Original Research Article

Unmet needs of family planning and its associated factors among married women in reproductive age group, Mysuru

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ABSTRACT

Background: According to national family health survey-5 (NFHS-5), in urban Karnataka, the total unmet need was 7.3. An important concept to describe effectiveness of family planning program is unmet need for family planning. Most married women want to limit childbirth and space deliveries but are unable to use contraceptives for varying reasons leading to unmet need. To assess unmet need of family planning and its associated factors among married women in reproductive age group in Mysuru.
Methods: A community based cross-sectional study was done from November 2020-January 2021 among married women in reproductive age group (18-49 years) in urban Mysuru. Sample size calculated was 162. The samples were selected by systematic random sampling and interviewed using a pre-tested semi- structured questionnaire. Data was analysed using SPSS version 23 (licensed to JSS AHER).
Results: The overall unmet need was 29.01%, among this 17.3% was for spacing and 11.71% for limiting. Out of 162 females studied, around 131 had knowledge about at least one contraceptive method. Unmet need was higher in unemployed women belonging to the lower socio-economic group. Important reasons cited for not using contraceptives were family opposition, fear of side effects, negligent attitude of the women and lack of knowledge about family planning.
Conclusions: Unmet need of family planning in the study area was comparatively high, therefore, routine family planning counselling, health education, and health awareness programs need to be strengthened.

Keywords: Contraceptives, Family planning, Reproductive age, Unmet need, Knowledge, Attitude

INTRODUCTION

India was the first country to establish a national family planning program in the year 1952. The population growth rate of India is 1.64 percent which is higher as compared to the worlds average of 1.2 percent. With an increasing birth rate of 20.0 and declining death rate, it is projected that India may soon replace China as the most populated nation by the year 2050. This increasing population presents a challenge to the country's socio-economic development and due to the related problems of poverty, overcrowding, illiteracy and malnutrition, the rising population is a major concern in India.[1]

Family planning is a way of thinking and living that is voluntarily embraced by individuals and couples on the basis of awareness, attitude and responsible decisions, so as to promote the health and welfare of family groups and thus effectively contribute to the social development of a country and is one of the most widely discussed concepts in the world these days.[2] Family planning services can provide a range of benefits to the women as well as the society. It helps in reducing maternal mortality rate by

delaying unsafe and high-risk pregnancies which can also help in reducing the infant mortality.[3]

According to WHO it is estimated that 45% of abortions in the world are unsafe which can lead to death as well as other long-term complications affecting both physical as well as mental health of women through-out her life time. This can be reduced by proper family planning practices. Another important role of family planning is in preventing HIV/AIDS and other sexually transmitted diseases.[4] Family planning helps in slowing down the population growth rate by reducing adolescent pregnancies and other unwanted pregnancies which will eventually help in empowerment of the people.[5]

As per United Nations department of economic and social affairs, in the year 2019, there were around 1.9 billion women of reproductive age (15-49 years) in the world among which 1.1 billion have a need for family planning. Among these, around 842 million use modern methods of contraception while 80 million are using traditional methods.[6]

The 190 million women around the world are not using any contraceptive methods but want to avoid pregnancy.[6] Unmet need of family planning is defined as the percentage of women of reproductive age, either married or in a union and presumed to be sexually active but not using any method of contraception, either don't want any more children or want to postpone child birth or do not know when or if they want another child.[7]

According to NFHS-5, the total unmet need of family planning in Karnataka is 6.5% with 3.8% unmet need for spacing and 2.7% unmet need for limiting.[8] This is lower than the national average (12.1%) according NFHS-4.[9] The total unmet need in urban Karnataka is 7.3% which is higher than that of the rural areas (5.9%).[8] Mysuru, which is the southernmost district in Karnataka, was the first government in the world to establish a network of birth control clinic during the year 1930 but this effort had a major setback following world war II.[10]

With the above background, this study aims to determine the unmet need of family planning among married women of reproductive age group in urban Mysuru and to identify the factors influencing them.

Aims and objectives

The aim and objectives were to determine the unmet need of family planning among married women of reproductive age group in urban Mysuru, to study the associated factors of unmet need of family planning among study subjects and to assess knowledge, attitude and practice about contraception among the study subjects.

