is above the national average (12.8%).<sup>4,5</sup> The causes of unmet need are complex. Surveys and other in depth research reveal a range of obstacles and constraints that can undermine a woman's ability to act on her childbearing preferences.<sup>6</sup>

The extent of acceptance of contraceptive methods still varies within, between societies and among different castes and religion groups. The factors responsible for such varied picture operate at the individual, family and community levels with their roots in the socio-economic and cultural milieu of Indian society.<sup>7</sup>

In most of studies major focus was given on socio-demographic characteristics of women instead reproductive behaviour like, age at marriage, duration of active married life, age at first child birth, total number and sex of living children. So, the present study was planned to assess the extent of unmet need and its association with reproductive factors among married women in a rural community of Vatika village, district Jaipur.

## MATERIALS AND METHODS

It was a community based cross sectional study, carried out in a field practice area covered under rural health training centre of a private medical college in Jaipur (Rajasthan). The study population consists of all the married women in the reproductive age group (15-49 years) residing in Vatika village. According to census 2011<sup>8</sup>, population of village is 10590 with total 1677 families residing.

**Inclusion criteria:** Married women of reproductive age group (15-49 years).

**Exclusion criteria:** All unmarried female of reproductive age group, married female less than 15 years and more than 49 years and married women who were not permanent resident of Vatika village.

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**Sample size:** Using prevalence of reported unmet need for family planning in National Family Health Survey-3 in Rajasthan of 14.6%<sup>6</sup> and an absolute error of 3% a sample size of 550 was arrived at.

**Sampling procedure:** Systematic random sampling method was used to select the study population. There were 1677 families in the Vatika village as per Population Census 2011. First family was randomly selected using currency note method. All the married women of the selected family in the reproductive age group (15-49 years) present at the time of data collection were included in the study. After selecting the first family, every third family was taken till the desired sample size was met.

**Method of data collection:** After obtaining approval from institutional ethics committee house to house survey was done and data collected by taking interview of the married women. Each respondent was explained the purpose of the study prior to the administration of tools of data collection and informed consent was obtained. The confidentiality of the information was assured. A pre-designed and pre-tested questionnaire was used to collect the data.

## STATISTICAL ANALYSIS

The data were entered into Microsoft Excel 2010 and analyzed using "Chi square test" to find out association between unmet need for family planning and reproductive behaviour of women.

## RESULTS

Among the 550 women interviewed, it was observed that 214 (38.91%) women were not in need of any family planning, 238 (43.27%) women had their needs met and 98 (17.82%) was the number of women who had unmet need for family

Need of family planning	Number	Percent
No need	214	38.91
Met need	238	43.27
Unmet need	98	17.82

**Table-1:** Distribution of women according to need of family planning

Women	Number	Percent
Women with unintended pregnancy (unmet need for limiting)	8	1.46
Women with mistimed pregnancy (unmet need for spacing)	4	0.73
Women with unintended recent birth (unmet need for limiting)	2	0.36
Women with mistimed recent birth (unmet need for spacing)	1	0.18
Do not want a child (unmet need for limiting)	56	10.18
Want a child after two year (unmet need for spacing)	27	4.91
Total	98	17.82

**Table-2:** Distribution of women according to status of unmet need for family planning

planning (Table 1).

Among the 98 women who had unmet need for family planning, there were 8 (1.46%) pregnant women whose pregnancies were unintended and 4 (0.73%) others whose pregnancies were mistimed. 2 (0.36%) postpartum amenorrheic women said that their recent births were unintended and 1 (0.18%) postpartum amenorrheic women said that her recent birth was mistimed. 56 (10.18%) non-pregnant women had an unmet need for limiting and 27 (4.91%) non-pregnant women had an unmet need for spacing. Therefore, in present study total unmet need for family planning was 17.82%; of which 12% for limiting and 5.82% for spacing (Table 2).

Table 3 shows association of unmet need for family planning with reproductive behaviour of women. It was observed that age at marriage, duration of active married life, age at first child birth, total number and sex of living children were significantly associated with unmet need for family planning. The unmet need was more among women who got married before the age 18 years (26.11%) followed by those who got married between 18 and 25 years (15.61%) and after the age of 25 years (10.13%).

Variables	Yes	No	Chi Square (df)	'P' value
	n (%)	n (%)		
Age at marriage (in years)				
< 18	41 (26.11)	116 (73.89)	11.622 (2)	0.003
18-25	49 (15.61)	265 (84.39)		
> 25	8 (10.13)	71 (89.87)		
Duration of active married life (in years)				
< 1	5 (11.63)	38 (88.37)	20.191 (5)	0.001
1-5	19 (13.19)	125 (86.81)		
6-10	35 (29.17)	85 (70.83)		
11-15	21 (21.88)	75 (78.12)		
16-20	11 (17.74)	51 (82.26)		
> 20	7 (8.24)	78 (91.76)		
Age at first child birth (in years)				
< 18	14 (14.43)	83 (85.57)	9.097 (2)	0.011
18-25	68 (24.20)	213 (75.80)		
> 25	11 (11.70)	83 (88.30)		
Total number of living children				
0	5 (6.41)	73 (93.59)	17.641 (4)	0.001
1	12 (14.46)	71 (85.54)		
2	19 (17.59)	89 (82.41)		
3	26 (16.77)	129 (83.23)		
≥ 4	36 (28.57)	90 (71.43)		
Number of male children				
0	18 (11.11)	144 (88.89)	9.062 (3)	0.037
1	31 (17.61)	145 (82.39)		
2	35 (22.88)	118 (77.12)		
≥ 3	14 (23.73)	45 (76.27)		
Number of female children				
0	20 (11.83)	149 (88.17)	8.800 (3)	0.041
1	34 (19.21)	143 (80.79)		
2	30 (19.23)	126 (80.77)		
≥ 3	14 (29.17)	34 (70.83)		
df= Degree of freedom				

