Determinants of the unmet need for family planning among women of Jaipur, Rajasthan

Rajaat Vohra, Anusha Vohra¹, Suchi Sharma, Madan Singh Rathore, Bhoopendra Nath Sharma, Mahesh Prasad Sharma

Departments of Community Medicine and ¹Pharmacology, Mahatma Gandhi Medical College and Hospital, Jaipur, Rajasthan, India

ABSTRACT

Background: More than 100 million women in less developed countries or about 17% of all married women would prefer to avoid pregnancy, but are not using any form of family planning. Despite the government's many efforts, the unmet need for family planning in India is still 12.8%. The present study is aimed to assess prevalence of the unmet need for family planning, its determinants, and the reasons for the unmet need for family planning.

Materials and Methods: A sample size of 500 was divided equally among the rural and urban areas. A simple random technique was used to select the first household for the survey. A predesigned and pretested questionnaire was used to record the information. Data was entered on Microsoft Access and analyzed using the statistical software SPSS version 11.5 for Windows Vista. The chi square test was used for finding the association and trends.

Results: In the present study, 35% of the population had an unmet need, of which 58.28% belonged to rural area, while 41.71% belonged to the urban area. The significant determinants associated with the unmet need for family planning were religion, type of family, husband's education and occupation, socioeconomic class, women's age, women's education and occupation, exposure to mass media, and healthcare facility where services were provided. Overall, lack of motivation and obstacles were the major reasons for the unmet need. Conclusion: Improved access to family planning services, better education, improved standard of living, and higher exposure to mass media can significantly decrease the unmet need of family planning.

Key words: Determinants, unmet need, urban and rural areas

INTRODUCTION

More than 100 million women in less developed countries or about 17% of all married women would prefer to avoid pregnancy, but are not using any form of family planning. Demographers and health specialists refer to these women as having an ‘unmet need’ for family planning — a concept that has influenced the development of family planning programs for more than 20 years. Over the past decade, the rising rates of contraceptive use have reduced the unmet need for family planning in most countries. In some countries, however, the unmet need remains persistently high (more than one-fifth of married women) or is increasing, indicating that greater efforts are needed to understand and address the cause of the unmet need.

The unmet need is especially high among groups such as:
- Adolescents
- Migrants
- Urban slum dwellers
- Refugees
- Women in the postpartum period
Numerous studies reveal that a range of obstacles other than physical access to services prevents women from using family planning.\[6-10\] According to findings from surveys and in-depth studies, the reasons for the unmet need for family planning are:

- Difficulty in access to methods and quality of family planning services
- Health concerns about contraceptives and side effects
- Lack of information
- Opposition from husbands, families, and communities
- Little perceived risk of pregnancy

Despite the government’s many efforts, the unmet need for family planning in India is still 12.8%. The present study is aimed to assess prevalence of the unmet need for family planning, its determinants, the reasons for the unmet need for family planning, and to suggest suitable measures to improve the utilization of contraceptive methods.

**MATERIALS AND METHODS**

It was a community-based, cross-sectional study, carried out in an area covered under the Rural Health Training Center (RHTC) and Urban Health Training Center (UHTC) of a medical college. Due approval was taken from the Institutional Ethical Committee prior to undertaking the study.

**Sample size**

Sample size was calculated by the formula:

\[
n = \frac{z^2 \times p \times q}{d^2}
\]

where:
- \(n\) = Sample size
- \(z\) = statistic at a level of significance, that is, 1.96
- \(p\) = expected prevalence
- \(q\) = 100 - \(p\)
- \(d\) = absolute error

As per National Family Health Survey (NFHS) 3, the unmet need for family planning in India is 12.8%. Thus \(p\) is 12.8. \(q\), when calculated, accounts to 87.2.

Taking 3% as the absolute error, the sample size is found to be 476.42.

First, the sample size of 500 was divided equally among the rural and urban areas. A simple random technique (using the last digit of a currency) was used to select the first household for the survey. Then starting from the first household, all the houses where a woman of reproductive age group was available were surveyed, till the desired number of the sample size was met.

A door-to-door survey was done for three months, from June 2013 to August 2013, for collection of the necessary information. Help was taken from the Auxiliary Nurse Midwife (ANM), Angan Wadi Worker (AWW), Accredited Social Health Activists (ASHA), and social workers from the Department of Community Medicine, to build a rapport with the local people. 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. Women belonging to reproductive age group (15-45 years of age) were interviewed. A predesigned and pretested questionnaire was used to record the information.

**Inclusion criteria**

1. Women residing for at least six months in the area were considered as residents and included in the study.
2. If a woman’s native place was different from her present place of residence, but her duration of stay here was more than six months, she was included in the study.
3. If more than one woman of reproductive age group was present in the family, then only one woman was included in the study.