METHODS

Study design and population source

A community based cross-sectional study was done under the field practice area of department of Community Medicine, JSS medical college, Mysuru (Medhar block UHC) during the period of three months (November 2020-January 2021) among married women of reproductive age group (18-49 years) in urban Mysuru. Women who were unmarried, widows, separated or divorced were excluded from the study. The study was approved by the institutional ethics committee and informed consent was obtained from the participants after explaining the purpose and procedure of the study.

Study settings

The Medhar block urban health centre comes under the field practice area of department of community medicine, JSS medical college, Mysuru, under the limit of Mysuru city corporation. The total householders in this area were 1807 and has a total population of about 9229 people among which 4412 were females and 4817 males. The required sample size of 162 was obtained by house-to-house visits by systematic random sampling in this area.

Sample size

According to NFHS-5 in 2019, the unmet need for family planning in urban Karnataka was 7.3%. With a confidence interval of 95% and an absolute precision of 4%, the sample size was calculated as follows,

$$n = \frac{Z^2 PQ}{L^2}$$

Where, Z=1.96, P=7.3, Q= (100-7.3)=92.7, L=4%
Thus, a sample size of 162 subjects were studied.

Using systematic random sampling, the first house was selected between house numbers one to eleven after which every 11th house was selected for the study. In case the 11th house selected was locked or didn't have any females in reproductive age group, the very next house was selected for the study. However, if there were more than 1 women in reproductive age group, the youngest participant was included for the study.

Study tool

A pretested, semi-structured questionnaire was used to collect data by house-to-house survey through interview method. The questionnaire had 2 parts: part 1 included details regarding socio- demographic factors, marital history, details regarding conception, pregnancy status. Socio- economic status was assessed using modified Kuppuswamy scale. Part 2 included questions to assess knowledge, attitude and practice regarding contraceptive usage.

Statistical analysis

The data collected was entered in Microsoft excel 2019 spreadsheet followed by analysis using SPSS version 23 (Licensed to JSS AHER). The socio- demographic details were represented using arithmetic mean, standard deviation and percentages. The possible association between demographic variables and unmet need was found out using Chi-square test/ Fishers Exact test. P value of less than 0.05 was considered statistically significant.

Concept of unmet need

Westoffs model was used in the study to estimate the unmet need of family planning. We divided the women into 2 groups- unmet need for spacing and unmet need for limiting. Sum of the two groups gave the total unmet need for family planning.

RESULTS

Among the 162 females interviewed, the total unmet need for family planning was 29.01% with 17.3 % having unmet need for spacing and 11.71% with unmet need for limiting (Figure 1).
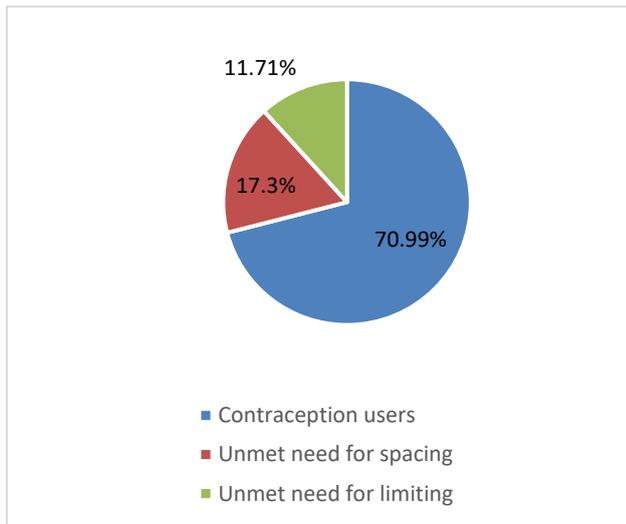

Figure 1: Unmet need for family planning.

The mean age of the study population was 30.26±7.788 years with maximum age of 48 years and minimum age of 18 years respectively. Majority of the women belonged to the age group of 21-30 years (48.8%) and were Hindus (66.7%). More than half (51.2%) of the women belonged to nuclear family and were homemakers (82.1%). Around 128 (79%) of the women were educated up to high school level and above, and 73.5 % of the females were BPL card holders.

