## Original Research Article

# Socio-demographic correlates of unmet need for family planning among rural women of Haryana, India

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**ABSTRACT**

**Background:** The continuously growing population not only hampers the socio-economic development but the health of mothers and newborns. Progress made in improving social development in addition to strengthening the ongoing family planning programme will contribute towards the future pace of fertility and decline in unmet need. Objective of present study to assess the unmet need for family planning and role of socio-demographic factors among 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 SES 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%).
**Conclusions:** The unmet need for family planning was high. Women education and empowerment by protecting their health, wellbeing and rights, including their reproductive rights would prove to be beneficial.

**Keywords:** Contraceptives, Education, Occupation, Unmet need

## INTRODUCTION

The continuous increase in population is a serious global concern. India's population grew from 238.4 million in 1901 to 1.21 billion in 2011 making her the second most populous country in the world.[1]

India harbours 17.5% of the world's population in only 2.4% of the global land mass.[2]

In India, population has been realized as a major obstacle for the socio-economic development because it hampers the capabilities of not only the society but also an individual who has to compete to survive among the limited resources.

The need of the hour is to keep a check over the population by limiting child births and promoting contraceptive usage as per the people's requirement. There lies the important concept to address the unmet need for family planning.

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.[3]

Unmet need has received an unprecedented level of scrutiny since it is included in Millennium Development Goals and Sustainable Development Goals with focused on reproductive health issues and gender equity.[4,5]

It has been estimated that there are some 225 million women in the world who want to use safe and effective family planning methods are unable to do so because they lack access to information, services, or the support of their partners or communities.[6]

In 2015, 12% of married or in-union women of reproductive age worldwide wanted to delay or avoid pregnancy but were not using any method of contraception.[4]

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.[7] NFHS-4 Haryana reported it as 9.3% (3.8% for spacing and 5.5% for limiting).[8]

Among the reasons for unmet need for family planning, the role of socio-demographic factors could never be underestimated. Thus, this study aims to determine the unmet need for family planning and role of socio-demographic factors among rural women.

## METHODS

The study was a Community based cross-sectional study carried out at Rural block of Haryana.

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 co-morbid conditions were excluded.

Study period was 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) came out to be 440 but for the purpose of the study, a sample size of 500 eligible subjects was taken.[9]

### Sampling technique

Out of the 20 subcentres under a CHC located in the block, 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.

### Statistical analysis

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 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 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 |

In this study, the mean age of study participants was 29.2±6.9 years while the minimum and maximum ages were 18 years and 48 years respectively (range=30 years). Unmet need for family planning was highest below 35 years of age, illiterates, labourers, scheduled caste, joint family and illiterate husbands.

Table 3 shows that among 96 study 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.

In the study, those educated till high school had lesser odds of having unmet need for family (aOR=0.334:0.151-0.738, pvalue=0.007) planning in comparison to illiterates. Labourer had around 3.5 times (aOR=3.450:1.420-8.382, pvalue=0.006) more odds of having unmet need for family planning with respect to housewives taken as reference category.

## DISCUSSION

Present 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.[4,7] Current 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. Unmet need for family planning as reported in present study was higher in comparison to NFHS-4 Haryana but lower as regards to DLHS-4 Rohtak possibly because of the fact of being restricted to rural population in single block of Haryana.[8,9] 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.[10-12] Mathews et al from Kerala reported a lower (8%) unmet need for family planning in comparison to present study.[13] It could be so because women in the southern states literate and enjoy more reproductive rights.

**Table 2: Distribution of unmet need for family planning according to socio-demographic factors.**

| Socio-demographic factors | | Unmet need for family planning absent | Unmet need for family planning present | Test statistics |
|---|---|---|---|---|
| Age group (years) | 18-34 | 310 (80.3) | 76 (19.7) | $\chi^2$- 0.261 df-1, p value=0.359 |
| | 35-49 | 94 (82.5) | 20 (17.5) | |
| Educational status | Illiterate | 73 (70.9) | 30 (29.1) | $\chi^2$- 13.442, df-4, p value=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) | |
| Occupation | Housewife | 369 (81.6) | 83 (18.4) | $\chi^2$- 21.331, df-2, p value <0.01 |
| | Labourer | 13 (50) | 13 (50) | |
| | Service | 22 (100) | 0 (0) | |
| Caste | Scheduled caste | 160 (76.2) | 50 (23.8) | $\chi^2$- 9.239, df-4, p value=0.055 |
| | Lower caste | 64 (82) | 14 (18) | |
| | Artisan caste | 29 (96.7) | 1 (3.4) | |
| | Prestige caste | 45 (78.9) | 12 (21.1) | |
| | Dominant caste | 106 (84.8) | 19 (15.2) | |
| Socioeconomic status (according to Udai Pareek's Socio-economic scale) | Upper | 1 (100) | 0 (0) | $\chi^2$- 14.107, df-4, p value=0.007 |
| | Upper middle | 46 (83.6) | 9 (16.4) | |
| | Lower middle | 125 (85.6) | 21 (14.4) | |
| | Upper lower | 201 (81) | 47 (19) | |
| | Lower | 31 (62) | 19 (38) | |
| Type of family | Joint | 189 (79.4) | 49 (20.6) | $\chi^2$- 1.892, df-2, p value= 0.388 |
| | Nuclear | 161 (80.5) | 39 (19.5) | |
| | Three generation | 54 (87) | 8 (13) | |
| Husband's educational status | Illiterate | 37 (72.5) | 14 (27.5) | $\chi^2$- 3.351, df-4, p value=0.501 |
| | Primary | 49 (83) | 10 (17) | |
| | Middle | 69 (82.1) | 15 (17.9) | |
| | High school | 192 (80.3) | 47 (19.7) | |
| | Graduate and above | 57 (85) | 10 (15) | |
| Husband's occupation | Unemployed | 11 (91.7) | 1 (8.3) | $\chi^2$- 10.110, df-6, p value=0.12 |
| | Labourer | 157 (75.4) | 51 (24.5) | |
| | Caste occupation | 8 (88.9) | 1 (11.1) | |
| | Business | 55 (90.2) | 6 (9.8) | |
| | Independent professional | 14 (73.7) | 5 (26.3) | |
| | Cultivation | 92 (84.4) | 17 (15.6) | |
| | Service | 67 (81.7) | 15 (18.3) | |

