



## EPIDEMIOLOGICAL CORRELATES OF UNMET NEED FOR FAMILY PLANNING AMONG ELIGIBLE COUPLES-A CROSS SECTIONAL STUDY

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### ABSTRACT

Unmet need reflects the extent of discrepancy between women's fertility intentions and observed contraception usage behavior. This study was done to assess the epidemiological correlates of unmet need for family planning. Prevalence of unmet need for family planning was 8.3% of which 2.6% were limiters and 5.7% were spacers. With the advancement of age, prevalence of unmet need decreased significantly. The unmet need decreases with increase in number of living children and male children in family. The common reasons for unmet need were lack of knowledge, fertility related reasons, opposition to use, fear of side effects. The spacing methods needs to be given priority in women in younger age groups & with no or one living child and limiting methods needs to be given priority amongst women beyond age 25, having at least two children or having daughters only. Unmet need can be reduced by improved IEC activities.

**KEY WORDS:** Family planning, Eligible couples, IEC, Unmet Need



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## INTRODUCTION

Unmet need refers to proportion of sexually active women who are in reproductive age group and prefer to avoid becoming pregnant but is not using any method of contraception. Unmet need reflects the extent of discrepancy between women's fertility intentions and observed contraception usage behavior<sup>1</sup>. The unmet need for contraception may be for spacing birth or limiting births. In the developing countries about one-fourth of pregnancies are unintended i.e. either unwanted or mistimed (Haub and Herstad, 2002)<sup>2</sup>. Unmet need for contraception in India is around 20 percent (Packard Foundation, 1998)<sup>3</sup>. Though the proportion of women with unmet need is decreasing, the absolute number with unmet need may be growing because the population is growing<sup>4</sup>. The

common reasons for unmet need for family planning are inconvenience, unsatisfactory services, lack of information, fears about contraceptive side effects and opposition from husbands, relatives or others<sup>4</sup>. The women with unintended pregnancies may go for unsafe abortion leading to high rate of maternal death and injury. Also unwanted births can be detrimental to children's health and well being. This was shown in study by Pavankumar et al<sup>5</sup> that family size had influence on nutritional effects of children. Keeping in view the above factors, the present study was carried out to estimate the prevalence and epidemiological correlates of unmet need for family planning among eligible couples of an urban slum of Bangalore.

## METHODOLOGY

A community based cross-sectional study was done in an urban slum of Bangalore between August to November 2007 (Study period=Total 4months). The study subjects were married women (15yr – 49yr) residing in slum. Sample size was calculated using the formula<sup>6</sup>  $Z = 4PQ / D^2$  as 258 ( according to National Health & Family Survey-3<sup>7</sup>- prevalence (P) of Family Planning practices in Karnataka for urban population was 60.8 %, at 5 % significance, with 10 % allowable error). The total sample size was rounded off to 300. The houses were selected by stratified random sampling method. After explaining the purpose of study, data was collected by interview method using a pre-designed, structured questionnaire. All the women were categorized into contraceptive users, intenders and unmet need group. Contraceptive users included all women who

were using any of approved method of modern contraception. Intenders are women who are not using any contraception & wish to have child within 2years or women who currently pregnant/lactating and their pregnancy was intended. Unmet need group included those women who are not using any contraception and who wish not become pregnant atleast for 2years (Unmet need for Spacing) or want no more children (Unmet need for limiting). The unmet need group also included all those pregnant and lactating mothers whose current or previous pregnancies were mistimed (Unmet need for Spacing) or unwanted (Unmet need for limiting) and who became pregnant because they were not using contraception<sup>1</sup>. Data was analysed by statistical software version 16 and tests like proportions & chi-square were applied

## RESULTS

**Table 1**  
**Distribution of Women into groups as Contraceptive user, Intender and Unmet Need for Family Planning**

Pregnant /lactating(n=39)	Frequency	Percentage
Intender (last pregnancy was intended)	29	9.7
<i>Unwanted</i> (unmet need for limiting birth)	4	1.3
<i>Mistimed</i> (unmet need for spacing birth)	6	2
<b>Non Pregnant (n=261)</b>		
Contraceptive User	218	72.7
Non-user ----Intender (want child within 2yr)	28	9.3
<i>Nonuser - want no more child</i> (unmet need for limiting birth)	4	1.3
<i>Nonuser -Do not want at least 2yr</i> (unmet need for spacing birth)	11	3.7
<b>Total</b>	<b>300</b>	<b>100</b>

