Original Article

Unmet need for family planning among married women of reproductive age group in urban Tamil Nadu

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Context: Unmet need for family planning (FP), which refers to the condition in which there is the desire to avoid or post-pone child bearing, without the use of any means of contraception, has been a core concept in the field of international population for more than three decades. Objectives: The very objective of this study is to determine the prevalence of "unmet need for FP" and its socio-demographic determinants among married reproductive age group women in Chidambaram. Materials and Methods: The study was a community-based cross-sectional study of married women of the reproductive age group, between 15 and 49 years. The sample size required was 700. The cluster sampling method was adopted. Unmarried, separated, divorced and widows were excluded. Results: The prevalence of unmet need for FP was 39%, with spacing as 12% and limiting as 27%. The major reason for unmet need for FP among the married group was 18%, for low perceived risk of pregnancy, 9%, feared the side effects of contraception 5% lacked information on contraceptives, 4% had husbands who opposed it and 3% gave medical reasons. Higher education, late marriage, more than the desired family size, poor knowledge of FP, poor informed choice in FP and poor male participation were found to be associated with high unmet need for FP. Conclusion: Unmet need for younger women was spacing of births, whereas for older women, it was a limitation of births. Efforts should be made to identify the issues in a case by case approach. Male participation in reproductive issues should be addressed.

Key words: Family planning, informed choice, male participation, unmet need

INTRODUCTION

BSTRACT

Millions of women worldwide would prefer to avoid becoming pregnant either right away or never get pregnant, but are not using any contraception. These women are said to have an "unmet need" for family planning (FP). The concept of unmet need points to the gap between some women's reproductive intentions and their contraceptive behavior.^[1] Unmet need can be a powerful concept for FP programs because it is based on the women's own statement in answer to survey questions, and it identifies the group

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	DOI: 10.4103/2230-8229.128786		

most likely to be interested in contraception, but who do not use it. The challenge is for FP to reach and serve these women. The concept of "unmet need" points to the gap between some women's reproductive intension and their contraceptive behavior.^[2] According to National Family Health Survey (NFHS-3) Survey 2005-2006 unmet need for FP was 13% for India and 8.9% for Tamil Nadu.^[3]

More married women with unmet need live in India than in any other country – approximately 31 million. While FP needs of the majority of women (86%) who wish to stop childbearing are being satisfied, the needs of women who wish to delay or space childbearing remain largely unsatisfied, (only 30% of these women have their needs met). For this reason, young women are more likely to report an unmet need for contraception. The desire to limit family size and to space births are the main reasons given by the majority of those who seek an abortion, which highlights the huge unmet need for contraception for women in India.

Journal of Family and Community Medicine | April 2014 | Vol 21 | Issue 1 | 53-57

According to the NFHS (2005-2006), nearly 21% of pregnancies are either unwanted or mistimed. The NFHS-3 survey (2005-2006) indicated that the unmet need for FP in India was 13% with 6.2% for spacing and 6.6% for limiting.^[3]

Using multi-stage cluster sampling the unmet need for FP in different social and demographic groups in selected districts in Tamil Nadu, namely, Madurai, Kamarajar, Pudukkottai, Thanjavur and Nagapattinam was estimated by Ramanujam *et al.* (2005). The percentage of unmet need for FP ranged from 50% in Madurai to 63% in Nagapattinam. It was 56% in Kamarajar and Thanjavur, 61% in Pudukottai and 57% in all the five districts combined. The unmet need for spacing was 1.6 times more than that of limiting births.^[4] NFHS-3 report (2006) showed that the rural women had a higher unmet need than urban women for spacing and limiting.^[3]

According to NFHS-3 Survey 2005-2006, the unmet need for FP was 13% for India and 8.9% for Tamil Nadu.^[3] The use of spacing methods has remained low over the years. In 1990s, the use of contraceptives had declined even in the demographically advanced states like Tamil Nadu. The unmet need of FP was 8.8% for urban areas and 9.1% in the rural areas of Tamil Nadu. The prevalence of contraceptive use in Tamil Nadu is 61%.^[3] A community-based study done among married women in a rural settlement in Aurangabad (2001) showed that the prevalence of unmet need was 20%. The main reasons for this were low perceived risk of pregnancy (32.5%), lactation (31%) and ignorance (12%).^[5]

Not many available published community based studies have assessed the unmet need of FP in the urban areas of Chidambaram, Cuddalore District. It is against this background that the present study was conducted with the objective of determining the prevalence of unmet need for FP and its socio-demographic determinants among married women of reproductive age in Chidambaram.