**Exclusion criteria**

1. Women living in the area for less than six months were not included in the study.
2. Women who were non-cooperative or who refused to provide the necessary information were not included in the study.

**Statistical analysis**

The data was entered on Microsoft Access and was analyzed using the statistical software SPSS version 11.5 for Windows Vista. The chi-square test was used for finding the association and trends. A \(P\)-value of less than 0.05 was considered to be statistically significant.

**RESULTS**

Table 1 shows the prevalence of the unmet need for family planning among the study population. A total of 35% of the population had the unmet need, whereas, 65% of the population did not have the unmet need for family planning. Out of the total population who had the unmet need, 58.28% belonged to the rural area and 41.71% belonged to the urban area.

| Unmet need of family planning | Urban \(n\) (%) | Rural \(n\) (%) | Total \(n\) (%) |
|------------------------------|----------------|----------------|----------------|
| Yes                          | 73 (41.71)     | 102 (58.28)    | 175 (35)       |
| No                           | 177 (54.46)    | 148 (45.53)    | 325 (65)       |
It clearly shows that the unmet need was higher in the rural area (58.28%) in comparison to the urban area (41.71%).

The determinants of the unmet need for family planning are shown in Table 2. Religion and type of family were statistically significant determinants for the unmet need. The unmet need was seen in 61.29% Muslims in comparison to 33.26% Hindus. The unmet need was higher in a nuclear family (32.18%) in comparison to a joint family (7.52%). Husband’s education and occupation were also found to be statistically significant factors associated with the unmet need. Couples with a postgraduate husband had an unmet need of 17.97% in comparison to an illiterate husband (42.85%). A professional husband had an unmet need of 10.99%, while an unemployed husband had an unmet need as high as 66.66%.

Table 3 shows the socioeconomic and housing characteristics associated with the unmet need for family planning. Social class and overcrowding were statistically significant predictors of the unmet need for family planning. Couples belonging to a higher social class I had an unmet need of only 19.44%, while the lower social class V had an unmet need of 49.31%. Couples (46.82%) living in overcrowded houses had an unmet need.

Table 4 shows the individual characteristics of the females associated with the unmet need for family planning. Age had an inverse relation with the unmet need for family planning. Women in the 18-30-year age group had a higher unmet need of 71.02% in comparison to the more-than-40-years age group, with an unmet need of only 13.71%. The unmet need decreases with the number of children the couples have. The unmet need in couples with no children was 66.66%, while in those having five or more than five children, it was only 16.12%. Educational status and occupation were found to be statistically significant determinants of the unmet need for family planning. The unmet need in unemployed women was 36.06%, while in professional women it was 25.74%.

Exposure to mass media and health facilities where services were provided were found to be statistically significant predictors of the unmet need [Table 5]. Those women who were exposed to mass media had an unmet need of only 32.91% in comparison to 94.11% women, who were not exposed to mass media. Women (40.76%), who took services from the government health facility had an unmet need, in comparison to 28.75% women who took services from a private health facility.

Table 6 shows the reasons for the unmet need for family planning. In urban areas, the main reason for the unmet need were obstacles (familial disapproval and others) (52.05%) and postponement until another time (32.87%), while in rural areas, postponement until another time (39.21%) and familial disapproval (29.41%) were the major reason for the unmet need for family planning. Overall, lack of motivation and obstacles were the major reasons for the unmet need.
In the present study, the prevalence of the unmet need for family planning was 35%. Out of the total population having an unmet need, 58.28% of the population belonged to the rural area and 41.71% of the population belonged to the urban area. In a study by Sengupta and Das, in Rajasthan, the highest unmet need was seen in the Dungarpur district (42%), while the lowest was seen in the Hanumangarh district (8%). In his study, out of all the Empowered Action Group (EAG) states, the higher unmet need for family planning was seen in Jharkhand (39%), Bihar (37%), and Uttar Pradesh (35%).[1] Devi et al. in a study on the unmet need in Uttar Pradesh found a prevalence of 30% among women of reproductive age.[2] Indu in her study in the Trivandrum Corporation area found the prevalence of unmet need in slums to be 17%.[3]

Religion and type of family were statistically significant determinants of the unmet need in the present study. The unmet need was seen in 61.29% Muslims in comparison to 33.26% Hindus. He unmet need was higher in a nuclear family (32.18%) in comparison to a joint family (7.52%). The husband’s education and occupation were also found to be statistically significant factors associated with the unmet need. Couples with a postgraduate husband had an unmet need of 17.97% in comparison to those with an illiterate husband (42.85%). Couples with a professional husband had an unmet need of 10.99%, while those with an unemployed husband had an unmet need as high as 66.66%. Social class and overcrowding were statistically significant predictors of the unmet need for family planning. Couples belonging to social class I had an unmet need of only 19.44%, while the social class V had an unmet need of 49.31%.
Kanitkar and Murthy in a study on contraceptive use in Rajasthan and Bihar found a clear positive relationship between the standard of living and use of contraception.\(^{[4]}\) Bhende and Kanitkar attributed the low standard of living of people in developing countries to lower use of contraception and high fertility.\(^{[5]}\)

