Original Research Article

Unmet need for family planning among eligible couples in urban slums of Prayagraj District, Uttar Pradesh, India

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ABSTRACT

Background: Unmet need for family planning is the major problem in developing countries. The use of family planning methods is better in urban areas as compared to rural areas and it is worse in urban slums. Thus unmet need for family planning is more in urban slums. Aims and objectives: To find out the prevalence of unmet need and to estimate the factors associated with unmet need for Family Planning.

Methods: A community based cross sectional study was carried out on eligible couples selected from urban slums of Allahabad district by multistage random sampling and were interviewed by using pre-tested schedule. Data analysis was done by using SPSS version 21.

Results: The study revealed that 22.47% (80/356) of eligible couples had unmet need for family planning. The most common reason for unmet need was irregular supply of family planning methods (31.25%), followed by opposition from husband/family members (21.25%), fear of side effects of using any family planning methods (17.25%), lack of knowledge regarding any family planning methods (13.75%). Unmet need for family planning was found to be associated with number of live births, education of female participants and occupation of male participants.

Conclusions: The unmet need for family planning is high in slums areas and to improve the condition awareness should be created.

Keywords: Family Planning, Family planning methods, Unmet need

INTRODUCTION

The term “unmet need” was coined in the late 1970s to describe the seemingly discrepant behavior of women who want to avoid pregnancy but are not using contraception.¹ One of the first published use of the term “unmet need” appeared in 1977.² Many women who are sexually active would prefer to avoid becoming pregnant, but are not using any method of contraception (including use by their partner). These women are considered to have an “unmet need” for family planning.² Unmet need indicates the potential demand for family planning services and the likely impact on fertility if the demand is met effectively.

Unmet need is especially high among groups such as adolescents, migrants, urban slum dwellers, refugees, women in the postpartum period. In India, more than 75% of pregnancies are unplanned and a quarter of them are undesired.³ Annually almost 11 million abortions take place in the country, and more than half of these are unsafe, accounting to high maternal morbidity and mortality rates.³ In India, unmet need for family planning was 13.9% (NFHS 3), now reduced to 12.9% (NFHS 4) and unmet need for spacing was 6.1% (NFHS 3), now...
reduced to 5.7% (NFHS 4). In Uttar Pradesh unmet need for family planning was 23.1% (NFHS 3), now reduced to 18.1% (NFHS 4), in rural UP was 19.6% and in urban UP was 13.4%. But in one study in slums of Lucknow city (2014-2015) was 69% which was higher as compared to urban and rural areas of UP.

METHODS

Study design
A community based cross-sectional study was conducted from October 2016 to September 2017.

Study setting
The study was done in urban slums of Prayagraj district. There are total 292 urban slums in Prayagraj (185 notified and 107 non notified slums) with total population of about 6.8 lakhs (NUHM 2013-2014).

Study population
Among eligible couples (age 15-49 years) selected from urban slums of Prayagraj district.

Inclusion criteria
The eligible couples who were residing in that particular slum for more than one year and were not recently migrated were included in the study.

Exclusion criteria
The eligible couples in which women had attained early menopause, women with complaints of infertility, women who were pregnant and newly married, before the gauna were excluded from the study (gauna is an eastern India custom of child marriage. The ceremony takes place several years after marriage. Before the ceremony the bride stays at her natal home).

Sample size
Total population of urban slums in Prayagraj district=6,80,000. And population proportion of eligible couples is 164/1000 (NFHS 2001, UP).

So, the population of eligible couples in urban slums of Prayagraj district= 111520.

Sample size formula (n) = \( \frac{N(z)^2 P(1-P)}{d^2(N-1)+z^2P(1-P)} \)

N=111520 (Population of eligible couples)
P= 29.3% (Prevalence for unmet need of family planning practices in Uttar Pradesh NFHS III)

Z=1.96
d = 5% (allowable error)

\[ 111590 \times (1.96)^2 \times 0.293 \times 0.707/ (0.05)^2 \times 111589 + (1.96)^2 \times 0.293 \times 0.707 = 90554.24/279.65 = 323.81 (324) \]

The sample size was adjusted to compensate for non-response rate of 10%. Hence, a sample size of 356 (324+10% x 324)

Sampling technique
The participants were selected by multistage random sampling. In the first stage, slums were selected (Selected slums were- Dharariya, Nawada, Kydganj Dharkar, Ganga Nagar, Takiya Chamarauti, Alropolbagh). For this, Prayagraj city was divided into four quadrants.

