

## Original Research Article

# Assessment of unmet need for family planning and its determinants in a rural block of Haryana

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## ABSTRACT

**Background:** Unmet need represents the gap between women's reproductive intentions and their contraceptive behavior. Meeting the unmet need for family planning would help to reduce the mortality and morbidity from unwanted pregnancies. Objectives of the study were to assess the unmet need for family planning and its determinants among married rural women.

**Methods:** The present study was community based cross-sectional study conducted in rural area of Haryana from September 2015 to August 2016 among 500 currently married women (18-49 years).

**Results:** The unmet need for family planning was 19.2% (4.8% spacing and 14.4% limiting). Education, occupation and desirable number of children were significantly associated with unmet need for family planning. The commonest reason for not using contraception among those with unmet need was fear of side-effects (37.5%) followed by in-laws disapproval (21.9%) and others.

**Conclusions:** The unmet need for family planning was high. Women's education and empowerment by protecting their health, wellbeing and rights, including their reproductive rights would prove to be beneficial.

**Keywords:** Unmet need, Contraceptives, Family planning, Education

## INTRODUCTION

Every day about 830 women die from preventable causes related to pregnancy and childbirth. 99% of these maternal deaths occur in developing countries.<sup>1</sup> Pregnancies that occur too early, too late or too frequently can lead to illness during pregnancy and complications at the time of birth. When these pregnancies result in births, they contribute to higher fertility rates and population growth.<sup>2</sup>

Unmet need for family planning is a valuable concept that is widely used for advocacy, development of family planning policies, implementation and monitoring of

family planning programmes worldwide. 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.<sup>3</sup> Once derived, the figure of unmet need for family planning can be broken down into unmet need for spacing (women who want a child after two or more years) and unmet need for limiting (women who want no more children).

It has been estimated that there are 225 million women in the world who want to use safe and effective family planning methods but are unable to do so because they lack access to information, services, or the support of

their partners or communities. Most of these women with an unmet need for contraceptives live in 69 of the poorest countries on earth.<sup>4</sup>

Unmet need has received an unprecedented level of scrutiny since it is included in Millennium Development Goals as target 5.6 i.e. Achieve, by 2015, universal access to reproductive health.<sup>5</sup> Recently the Sustainable Development Goals have also focused on reproductive health issues and gender equity in its target 3.7 and 5.6.<sup>6</sup>

In 2015, 57% of married or in-union women of reproductive age used a modern method of family planning while the unmet need was reported as 12%.<sup>5</sup> According to NFHS-3, the unmet need for family planning for India was 12.8% including 6.2% for spacing and 6.6% for limiting.<sup>7</sup> NFHS-4 Haryana reported it as 9.3% (3.8% for spacing and 5.5% for limiting).<sup>8</sup>

Unmet need represents the gap between women's reproductive intentions and their contraceptive behavior. Increasing access to family planning is a cost-effective intervention that would reduce maternal and newborn health related costs by US\$11.3 billion annually apart from averting 19 million unsafe abortions and 29% maternal deaths.<sup>9,10</sup> With these issues in background, this study was planned with the aim to assess the unmet need for family planning and its determinants among women in rural areas.

## METHODS

### Study design

Community based cross-sectional study.

### Study area

Rural area of block Lakhan Majra of district Rohtak (Haryana).

### Study subjects

Currently married women in the reproductive age group (18-49 years), residing in the study area for more than one year and consenting to participate in the study. All those women who were affected with any critical/terminal illness or other co-morbid conditions were excluded.

### Study period

One year (September 2015 to August 2016).

### Sample size

Assuming the prevalence of unmet need for family planning as 28.8% (as per DLHS-4 Rohtak) and allowable error of 15% at level of significance of 95%,

and using the formula  $N=4pq/E^2$ , the calculated sample size (N) was 440 but for the purpose of the study, a sample size of 500 eligible subjects was taken.<sup>11</sup>

### Sampling technique

Out of the 20 subcentres under a CHC, 10 subcentres were randomly selected. The sample size of 500 subjects was equally divided and thus, 50 study subjects were selected from each subcentre by systematic random sampling.

### Study tool

Pre-designed, pretested and semi-structured interview schedule. Data analysis was done using MS Excel 2007 and SPSSv20.0. Appropriate statistical tests were applied.

## RESULTS

**Table 1: Distribution of study participants according to unmet need for family planning.**

Unmet need for family planning	N	Percentage (%)
Absent	404	80.8
Present	96	19.2
Total	500	100

Table 1 shows that 96 participants (19.2%) had unmet need for family planning out of which 24 participants had unmet need for spacing (4.8%) while 72 participants had unmet need for limiting (14.4%).