Figures in parentheses represent percentage

**Table 3: Distribution of study participants according to 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 |

In present study it was reported that women below 35 years of age had higher unmet need for family planning in comparison to those above 35 years which is similar to the findings of Rasheed et al (p value <0.001).[10] Current study observed that as the educational status increased, the unmet need for family planning decreased (p value= 0.009). Relwani et al reported that 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 finding of present study.[14] Vohra et al reported that unmet need was comparatively lower in better educated study subjects as compared to less educated .[15] Thus, education is an important determinant for unmet need for family planning.

**Table 4: Independent association of socio-demographic factors with unmet need for family planning.**

| Socio-demographic factors | aOR (95% C.I.) | p value |
|---|---|---|
| **Age group (years)** | | |
| 18-24 | Reference | 0.342 |
| 25-34 | 0.906 (0.511-1.605) | 0.734 |
| 35-44 | 0.882 (0.413-1.885) | 0.746 |
| 45-49 | 0.212 (0.040-1.121) | 0.068 |
| **Education** | | |
| Illiterate | Reference | 0.066 |
| Primary | 0.557 (0.266-1.165) | 0.120 |
| Middle | 0.725 (0.344-1.530) | 0.399 |
| High school | 0.334 (0.151-0.738) | 0.007 |
| Graduate and above | 0.295 (0.080-1.081) | 0.065 |
| **Occupation** | | |
| Housewife | Reference | 0.024 |
| Labourer | 3.450 (1.420-8.382) | 0.006 |
| Service | 0.009 (0.005-0.021) | 0.998 |
| **Caste** | | |
| Scheduled caste | Reference | 0.336 |
| Lower caste | 0.878 (0.422-1.825) | 0.727 |
| Artisan caste | 0.190 (0.024-1.498) | 0.115 |
| Prestige caste | 1.815 (0.642-5.130) | 0.261 |
| Dominant caste | 1.407 (0.491-4.033) | 0.525 |
| **SES** | | |
| Upper | 0.878 (0.422-1.825) | 1.000 |
| Upper middle | 0.190 (0.024-1.498) | 0.217 |
| Lower middle | 1.815 (0.642-5.130) | 0.073 |
| Upper lower | 1.407 (0.491-4.033) | 0.068 |
| Lower | Reference | 0.389 |
| **Type of family** | | |
| Joint | Reference | 0.124 |
| Nuclear | 0.647 (0.597-1.008) | 0.541 |
| Three generation | 0.843 (0.671-1.214) | 0.663 |
| **Husband's educational status** | | |
| Illiterate | Reference | 0.469 |
| Primary | 1.062 (0.356-3.167) | 0.913 |
| Middle | 1.292 (0.470-3.549) | 0.619 |
| High school | 1.980 (0.762-5.144) | 0.161 |
| Graduate and above | 2.217 (0.618-7.949) | 0.222 |
| **Occupation** | | |
| Unemployed | Reference | 0.496 |
| Labourer | 2.989 (0.355-25.144) | 0.314 |
| Caste occupation | 3.470 (0.163-74.030) | 0.426 |
| Business | 1.289 (0.134-12.442) | 0.826 |
| Independent professional | 4.486 (0.413-483667) | 0.217 |
| Cultivation | 2.637 (0.283-24.588) | 0.395 |
| Service | 3.571 (0.403-31.610) | 0.253 |

Present study reported that unmet need for family planning was absent among service class (p value <0.01). Pal et al found that the unmet need was 66.3% among non-working/housewives and 51.9% among working subjects (p value= 0.046).[16] Kumar et al in their study 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.[17] It

was also found in present study that the unmet need was highest among lower SES (38%) because of poor access to the contraceptive methods. Vohra et al had also made similar observations.[15] In present study highest unmet need for family planning was found in scheduled caste (23.8%). Rasheed et al reported unmet need among general caste, scheduled caste and other backward caste as 22.4%, 28.7% and 28.9% respectively.[10] The

difference between the findings of the studies could be because of different classification of caste used in these studies. Present study reported that unmet need was highest among joint family which corroborate with the findings of Relwani et al and Chaudhary et al.[11,14]

Current study found that unmet need for family planning was highest among illiterate husbands (72.5%). It could have been possibly because educated and working husbands have greater awareness regarding the benefits of use of contraception and thus an encouraging behavior towards the adoption of family planning methods. Jain et al (2014) from Maharashtra reported that the unmet need for family planning among those women whose husbands were illiterate was 57.7% while among the literates was 28.1% (p value <0.001).[18] Verma et al found that unmet need was higher among unemployed (33.3%) as compared to skilled workers (27.7%).[19]

Present study found the common reasons for non-usage of contraceptive methods as 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%) were the common reasons.[20] Wasnik et al had also reported similar findings.[21]

## CONCLUSION

Present study reported that unmet need for family planning was high in the study area. This issue warrants for a multidimensional approach. Women's education and employment seem to be one of the major determinants of unmet need for family planning thus women empowerment including their reproductive rights is the need of the hour. Promoting equality of sexes, providing equal rights and opportunities to the girl child coupled with accessible, affordable and wider range of contraceptives through well planned and efficient family planning programme may contribute as possible solutions.

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