MATERIALS AND METHODS

The study was conducted in the urban areas of Chidambaram, Cuddalore district, Tamil Nadu. According to the 2001 census, the population of Chidambaram is 56,946, consisting of 33 wards with approximately 11,390 households. Married women of reproductive age from 15 to 49 years residing in the 33 wards of Chidambaram were taken as the study group. The study was done from December 2008 to June 2009. It was a community-based cross-sectional study.

Data collection

This was done using a pre-tested structured questionnaire which included the following information:

- Socio-demographic characteristics like age, education, occupation, family income, age at marriage and first birth, family size, whether the woman approved of FP
- Assessment of unmet need and reasons for it whether pregnant or not, whether currently using any contraceptive or not, and the reasons for this
- Assessment of contraceptive knowledge: By asking to name any temporary and/permanent methods of contraception, side effects of contraceptive devices
- Informed choice in FP where and how the women get information on FP, whether they know about the cafeteria approach in FP
- Assessment of male participation in FP. Whether the women discuss FP with their husbands, whether he helps her to choose FP method, whether he has used or opposes the use of FP methods

Sampling method

The sample size calculated using the formula $4pq/l^2$ was found to be 700.

Cluster sampling method was adopted. Among the 33 wards, 30 wards were selected. From each cluster, 24 women of reproductive age group were selected.

Cluster identification was done as follows:

The cumulative population of the wards was found out. This was divided by the number of clusters (33) which gave the sampling interval 56,946/33 = 1745. A number was randomly selected from the random number table numerically less than the sampling interval. This was taken as the starting point to which the sampling interval was successively added till 30 clusters were identified, corresponding to the cumulative population of the respective wards. The first house in a cluster was randomly selected. Starting with this household, a house-to-house survey was done till 24 married women in the reproductive age group were identified. The following information was collected by the interview method-age, religion, educational and occupational status, per capita income, age at marriage, age at first delivery, contraceptive knowledge and use, informed choice in FP, any opposition to contraceptive use, and male participation in FP.

Inclusion criteria

The inclusion criteria were women in the reproductive age group of 15-49 age group who were currently married. (Women who were married, who were not using any method of contraception, but who either did not want any more children or wanted to wait for 2 or more-years-before having another child.)

Exclusion criteria

The exclusion criteria were unmarried women, separated/divorced women, widows, pregnant due to contraceptive failure.

Data analysis

Prevalence of unmet need assessed by proportions and determinants of unmet need were analyzed by Chi-square test using SYSTAT package.

RESULTS

Of the 700 married women, 276 had an unmet need for FP. The prevalence was 39% in the study area of Chidambaram [Table 1]. In the study population, the majority were in the age group of 25-29 years which constituted 24.2% of the study population. The educational background of the women showed that 6% were illiterate, 29% had primary education, 42% had middle school education and 4% had degrees/postgraduate degrees. The unmet need for spacing was found to be 12 and 27% for limiting of births [Table 2].

Among the determinants of unmet need for FP, age group, education, occupation of the husbands of respondents, age at marriage, age at first child birth, number of children, desired family size, contraceptive knowledge, opposition to the use of contraceptive methods and male participation in FP had a significant association as shown in Table 3. Unmet need was highest (29%) among those aged between 25 and 29 years, It was seen that unmet need decreased as age advanced (P = 0.0000). There was a significant association between husband's occupation and unmet need for FP. Out of those <20 years, 31% had unmet need for FP and 30% had no unmet need. Of the 52% of the women who were married by the age of 20-24 years, 49% had unmet need for FP. There was a significant association between age at marriage and unmet need. As age at marriage rose unmet need decreased (>35 years). 61% of those who had an unmet need for FP knew about only one method of FP, 20% knew about two methods, 6% had knowledge of three methods and 13% were not aware of any methods. Those who had better contraceptive knowledge were found to have fewer unmet needs. Statistically, there was a significant association between opposition to the use of contraception and unmet need. Of the respondents who were opposed to the use of contraceptive methods, 13.2% had unmet need. The major reason for this among the married group was low perceived risk of pregnancy (18%), 9% were afraid of the side effects of contraception, 5% lacked information on contraceptives, 4% had opposition from husbands and 3% gave medical reasons [Table 4].