Most of the husbands had received high school education (49.4%) and were involved in skilled work (56.2%). Around 74 women belonged to lower middle-class family

while 73 women belonged to upper lower-class family as per modified Kuppuswamy classification (Table 1).

The mean age at marriage was 19.92±3.077 years with minimum age of 12 years and a maximum age of 29 years while mean age of first pregnancy was 21.61±4.434 years. Around 62.3% of the females had duration of marriage more than 5 years and about 38.3% of them had less than or equal to 5 years of active married life.

Majority of the women (53.1%) had at least 2 or more living children. The desired number of children were less than or equal to 2 for 80.9% of the study population and 77.8% did not have any gender preferences. The time period between marriage and birth of first child was less than or equal to 1 for 88 (54.32%) of the women in the study population. In majority of the families studied, the decision regarding the use of contraception was taken jointly by both husband and wife (Table 2).

Figure 2 shows the unmet need of family planning based on this study. From the study we found that 70 out of 162 (43.20%) women were currently using at least one method of contraception. The total unmet need was estimated using Westoffs model and was found to be 29.01% with 17.3% having unmet need for spacing and 11.71% with unmet need for limiting (Figure 2).
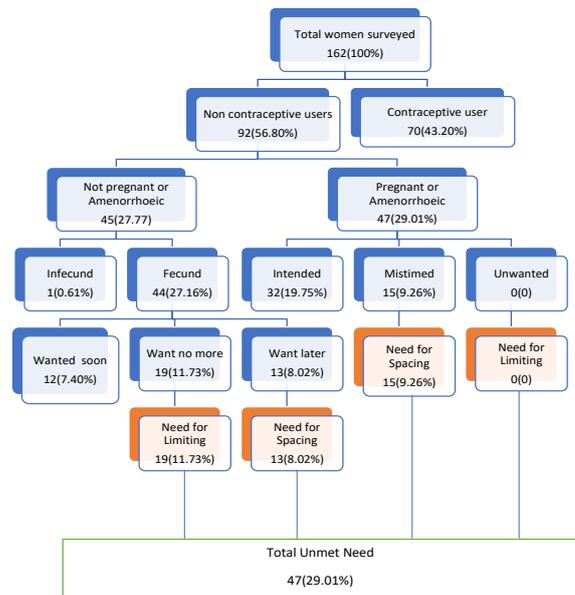

Figure 2: Unmet need for contraception (Westoffs model).

Among the 162 females studied, 131 (80.86%) of them had knowledge about at least one or more contraceptive methods. Around 115 (70.99%) of the study participants had knowledge about condoms, 110 of the couples were aware of sterilization, 92 of the couples knew about IUCD, 83 had knowledge on pills and 61 knew about NSV. The main source of information about family planning among the study population was from family

and friends followed by media. Only 24 (14.81%) out of the 162 were aware of family planning services provided by PHC, Asha workers and sub-centre.

From the study, it was seen that 85 of the study sample were aware of emergency contraception methods, 113 had knowledge about permanent methods of contraception and 122 had knowledge of contraceptive methods for spacing (Figure 3).
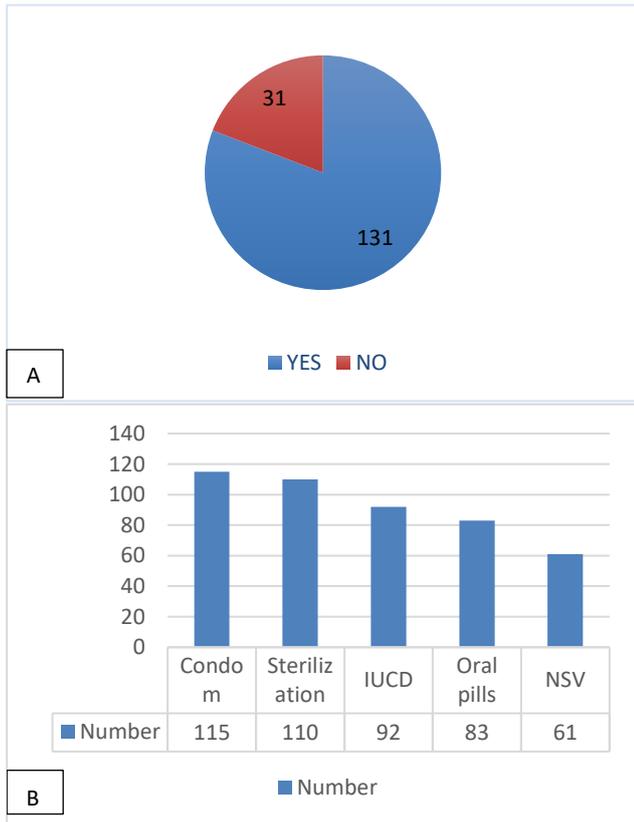
Figure 3 (A and B): Distribution of study sample based on knowledge about contraception.