**Table 2: Reasons for unmet need for family planning (n=96).**

Reasons for unmet need for family planning	N	Percentage (%)
Husband's disapproval	8	8.3
Lack of knowledge	12	12.5
Fear of side-effects	36	37.5
Inconvenient to use	19	19.8
In-laws disapproval	21	21.9
Total	96	100

Among the participants with unmet need for family planning, the commonest reason for not using contraception was fear of side-effects (37.5%) followed by in-laws disapproval (21.9%) and other reasons (Table 2).

In this study, mean age of study participants was  $29.2 \pm 6.9$  years while the minimum and maximum ages were 18 years and 48 years respectively (range=30 years). The purpose of taking the minimum age as 18 years in this study was to include all the legally married females i.e. those married after the age of 18 years.

Unmet need for family planning was highest among 35-44 years (20.7%), illiterates (29.1%), labourers (50%)

and lowest among those who desire to have two children (16%) (Table 3).

**Table 3: Distribution of unmet need for family planning according to various determinants.**

Variables		Unmet need for family planning absent	Unmet need for family planning present	
<b>Age group (years)</b>	18-24	109 (81.3)	25 (18.7)	$\chi^2$ - 2.745, df-3, p=0.433
	25-34	201 (79.8)	51 (20.2)	
	35-44	69 (79.3)	18 (20.7)	
	45-49	25 (92.6)	2 (7.4)	
<b>Educational status</b>	Illiterate	73 (70.9)	30 (29.1)	$\chi^2$ - 13.442, df-4, p=0.009
	Primary	79 (81.4)	18 (18.6)	
	Middle	72 (76.6)	22 (23.4)	
	High school	141 (87)	21 (13)	
	Graduate and above	39 (88.6)	5 (11.4)	
<b>Occupation</b>	Housewife	369 (81.6)	83 (18.4)	$\chi^2$ - 21.331, df-2, p<0.01
	Labourer	13 (50)	13 (50)	
	Service	22 (100)	0 (0)	
<b>Desirable number of children</b>	1	17 (63)	10 (37)	$\chi^2$ - 10.205, df-2, p=0.006
	2	295 (84)	56 (16)	
	3 or more	92 (75.4)	30 (24.6)	

(Figures in parentheses represent percentage)

**Table 4: Independent association of various variables with unmet need for family planning.**

Variables	cOR (95% C.I.)	aOR (95% C.I.)	P value
<b>Education</b>			
Illiterate	Reference		0.638
Primary	0.554 (0.285-1.078)	0.711 (0.342-1.478)	0.360
Middle	0.744 (0.392-1.409)	0.940 (0.459-1.923)	0.865
High school	0.362 (0.194-0.677)	0.596 (0.287-1.238)	0.165
Graduate and above	0.312 (0.112-0.868)	0.774 (0.243-2.463)	0.665
<b>Occupation</b>			
Housewife	Reference		0.001
Labourer	4.446 (1.988-9.942)	2.817 (1.133-7.007)	0.026
Service	0.008 (0.005-0.011)	0.004 (0.003-0.007)	0.998
<b>Socio-economic status (according to Udai Pareek's socio-economic scale)</b>			
Upper	Reference		0.716
Upper Middle	0.003 (0.002-0.006)	0.005 (0.001-0.008)	1.000
Lower middle	0.319 (0.128-0.797)	0.764 (0.264-2.216)	0.621
Upper lower	0.274 (0.131-0.571)	0.636 (0.271-1.495)	0.300
Lower	0.382 (0.198-0.733)	0.664 (0.318-1.385)	0.275
<b>Number of daughters</b>			
0	Reference		0.013
1-2	1.940 (1.102-3.413)	2.330 (1.245-4.362)	0.008
3 or more	3.575 (1.624-7.869)	3.373 (1.320-8.623)	0.011
<b>Knowledge regarding contraception</b>			
Absent	Reference		
Present	0.200 (0.107-0.374)	0.233 (0.113-0.479)	0.000
<b>Concordance between husband and wife regarding number of children</b>			
No	Reference		
Yes	0.281 (0.143-0.549)	0.260 (0.123-0.551)	0.000

On applying binary logistic regression, it was found that the odds of having unmet need for family planning in the

laborer category were three times (aOR-2.817:C.I.-1.133-7.007) as compared to housewives. Those women

engaged in service had lower odds of unmet need for family planning.