DISCUSSION

A cross-sectional study on the prevalence of unmet need for FP of married women of reproductive age group was conducted in the urban area of Chidambaram. The

Table 1: Prevalence of unmet need of familyplanning				
Unmet need	Number	Percentage		
Yes	276	39		
No	424	61		
Total	700	100		

Table 2: Distribution of type of unmet need forfamily planning among study population

Type of unmet need	Number	Percentage
Spacing	82	12
Limiting	194	27
Total	276	39

Table 3: Determinants of unmet need for familyplanning

Yes No Age group 37 (13) 39 (8) 0.005 26-35 145 (53) 178 (42) 35 >35 94 (33) 207 (49) 207 (49) Education 111 111 111 Illiterate 14 (5) 33 (8) 377 (89) 0.001 >Class 12 247 (89) 377 (89) 0.001 >Class 12 15 (6) 15 (6) 0 Occupation of Husbands <0.001 0.001 Unskilled 62 (23) 113 (26) Skilled 156 (25) 266 (63) Professionals 58 (21) 45 (11) Age at first child birth 20-24 205 (14) 319 (75) <0.001 25-29 59 (22) 69 (16) 30-39 12 (4) 10 (3) No. of children - - 2 242 (87) 280 (66) <0.001 >2 34 (13) 118 (28) - - <th>Variables</th> <th>Unme</th> <th colspan="2">Unmet need</th>	Variables	Unme	Unmet need	
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Professionals 58 (21) 45 (11) Age at first child birth 205 (14) 319 (75) <0.001	Unskilled	62 (23)	113 (26)	
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25-29 59 (22) 69 (16) 30-39 12 (4) 10 (3) No. of children	Age at first child birth			
30-39 12 (4) 10 (3) No. of children 242 (87) 280 (66) <0.0001	20-24	205 (14)	319 (75)	<0.001
No. of children 242 (87) 280 (66) <0.0001	25-29	59 (22)	69 (16)	
<2	30-39	12 (4)	10 (3)	
>2 34 (13) 118 (28) Desired family size - <2	No. of children			
Desired family size 2 255 (91) 357 (84) <0.001	<2	242 (87)	280 (66)	<0.0001
<2	>2	34 (13)	118 (28)	
>2 15 (6) 54 (13) Contraceptive knowledge	Desired family size			
Contraceptive knowledge168 (61)210 (50)0.005Poor168 (61)210 (50)0.005Good108 (39)143 (33)Opposition to use contraceptive methods	<2	255 (91)	357 (84)	<0.001
Poor 168 (61) 210 (50) 0.005 Good 108 (39) 143 (33) 0 Opposition to use contraceptive methods 7 8 (3) <0.001	>2	15 (6)	54 (13)	
Good108 (39)143 (33)Opposition to use contraceptive methods	Contraceptive knowledge			
Opposition to use contraceptive methods Yes 38 (13) 8 (3) <0.001	Poor	168 (61)	210 (50)	0.005
contraceptive methodsYes38 (13)8 (3)<0.001	Good	108 (39)	143 (33)	
No 236 (58) 394 (93)	Yes	38 (13)	8 (3)	<0.001
	No	236 (58)	394 (93)	
Male participation in family planning				
Poor 234 (85) 284 (79) 0.001	Poor	234 (85)	284 (79)	0.001
Good 42 (15) 90 (21)	Good	42 (15)	90 (21)	

study also aimed at finding out the determinants of unmet need for FP in the study population. Of the 700 married women interviewed, 276 (39%) had an unmet need for FP

Table 4: Reasons for unmet need of familyplanning		
Reasons	No. (%)	
Lack of information	14 (5)	
Fears of side effects	25 (9)	
Opposition from family	11 (4)	
Little perceived risk of pregnancy	50 (18)	
Medical reasons	7 (3)	

12% for spacing and 27% for limiting. The District Level Household surveys (DLHS) carried out in Tamil Nadu in 2008 showed an unmet need of 19.4% for spacing and 12.9% for limiting.^[4] The NFHS-3 survey for unmet need was 13% for India and 8.9% for Tamil Nadu. There is a clear relationship between women's age and the level of unmet need. Most unmet need of younger women is for spacing births, whereas for older women it is for limiting births. Unmet need typically peaks for many women in their thirties and then declines in the forties.