Around 90 (55.55%) females among the study population had used either 1/ more contraceptive methods. Majority

of them have undergone tubectomy 57 (35.18%), 24 (14.81%) of them have used male condoms, 16 (9.87%) of them used IUCD, 3 (1.85%) of them used oral pills and traditional methods were used by 4 (2.46%) of them.

The most common contraceptive method used for spacing was IUCD followed by male condoms. Female sterilization is the most preferred method after completion of the family followed by IUCD. Failure of contraception was reported by 1 female while using IUCD out of 162 study population.

According to our study, around 133 (82.09%) females were having excellent attitude towards family planning programs (Figure 4).
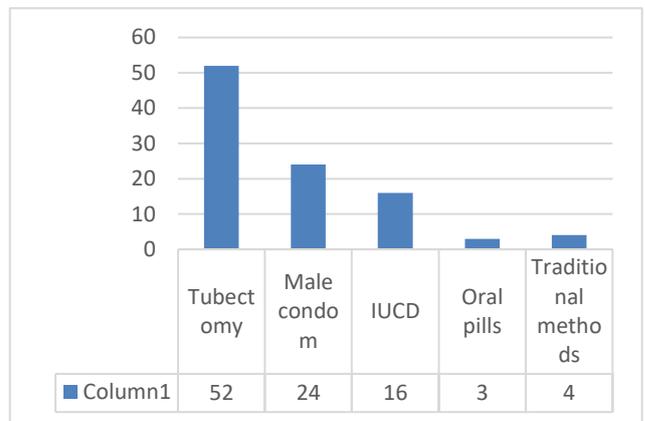
Figure 4: Distribution of study sample based on usage of contraceptive methods

Among the 47 women with unmet need, more than 50% had contraception related issues while around 44% had lack of knowledge about family planning (Table 3).

Table 1: Association between unmet need of family planning and socio demographic factors

Variables	Categories	Total	Unmet needs (%)	Met needs (%)	Chi-square value	P value
Age group (years)	≤20	14 (8.64)	7 (50)	7 (50)	7.804	0.047#
	21-30	79 (48.76)	27 (34.2)	52 (65.8)		
	31-40	52 (32.10)	11 (21.2)	41 (78.8)		
	≥41	17 (10.50)	2 (11.8)	15 (88.2)		
Education	Professional	0	0	0	10.160	0.047#
	Graduate or postgraduate	26 (16.05)	6 (23.1)	20 (76.9)		
	Post high school diploma	4 (2.47)	3 (75)	1 (25)		
	High school	98 (60.49)	29 (29.6)	69 (70.4)		
	Middle school	24 (14.82)	4 (16.7)	20 (83.3)		
	Primary School	2 (1.23)	2 (100)	0 (0)		
	Illiterate	8 (4.94)	3 (37.5)	5 (62.5)		
Religion	Hindu	108 (66.67)	28 (25.9)	80 (74.1)	8.727	0.013*
	Muslim	46 (28.40)	13 (28.3)	33 (71.7)		
	Christian	8 (4.93)	6 (75)	2 (25)		

#-Fisher's exact test, *Significant p value.

Table 2: Association between Unmet need of family planning and marital history.