From each quadrant, one slum was selected randomly. In the second stage, eligible couples were selected from within the selected slums by starting from a random house and moving in the fixed direction. Consecutive households were selected and all eligible couples in every household visited was enumerated after taking the informed consent and explaining the objective of the study and interviewed till 89 couples could be interviewed in each slum in order to complete sample size. In case a total of 89 eligible couples could not be interviewed in one slum (because of no-cooperation, non-response or total population <1000) in a selected slum, another nearby slum of the same quadrant was selected to complete the sample size.

Data collection
A semi-structured, pretested and predesigned questionnaire was used for collection of data.

The questionnaire was divided into three parts. First part consist of detailed sociodemographic characteristics- age, gender, education, occupation and Socio economic status of study population. Second part consist of detailed questions of knowledge and usage and unmet need for family planning methods. Third part consists of questions regarding reasons of not using any family planning methods.

Ethics
Institutional ethics committee permission was obtained prior to start of the study.

Data analysis
Data was compiled in MS Excel sheet analyzed using SPSS version 21. Chi-square test was used to test the
associations between different variables. P value less than 0.05 was considered as significant.

**RESULTS**

A total of 356 eligible couples were selected from urban slums of Prayagraj district. Table 1 shows sociodemographic details of the selected eligible couples.

| Variables                                | Number (n=356) | Percentage (%) |
|------------------------------------------|----------------|----------------|
| **Women’s age category (years)**         |                |                |
| 15-25                                    | 98             | 27.52          |
| 26-35                                    | 176            | 49.43          |
| 36-49                                    | 82             | 23.03          |
| **Duration of marriage (years)**         |                |                |
| 0-5                                      | 115            | 32.30          |
| 6-10                                     | 103            | 28.93          |
| 11-20                                    | 112            | 31.46          |
| More than 20                             | 26             | 7.30           |
| **Religion**                             |                |                |
| Hindus                                   | 336            | 94.38          |
| Muslims                                  | 20             | 5.61           |
| **Type of family**                       |                |                |
| Nuclear                                  | 203            | 57.02          |
| Joint                                    | 153            | 42.97          |
| **Number of live births**                |                |                |
| None                                     | 9              | 2.52           |
| 1-2                                      | 179            | 50.28          |
| ≥ 3                                      | 168            | 47.19          |
| **Education status of female partners**  |                |                |
| Illiterate                               | 189            | 53.08          |
| Primary                                  | 66             | 18.53          |
| Middle                                   | 59             | 16.57          |
| High School                              | 06             | 1.68           |
| Intermediate                              | 08             | 2.24           |
| Graduate and PG                          | 28             | 7.86           |
| **Education status of male partners**    |                |                |
| Illiterate                               | 154            | 43.25          |
| Primary                                  | 57             | 16.01          |
| Middle                                   | 63             | 17.69          |
| High School                              | 21             | 5.89           |
| Intermediate                              | 28             | 7.86           |
| Graduate and PG                          | 33             | 9.26           |
| **Occupation of husband**                |                |                |
| Professional                             | 13             | 3.65           |
| Semi-professional                        | 02             | 0.56           |
| Clerical, shop-owner, farmer owner       | 41             | 11.51          |
| Skilled worker                           | 87             | 24.43          |
| Semi-skilled worker                      | 23             | 6.46           |
| Unskilled worker                         | 186            | 52.24          |
| Unemployed/housewife                     | 04             | 1.12           |

It was observed that among couples, majority 49.43% (176/356) of the women belonged to 26-35 years group, and 32.30% (115/356) of eligible couples had duration of marriage less than 5 years. Majority of eligible couples were having 1-2 living children i.e. 50.28% (179/356) and they belonged to nuclear family i.e. 57.02% (203/356). It can be observed that most of the study participants were illiterate i.e. 48.17% (343/712), i.e. 189 female participants and 154 male participants followed by primary and middle-class education.

| Unmet need | No. of eligible couples | Percentage (%) |
|------------|-------------------------|----------------|
| Yes        | 80                      | 22.47          |
| No         | 276                     | 77.52          |

It was observed that out of 356 eligible couples, 22.47% (80/356) were having unmet need for family planning (Table 2). Twenty (5.61%) women had unmet need for spacing and 60 (16.85%) for limiting birth. It was also observed that out of 193 eligible couples who were the non-users of any of the family planning methods, 41.45% (80/193) were having unmet need for family planning.