The study showed that 24.2% was in the 25-29 age groups, where unmet need was at its highest (29%). The unmet need was found to increase with higher educational status. These findings are in accordance with those of various other studies conducted elsewhere.^[5-8] The majority of women belonged to the nuclear family, i.e., 72%, and 28% were from joint families. In this study, 424 (61%) of the 700 women interviewed had no unmet need for FP. 53% had undergone permanent sterilization and 3% were using intauterine devices (IUDs). None of them took oral pills. It was found that those who had a better knowledge of FP methods had less unmet need.

According to NFHS-3 (2006) two-thirds of the women currently married have used a FP method at some point in their lives.^[3] National average percentage of women using any methods of contraception is 48%. The DLHS for Tamil Nadu (2008) reported similar findings of 53% for permanent sterilization and 3% users of IUDs. The major reason for not using any FP methods was low perceived risk of pregnancy (18%). Spinell noted that when a woman believes that she is unlikely to become pregnant, she may not be interested in contraception.^[9] The other reasons in this study were the fear of the side effects of contraceptive methods (9%), lack of information (5%), opposition from husbands (4%) and medical reasons (3%). Ghosh et al. in Kolkotta observed that 25% of women did not accept contraceptive methods because of concerns about health and side effects.^[8] For 69% of the women, the source of informed choice was the health care worker. A family member/neighbor was the source for 26% and mass media for 3%. According to 53% of respondents, detailed information on FP methods was provided by doctors. Eighty four percent of the women had discussed FP methods with their husbands. Male participation in shared responsibility and counseling was very poor. Only 3% of the men used condoms. Ninety-six percent had nothing against their wives' use of contraception. De Graft and De Silva in a Sri Lankan study (1997) reported that men and women who discussed FP were more likely to use contraception effectively and have fewer children than those who did not.^[10] The critical role of the husband has been noted in several studies by Santhya et al. (2001),^[11] and Jejeebhoy (2003) on decision-making relating to the use of contraception, especially during the early years of marriage.^[12] A Reproductive Health Survey in Uttar Pradesh (1997) showed that 87% of women with unmet need said that the decision to use contraception ultimately rests with the husband. Seventy-five percent of men with secondary or higher education approved of FP.^[13]

Limitations of the study

- In spite of the best efforts to get the correct age by cross checking, women older than 49 years might have been included in the 45-49 age group, thereby increasing the proportion of women with unmet need particularly for limiting births
- Operational definition of unmet need has its own ambiguity. Especially those who are not sexually active beyond 35-40 years and are relatively not fecund would influence the unmet need towards the higher side. In fact, for them, there is no need for FP, especially in the Indian context.

CONCLUSION AND RECOMMENDATIONS

Over the last two decades, there has been a growing interest in estimating women's unmet need for contraceptive services. While the FP needs of the majority of women (86%) who wish to stop childbearing are being satisfied, the needs of women who wish to delay or space childbearing remain largely unsatisfied (only 30% of these women have their needs met).

The present study has revealed a high prevalence of unmet need for FP for which the following recommendations are suggested:

- One of the key findings in the study was the poor support for spacing methods (3% for IUDs). Efforts should be made to identify the issues in a case by case approach so that the Health care provider can tailor the spacing method to each case as appropriate
- Couples should be given FP counseling together. Inter-spousal communication and joint decision making should be encouraged. The deficiency in this area was observed in this study

• Various aspects of men's participation as reported in this study was very poor. It is recommended that men's participation in decision making on FP and care about reproductive health should be encouraged. There should be programs to address young men's reproductive issues through adolescent care clinics

In the present study, the source of informed choice was attributed to the mass media by 3% of women only. More emphasis should be given to the dissemination of reproductive and contraceptive information through the mass media in order to get a wider circulation.

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How to cite this article: Bhattathiry MM, Ethirajan N. Unmet need for family planning among married women of reproductive age group in urban Tamil Nadu. J Fam Community Med 2014;21:53-7. Source of Support: Nil, Conflict of Interest: None declared.

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