Variables	Categories	Total, n (%)	Unmet need (%)	Met needs (%)	Chi-square value	P value
Age at marriage (Years)	<20	85 (52.47)	19 (22.4)	66 (77.6)	6.968	0.031*
	20-25	67 (41.36)	22 (32.8)	45 (67.2)		
	26-30	10 (6.17)	6 (60)	4 (40)		
	>30	0	0	0		
Duration of marriage (Years)	1-5	61 (37.65)	27 (44.3)	34 (55.7)	11.048	0.001*
	>5	101 (62.35)	20 (19.8)	81 (80.2)		
Active married life (Years)	≤5	62 (38.27)	27 (43.5)	35 (56.5)	13.542	0.001*
	6-10	40 (24.69)	12 (30)	28 (70)		
	>10	60 (37.04)	8 (13.3)	52 (86.7)		
Parity	0	38 (20.46)	15 (39.5)	23 (60.5)	7.295	0.026*
	1	42 (25.92)	16 (38.1)	26 (61.9)		
	≥2	82 (50.62)	16 (19.5)	66 (80.5)		
Decision maker regarding contraception	Self	8 (4.94)	1 (12.5)	7 (87.5)	7.576	0.020*
	Spouse	31 (19.13)	15 (48.4)	16 (51.6)		
	Joint	123 (75.94)	31 (25.2)	92 (74.8)		

*Significant p value

Table 3: Reasons reported for unmet needs of family planning.

Reason for not using family planning	Number	Percentage (%)
Lack of information about method	21	44.68
Fear of side effects	15	31.91
Health concerns	16	34.04
Previous failure of contraception	1	2.12
Religion related issue	4	8.51
Opposition of husband	7	14.89
Opposition of family members	10	21.27
No knowledge of place where family planning is provided	11	23.40
Embarrassment	3	6.38
Negligent attitude of women	19	40.42

DISCUSSION

The present study showed around 29.01% of married women had unmet needs with 17.3 % unmet need for spacing and 11.71% unmet need for limiting. This was higher when compared to total unmet need of urban Karnataka (7.3%, according to NFHS-5) and national average of 12.1% according NFHS-4. It was also higher when compared to similar studies conducted in Davangere taluk and Anekal taluk of Karnataka which showed an unmet need of 16.7% and 11.3% respectively.[3,11]

Unmet need was higher in women aged ≤20 years and duration of marriage ≤ 5 years which was similar to other studies which showed women in younger age group have more unmet need as compared to older women. The fear of side effects, opposition from family members as well negligent attitude of the women were noted as other reasons for unmet need which calls for appropriate counselling at both community as well as school level so as to help them prevent unintended pregnancy and hence achieve their reproductive goals.[3,11,12]

Similar to a study done in Ambala district, Haryana, education was seen as an important factor to determine the use of contraception.[13] In the present study, among women with lower education levels, a higher level of unmet need was observed. Religion was also seen to be a significant factor with around 75% of Christian women having unmet need. This was unlike the findings in other studies.

Majority of the study participants were homemakers and around 17.9% women were employed which was similar to a study done by Kashyap et al in Davangere district in urban Karnataka.[14] Unmet need was found to be higher in families where the decision maker was the husband similar to a study done in Gwalior district.[15]

More than half of the study participants in the present study were from nuclear families and nearly a third were from joint families. This was comparable to NFHS-4 data wherein 61.2% of population in urban Karnataka were from nuclear families.[9] Similar pattern in family composition was also observed in previous study in India by Gupta et al, however in a study by Shree et al the proportion of joint families was found to be higher than nuclear families.[16,17]

From this study it was found that around 80.86% of the study population had knowledge about contraception. 115 of the study samples had knowledge about condoms, 110

of the couples knew about sterilization, 92 of the couples were aware of IUCD and the main source of information about the contraceptive was from friends and family which was seen to be similar to a study done in Dharwad.[18]

While around 14.81% of the study sample used condoms and 9.87% were using IUCD, the most used method after completion of family was female sterilization, used by around 35% of the study population and more commonly in the higher/ elderly age group. This was seen to be similar with a study conducted in Trivandrum, Kerala.[19]

The study also had few limitations. Since this study was conducted during working hours, working women might have missed out from this study. The knowledge and attitude of male partners were not analysed as they were not part of the study and few females were reluctant to answer the questions due to social stigma.

CONCLUSION

The total unmet need for family planning in the present study was higher as compared to both state and national statistics. Age of the women, education, religion, age at marriage, duration of marriage, active married life, parity, decision maker regarding contraception were found to be significant factors for unmet need. The main reasons cited for unmet need were lack of knowledge, negligent attitude of the women, fear of side effects and opposition from family. The knowledge about contraception in the present study population was good. However, women were unwilling to use any contraceptive methods which calls for strengthening of health education and other awareness programs at both community and school levels.