**Table-3:** Association of unmet need for family planning with reproductive behaviour of women

Reason for non-usage	Number	Percent
Lack of information	22	22.45
Unaware of need	6	6.12
Place of contraceptive facility was unknown	2	2.04
Fear of side effects	8	8.16
Myths and misconceptions	6	6.12
Lack of motivation:	41	41.84
Postponed until another time	31	31.63
No faith	3	3.06
Indifference	7	7.14
Obstacles	35	35.71
Place of contraceptive facility too far	5	5.10
Familial opposition	10	10.20
Husband not willing	13	13.27
Religious beliefs	7	7.14
Total	98	100

**Table-4:** Distribution of women with unmet need according to reason for non-use of contraception

The unmet need was highest between 6 and 10 years duration (29.17%) followed by 11-15 years (21.88%), 16-20 years (17.74%), 1-5 years (13.19%), less than one year (11.63%) and more than 20 years (8.24%). It was observed that the unmet need was more among women who delivered their first child between 18-25 years (24.20%) followed by those who delivered before age of 18 years (14.43%) and after the age of 25 years (11.70%).

It was seen in this study that as the number of living children increased the unmet need for family planning also increased significantly ( $P<0.01$ ). The unmet need was highest among women who had 4 or more children (28.57%) followed by 2 children (17.59%), 3 children (16.77%), 1 child (14.46%) and lowest (6.41%) in those who had no living child. It was observed from this study that as the number of male children increased the unmet need for family planning also increased significantly ( $P<0.05$ ). Similar pattern was observed with number of living male and female children.

In the present study, lack of motivation (41.84%), various obstacles (35.71%) and lack of information (22.45%) were the common reasons for unmet need for family planning (Table 4).

## DISCUSSION

In our study, married women of 15 to 49 years were included. Similar reproductive span was taken by recent national level surveys (NFHS-3<sup>5</sup>, DLHS-3<sup>9</sup>).

The present study showed 17.82% unmet need for family planning among women of reproductive age group. Similar findings were observed in previous studies by Yadav et al<sup>10</sup> at Ballabgarh, Haryana (17.5%), Indu<sup>11</sup> at Thiruvananthapuram (17.0%) and Sengupta and Das<sup>12</sup> in Jaipur Rajasthan (18.6%).

In the present study, unmet need for limiting was more (12%) as compared to unmet need for spacing (5.82%). Similar findings were observed in previous studies by Yadav et al<sup>10</sup> at Ballabgarh, Haryana (11.5% v/s 6%), Andurkar et al<sup>13</sup> at

Aurangabad, Maharashtra (16.93% v/s 3.61%), Saini et al<sup>14</sup> at East Delhi (18.7% v/s 6.7%), Lata et al<sup>15</sup> at Kishanganj, Bihar (14.5% v/s 9.4%).

The present study showed an inverse and highly significant association ( $P<0.01$ ) of unmet need with age of woman at marriage. The unmet need decreased with increase in age of women at marriage. Similar findings were found in previous studies by Korra<sup>16</sup> in Ethiopia and Bhandari et al<sup>17</sup> in Nepal. While contrary findings were observed by Prusty<sup>18</sup>, who reported that unmet need was more among those women who got married after 18 years as compared to those who got married before 18 years of age.

The unmet need was also significantly ( $P<0.01$ ) associated with duration of active married life. The unmet need increased with increase in duration of active married life up to 10 years thereafter unmet need decreased. The unmet need was significantly ( $P<0.05$ ) more among women who delivered their first child between 18-25 years followed by before age of 18 years and after the age of 25 years. In a previous study by Bhattathiry and Ethirajan<sup>19</sup> at Cuddalore district, Tamil Nadu, an inverse association between age of women at first childbirth and unmet need was found, which was significant.

It was observed from present study that as the number of living children increased the unmet need for family planning also increased significantly ( $P<0.01$ ). Similar findings were observed in previous studies by Saini et al<sup>14</sup> at East Delhi, Lata et al<sup>15</sup> (2012) at Kishanganj, Bihar whereas Bhattathiry and Ethirajan<sup>19</sup> (2014) at Cuddalore district, Tamil Nadu found inverse association between number of living children and unmet need, which was significant.

In the present study, it was observed that as the number of male children increased the unmet need for family planning also increased significantly ( $P<0.05$ ) and similar trend was also observed for female children. Similar results were observed in previous study by Prusty<sup>18</sup> in Jharkhand, Chhattisgarh and Madhya Pradesh while Pal et al<sup>20</sup> in urban slums of Lucknow, reported high unmet need with less number of sons. In the present study, most common reason for unmet need for family planning was "postponed until another time" (31.63%), followed by unwillingness of husband (13.26%), opposition by family (10.20%), fear of side effects (8.16%), indifference (7.14), religious beliefs (7.14%), unaware of need (6.12%), myths and misconceptions (6.12%), place too far (5.10%) and some other reasons. In previous studies by Lata et al<sup>15</sup> at Kishanganj, Bihar, Puri et al<sup>21</sup> at urban slum of Delhi and Yerpude et al<sup>22</sup> in Guntur, Andhra Pradesh found that opposition from husband or family was the most common reason for unmet need.

## CONCLUSIONS

In our study the unmet need for family planning was more as compared to national and state average showing a need for an effective education campaign among the study population. Lack of motivation and obstacles were the main causes of unmet need for family planning which can be overcome by awareness and education campaign.

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