Among reasons for unmet need of the family planning, the most common reason was irregular supply of family planning methods i.e. 31.25% (25/80), followed by opposition from husband/family members i.e. 21.25% (17/80), fear of side effects of using any family planning methods i.e. 17.25% (14/80), lack of knowledge regarding any family planning methods i.e. 13.75% (11/80), the cost of the family planning methods i.e. 12.5% (10/80) and lack of access i.e. 3.75% (3/80) (Figure 1).

It was seen that among all selected eligible couples, the unmet need for family planning was found to be associated with number of live births, education of female
participants and occupation of male participants. The associations were found to be statistically significant (p<0.05). No association was seen between unmet need for family planning and with women’s age, duration of marriage, religion, type of family and education of male participants (Table 3).

Table 3: Determinants for unmet need for family planning methods.

| Variable                      | Unmet need | χ²  | P value |
|-------------------------------|------------|-----|---------|
| Women’s age category (years) |            |     |         |
| 15-25                         | 27         |     |         |
| 26-35                         | 41         |     |         |
| 36-49                         | 12         |     |         |
| Duration of marriage (years)  |            |     |         |
| 0-5                           | 30         |     |         |
| 6-10                          | 23         |     |         |
| 11-20                         | 24         |     |         |
| More than 20                  | 03         |     |         |
| Religion                      |            |     |         |
| Hindus                        | 76         |     | 0.749   |
| Muslims                       | 04         |     | 0.785   |
| Type of family                |            |     |         |
| Nuclear                       | 50         |     | 1.26    |
| Joint                         | 30         |     | 0.261   |
| Number of live births         |            |     |         |
| None                          | 05         |     |         |
| 1-2                           | 20         |     |         |
| ≥3                            | 55         |     |         |
| Education status of female partners |    |     |         |
| Illiterate                    | 56         |     | 14.05   |
| Primary                       | 10         |     | 0.015*  |
| Middle                        | 11         |     |         |
| High school                   | 00         |     |         |
| Intermediate                  | 01         |     |         |
| Graduate and PG               | 02         |     |         |
| Education status of male partners |       |     |         |
| Illiterate                    | 39         |     | 6.667   |
| Primary                       | 11         |     | 0.247   |
| Middle                        | 18         |     |         |
| High School                   | 02         |     |         |
| Intermediate                  | 03         |     |         |
| Graduate and PG               | 07         |     |         |
| Occupation of husband         |            |     |         |
| Professional                  | 01         |     |         |
| Semi-professional             | 01         |     |         |
| Clerical, shop-owner, farm owner | 03     |     |         |
| Skilled worker                | 18         |     |         |
| Semi-skilled worker           | 04         |     |         |
| Unskilled worker              | 52         |     |         |
| Unemployed/housewife          | 01         |     |         |

*Significant.

DISCUSSION

In the present study it can be observed that out of 356 eligible couples, 22.47% (80/356) were having unmet need for family planning and the most common reason was irregular supply of family planning methods (31.25%). Similar results were found in a study conducted by Sulthana et al among 267 eligible couples in Puducherry, and they found that 27.3% of women were having unmet need for family planning and majority were not using any FPMs was because of lack of knowledge, shyness, etc. (50%) and others because of availability, accessibility, affordability, side effects (37%). In a study conducted by Vasudevan et al among 244 married women in Pondicherry and they had found that 20.5% of women were having unmet need for family planning. Also, in a study conducted by Srivastava et al among 520 married women in Gwalior District, they found that 21.07% of women were having unmet need for family planning.

Similarly, according to NFHS 4 (2015-2016) Uttar Pradesh report the unmet need for family planning was 18.1% and unmet need for spacing was 6.8%.

Regarding reasons of not using any family planning methods, similar results were found in a study conducted by Landge et al among 250 married women in Mumbai. They had found that among reasons of not using any of FPMs, the most common was opposition from family members or husband i.e. 47%, religious belief i.e. 39%.

In contrast to the present study, in a studies conducted by Kumar et al in Lucknow city and by Azmat et al in Chakwal among married women of reproductive age group (15-45), the unmet need for family planning was high i.e. 45.6% and 40.6.11,12

Strength of the study

The strength of the study lies in the fact that very few studies were conducted in slum areas of Northern India, which will further help to find out the prevalence of contraceptives use and unmet need in this special population as the population of these areas were always been neglected, the prevalence is good among urban population and there is NRHM to cater the rural population of our country.

CONCLUSION

As it was observed in the present study that the family planning methods use was very low and the unmet need is very high in slums as compared to urban and rural areas. And among the reasons of not using any family planning methods, that most common reason was irregular supply and opposition from family members. So in order to improve this condition direct supervision of health workers should be done so that they should ensure proper supply and should do proper counselling regarding use of different family planning methods.
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