**Couple Protection Rate 72.7%, Intender 19%, Unmet need 8.3%**

It was observed from the study that prevalence of contraceptive usage was 72.7%. The intenders formed 19% of total women. Intenders were constituted by women who were not using any contraception & wish to have child within 2 years (9.3%) and women

who were pregnant / lactating and their pregnancy was intended(9.7%).The total Unmet need of family planning was found to be 8.3%. The limiters were 2.6% and spacers were 5.7%.

**Table 2**  
**Age structure and unmet need of contraception**

Age	No-unmet need	unmet need Spacing	unmet need Limiting	Total
15-19	14(70.0%)	6(30.0%)	0	20(100%)
20-24	60(87.0%)	8(11.6%)	1(1.4%)	69(100%)
25-29	74(97.4%)	1(1.3%)	1(1.3%)	76(100%)
30-34	49(92.5%)	2(3.8%)	2(3.8%)	53(100%)
35-39	51(94.4%)	0	3(5.6%)	54(100%)
40-49	27(96.4%)	0	1(3.6%)	28(100%)
Total	275(91.7%)	17(5.7%)	8(2.6%)	300(100%)

**Chi-Square= 37.732 df 10 P <0.001**

The overall unmet need (spacing & limiting together) was more in younger women. The unmet need for spacing was more in lower age group where as unmet need for limiting births

was more in higher age group. The association between advancing age and reduction in unmet need was significant ( $P < 0.001$ ).

**Table 3**  
**No of living children and status of unmet need**

Living children	No unmet need	unmet need for Spacing	unmet need for limiting	Total
0	21(84%)	4(16%)	0	25(100%)
1	40(78.4%)	10(19.6%)	1(2.0%)	51(100%)
2	97(93.3%)	3(2.9%)	4(3.8%)	104(100%)
3	75(97.4%)	0	2(2.6%)	77(100%)
>4	42(97.7%)	0	1(2.3%)	43(100%)
Total	275(91.7%)	17(5.7%)	8(2.6%)	300(100%)

**Chi-Square =33.358 df 8 P = <0.00001**

The unmet need for spacing was found upto 19.6% in women having 1 child compared to no unmet need in those having more than 3 children. Similarly there was no unmet need for limiting births in women with zero parity compared to those with atleast 1 living child.

**Table 4**  
**Male children and status of unmet need**

No of Male children	No unmet need	unmet need for Spacing	unmet need for limiting	Total
0	52(83.9%)	9(14.5%)	1(1.6%)	62(100%)
1	109(90.1%)	7(5.8%)	5(4.1%)	121(100%)
2	98(98%)	1(1%)	1(1%)	100(100%)
3	11(91.7%)	0	1(8.3%)	12(100%)
>4	5(100%)	0	0	5(100%)
Total	275(91.7%)	17(5.7%)	8(2.6%)	300(100%)

**Chi-Square =18.150 df 8 P = .020**

It was shown from the study that the total unmet need reduced from 16.1% in women with no male child to no unmet need for family planning in women with 4 or more male children. This association was statistically significant ( $P=0.02$ )

**Table 5**  
**Education and Unmet need for Family Planning**

Education	No-unmet need	unmet need Spacing	unmet need Limiting	Total
Illiterates	115(94.3%)	5(4.1%)	2(1.6%)	122(100%)
Upto high school	131(89.7%)	9(6.2%)	6(4.1%)	146(100%)
Intermediate and above	29(90.6%)	3(9.4%)	0	32(100%)
Total	275(91.7%)	17(5.7%)	8(2.6%)	300(100.0%)

**Chi-Square= 3.9 df=4 P=0.406**

Unmet need of family planning in illiterates for spacing & limiting births was 4.1% and 1.6% compared to 6.2% and 4.1% in people who are studied upto middle school. In our study there was no association found between level of education and unmet need.