It was reported that as the number of daughters increased, the odds of having unmet need for family planning increased. Women who knew about contraception had lower odds of having unmet need for family planning (aOR=0.233; C.I.-0.113-0.479) in comparison to those who did not know about contraception. Among the couples with concordance regarding number of children, there were lesser chances of unmet need for family planning (aOR=0.260; C.I.-0.123-0.551) in comparison to discordant couples. Thus, it can be concluded that knowledge regarding contraception and concordance between husband and wife regarding number of children had a protective effect on unmet need for family planning (Table 4).

## DISCUSSION

Our study reported that the total unmet need for family planning was 19.2% comprising of 4.8% and 14.4% as unmet need for spacing and limiting respectively. The MDG Report 2015 and NFHS-3 India reported it to be around 12% approximately.<sup>5,7</sup> Our study reported a higher level of unmet need for family planning in comparison to worldwide and Indian data possibly because of regional differences and a smaller sample size. Our study reported a higher level of unmet need for family planning in comparison to NFHS-4 Haryana but lower as regards to DLHS-4 Rohtak which may be because of the fact that our study was restricted to rural population in a single block of Haryana.<sup>8,11</sup> Rasheed et al from Uttar Pradesh, Chaudhary et al from Rajasthan and Rajkumari et al from Manipur reported the unmet need for family planning as 25.9%, 31.15% and 23.9% respectively.<sup>12-14</sup> Mathews et al from Kerala reported a lower (8%) unmet need for family planning in comparison to our study.<sup>15</sup> It could be so because women in the southern states literate and enjoy more reproductive rights.

Our study reported that unmet need for family planning was highest in 35-44 years age group (20.7%). Rasheed et al concluded that women below 35 years of age had higher unmet need for family planning in comparison to those above 35 years (p value <0.001).<sup>12</sup>

In our study it was observed that as the educational status improved, the unmet need for family planning decreased (p= 0.009). Relwani et al reported that those who were educated below senior secondary level had 27% unmet need for family planning while those educated above senior secondary had 11% (p value <0.001) which is similar to our study findings.<sup>16</sup> Vohra et al from Rajasthan reported that unmet need for family planning was comparatively lower in better educated study subjects as compared to those less educated.<sup>17</sup> It may be concluded that women education and empowerment by protecting their health, wellbeing and rights, including

their reproductive rights would greatly reduce the burden of unmet need for family planning.

Our study reported that the unmet need for family planning was highest among labourers (50%) followed by housewives (18.4%) (p<0.01). Pal et al found that unmet need for family planning was 66.3% among non-working/housewives and 51.9% among working subjects (p = 0.046).<sup>18</sup> Kumar et al found that the odds of having unmet need for family planning in working subjects was lower (aOR:0.990 C.I. 7.17-0.27) as compared to the non-working subjects.<sup>19</sup> It was also found in our study that the unmet need for family planning was highest among lower SES (38%) possibly because of inadequate access to the contraceptive methods. Vohra et al had also made similar observations.<sup>17</sup>

It was reported that the unmet need for family planning was lowest among those who desire to have two children (16%) in comparison to those who desire a larger family size. Kumar et al reported that working women desired to have lesser children in comparison to those non-working (p<0.05).<sup>20</sup> Thus a favourable attitude towards desirable family size (i.e. ≤2) shows the inclination towards the adoption of family planning methods. Our study reported that unmet need for family planning was high among those who had more daughters (p=0.004). This may be because of a strong preference for sons in Northern India. It has been seen that those women who had already borne their desired number of sons would like to restrict childbearing and adopt use of contraceptive methods while those with daughters only might not have achieved their desired family composition thus, not so receptive to the use of family planning measures.

Shrivastava et al found that the odds of having unmet need for family planning was around six times (aOR=6.22 C.I.-3.456-11.17) among those whose husbands had a discouraging behavior towards contraceptive methods as compared to those who encouraged.<sup>21</sup> Our study had also reported similar findings.

Our study found that the commonest reason for non-usage of contraceptive methods was fear of side-effects (37.5%) followed by in-laws disapproval (21.9%). Patel et al in their study found that lack of knowledge (55%) and ignorance (25%) as the common reasons.<sup>22</sup> Wasnik et al had also reported similar findings.<sup>23</sup>

## CONCLUSION

Our study reported that the unmet need for family planning was high in the study area. A multidimensional approach is required to tackle this issue. Expanding women's choice of methods by increasing access to more methods and newer contraceptives with informed choice, follow-up and counselling may prove to be beneficial. Improving women's access to education and encouraging continuous and constant exposure to make them more



aware about family planning methods which requires commitment on the part of different sectors like health, education and mass media. Encouraging spousal communication and male participation in family planning is important in bridging the gap between met and unmet need.

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