In the present study, age had an inverse relation to the unmet need for family planning. Women in the 18-30-year age group had a higher unmet need of 71.02\% in comparison to the above-40-year age group, with an unmet need of only 13.71\%. The unmet need decreased with the number of children the couples had. The unmet need in couples with no children was 66.66\%, while with those having five or more than five children was only 16.12\%. The educational status and occupation of the women were found to be statistically significant determinants of the unmet need for family planning. The unmet need in women who were illiterate was 50.54\%, while in women who were postgraduates it was 20.89\%. The unmet need in unemployed women was 36.06\%, while in professional women it was 25.74\%. Exposure to mass media and a health facility where services were provided were also found to be statistically significant predictors of the unmet need. Those women who were exposed to mass media had an unmet need of only 32.91\% in comparison to 94.11\% women who were not exposed to mass media; 40.76\% of the women who took services from a government health facility had an unmet need in comparison to 28.75\% of women who took services from a private health facility. Devi \etal\. in a study on the unmet need in Uttar Pradesh found that contraceptive usage was much less in women with fewer living sons. It was 31\% in women with two or more living sons than in women with fewer living sons (5\% for no living sons). This is because of a strong preference for sons in Northern India. It has been seen that those women who have already borne enough sons would like to stop childbearing and women with few sons would like to continue childbearing.\(^{[2]}\)

Basu in his study states that the work status of women and her economic independence can be considered as an indicator of the status of women in the household. Working women have higher opportunities to interact with the outside world, which exposes her to new ideas, which could bring a change in her attitudes toward family size and the use of contraception. Economic independence also enhances a woman’s role in the decision-making process, which ultimately leads to lower family size and greater use of contraception. Economic independence also enhances a woman’s role in the decision-making process, which ultimately leads to lower family size and greater use of contraception.\(^{[6]}\)

In the present study, in an urban area, the main reason for the unmet need were obstacles (52.05\%) and postponement until another time (32.87\%), while in rural areas postponement until another time (39.21\%) and familial disapproval (29.41\%) were the major reasons for the unmet need for family planning. Overall, lack of motivation and obstacles were the major reasons for the unmet need.

Analysis of data from 13 DHS surveys by Bongaarts and Bruce showed that lack of knowledge, fear of side effects, and husband’s disapproval, were the principal reasons for nonuse among women, who were otherwise motivated to use family planning.\(^{[7]}\) A study by Westoff and Bankole, using the DHS-II data, indicated that lack of information about family planning, opposition to family planning, and ambivalence about future childbearing were the principal factors responsible for the unmet need for family planning.\(^{[8]}\) A study by Pav and Boadi, among Ghanaian women, found that a significant number of women mentioned fertility-related reasons (infrequent sex, menopausal/subfecundity, postpartum/breastfeeding, and wanting more children), as the principal reasons for nonuse. Method-related reasons, particularly fear of side effects of method use, were also cited as reasons for nonuse.\(^{[9]}\)

A study conducted in Bihar by Prasad \etal\. states that improved access to services, expanded choice of available methods, and increased knowledge of family planning were the most important factors that had increased the acceptance of contraception. However, opposition from husband and in-laws, the desire for at least two sons, and lack of trust of voluntary health workers from a different caste or religion were obstacles to the acceptance of contraception.\(^{[10]}\) Indu in her study in the Trivandrum Corporation area found that extended family, poor knowledge of family planning, poor informed choice in Family Planning, and poor male participation were found to be associated with a high unmet need for Family Planning.\(^{[11]}\) Sengupta and Das\(^{[1]}\) in their study states of Bihar, Jharkhand, and Madhya Pradesh, cited opposition by husband as the most prominent reason for not using the contraception. In Chhatisgarh, Uttarakhand, and Uttar Pradesh, women did not use any contraceptives because of their health-related problems. The women in Madhya Pradesh and Jharkhand reported that lack of knowledge is one of the most prominent reasons for not using contraceptives.\(^{[1]}\)

**CONCLUSION**

In the present study, 35\% of population had the unmet need. Out of the population who had the unmet need, 58.28\% belonged to the rural area, while 41.71\% belonged to the urban area.

In the urban area, the main reason for an unmet need were obstacles (familial disapproval and others) (52.05\%)
and postponement until another time (32.87%), while in rural areas, postponement until another time (39.21%) and familial disapproval (29.41%) were the major reasons for the unmet need for family planning. Overall, lack of motivation and obstacles were the major reasons for the unmet need.

Thus, improved access to family planning services, better education, improved standard of living, and higher exposure to mass media, can significantly decrease the unmet need of family planning.

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