## DISCUSSION

The total unmet need in our study (8.3%) was less compared to other studies. NFHS-3 survey (2005-06)<sup>7</sup> shows that 13 % of currently married women in India have an unmet need for family planning. The unmet need for spacing births is 6% and the unmet need for limiting births is 7%. A survey data of developing countries observed total unmet need of 21% with 12% for limiting births and 9% for spacing.<sup>8</sup> It was shown from the study that with advancing age the contraceptive usage increases and the total unmet need decreases. A similar study at Kolkata<sup>9</sup> showed Contraceptive use rate increases significantly with the advancement of age and prevalence of unmet need is significantly higher in the age group below age of 30 years. Anju Puri et al<sup>10</sup> reported women of 15-19 years had highest unmet need for spacing (100%) and highest unmet of limiting family size was present in 40-45 years aged women. Similar observations were made by Ram R<sup>11</sup> et al and NFHS3 survey (2005-06)<sup>7</sup>. It was observed that the unmet need for spacing was more in women with lesser number of living children and unmet need for limiting births was seen in women with more number of living children. Also unmet need for both spacing & limiting decreases with increase in the number of living children. This association was statistically significant ( $P = <0.00001$ ). Similar findings were reported by Bhattacharya S.K et al in Kolkata<sup>9</sup> but in study by Ram et al<sup>11</sup> 92% of the mothers with unmet need had 2 or more children.

This study showed that unmet need for family planning decreased as the number of male children in family increased. Male child Syndrome is still a widely prevalent concept and similar findings were reported by Anju Puri et al<sup>10</sup>, Kansal Chandra<sup>12</sup>, and Sharma AK<sup>13</sup>. These studies suggest that still there is affinity for male child among couples. This can lead to increase in family size or abortion of female child. So there is a need to create awareness about gender equality. It was observed from our study that level of education of the

respondents was not an influencing factor for unmet need of family planning methods. A similar study conducted in Dakshin Kannada<sup>14</sup> showed that level of education of the respondents had no influence on acceptance of contraceptives. In contrast to our study most other studies viz Bratati Bannerjee et al<sup>6</sup>, Harvinder Kour et al<sup>15</sup> and Studies in Turkey<sup>16</sup> have shown positive correlation between literacy and contraceptive use. In our study the acceptance of family planning methods was similar among literates and illiterates. The reason may be better awareness and more active health workers. The common reasons for unmet need in our study were: Lack of knowledge (knows no method or source of contraceptives) 37.32 %, Fertility and related reasons (infrequent sex) 26.10 %, Opposition to use (respondent, husband, against religion) 22.44%, Method related reasons (like side effects, cost and, inconvenient use) 22.44%. Similar observations were noted by Bhasin S.K et al<sup>17</sup>, Khokhar et al<sup>18</sup> and studies in Sub Saharan countries<sup>19</sup>. These studies indicate that many of the reasons for not using contraception like lack information; worry of side effects, opposition to use can be managed if proper counseling and IEC activities are undertaken.

## CONCLUSION

This study highlighted the various epidemiological factors related to unmet needs of family planning. The spacing methods need to be given priority for women in younger age groups and with no or one living child as they have higher unmet need of contraception for spacing. Similarly limiting methods needs to be given priority amongst women beyond age 25, having at least two children or having daughters only as the unmet need of contraception for limiting births is higher. Proper counseling and IEC through mass media can reduce misapprehensions about side effects and increase awareness of

benefits. Improving quality & accessibility of family planning services and adding new contraceptive methods such as injectables can attract new users. These measures will eventually increase awareness & acceptance of

contraceptives. The consequences of unwanted births like unsafe abortions risking mother's health, child health, socioeconomic stress on family and rapid population growth can be reduced if unmet needs are met.

## ACKNOWLEDGEMENT

Authors would like to thank all the participants of study. Authors also acknowledge the help received from the scholars whose articles are cited and included in references of this manuscript.

**CONFLICT OF INTEREST STATEMENT:** There was no conflict of interest to be stated.

**FUNDING:** No sources of support provided.

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