Recommendations

Community based awareness programs should be conducted to educate the population on the safety and efficacy of modern contraceptives. By giving a proper health education to the eligible couples about the various contraceptive methods, their availability, their proper usage and the need for using these methods we can reduce the unmet need among eligible couples to a great extent.

REFERENCES

1. Park K. Park's Textbook of Preventive and Social Medicine. 25th ed. Jabalpur: M/s Banarsidas Bhanot. Chapter 9, Demography and Family Planning. 2019;445-520.
2. WHO. Technical Report. Series. No. 483. 1970. Available at: http://apps.who.int/iris/bitstream/handle/10665/40931/WHO_TRS_483.pdf;jsessionid=2DD4EBC96F328598B05E300FF60584FD?sequence=1. Accessed on 17 February 2021.
3. George N, Sulekha T, Ramachandran A, Peters A, Kiran PR. The unmet needs for family planning and its associated factors among ever married women in selected villages of Anekal taluk, Karnataka: acommunity based cross sectional study. Int J Community Med Public Health. 2018;5(5):2048-52.
4. Abortion. Available at: https://www.who.int/western pacific/health-topics/abortion. Accessed on 17 February 2021.
5. Bill and Melinda Gates Foundation. Family Planning Overview. Available at: http://www.gatesfoundation.org/familyplanning/Pag es/overview.aspx. Accessed 12 January 2018.
6. Family Planning and the 2030 Agenda for Sustainable Development (Data Booklet) [Internet]. United Nations; 2019. Available at: http://www.un-ilibrary.org/population-and-demography/family-planning-and-the-2030-agenda-for-sustainable-development-data-booklet_e154e49d-en. Accessed on 17 February 2021.
7. Kantorova V. Unmet need for family planning. 2017;4.
8. National Family Health Survey (NFHS-5). Available at: http://rchiips.org/nfhs/factsheet_NFHS-5.shtml. Accessed on 17 February 2021.
9. National Family Health Survey. Available at: http://rchiips.org/nfhs/factsheet_NFHS-4.shtml. Accessed on 17 February 2021.
10. Rao S. Karnataka: pioneer in family planning. Yojana. 1983;27(12):39-40.
11. Raveendran R. Unmet need for family planning in South India. 2017;5.
12. Yadav K, Agarwal M, Shukla M, Singh JV, Singh VK. Unmet need for family planning services among young married women (15-24 years) living in urban slums of India. BMC Women's Health. 2020;20(1):187.
13. Nazir S, Mittal A, Anand BK, Goel R, Singh J, Rashid A. Determinants of unmet need for family planning in a developing country: an observational cross-sectional study. National J Community Med. 2015;6(1):6.
14. Kashyap R, Vidya GS, Dhar R. A Study on Unmet Need of Contraception Among Married Women in Urban Field Practice Area of JJM Medical College, Davangere, Karnataka. Community Med. 2017;8(4):203-7.
15. Kumar SD, Pramod G, Roli G, Neeraj G, Manoj B. A study to assess the unmet needs of family planning in gwalior district and to study the factors that helps in determining it. National J Community Med. 2011;2(1):4.
16. Gupta A, Roy TK, Sarker G, Banerjee B, Ghosh S, Pal R. Determinants of contraceptive practices among eligible couples of urban slum in Bankura

District, West Bengal. J family med primary care. 2014;3(4):388.

17. Shree V, Prasad RR, Kumar S, Sinha S, Choudhary SK. Factors for nonacceptance of contraceptive methods amongst married women of reproductive age group in rural Patna. Int J Community Med Public Health. 2017;4(6):1882-7.

18. Sunita TH, Desai RM. Knowledge, attitude and practice of contraception among women attending a tertiary care hospital in India; 2013. Available from: http://112.133.228.228:8080/xmlui/handle/123456789/671. Accessed on 17 February 2021.

19. Thulaseedharan JV. Contraceptive use and preferences of young married women in Kerala, India. Open Access J Contracept. 2018;9:1-10.

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