

Assessment of Unmet Needs of Family Planning and Reasons for Non-Use of Contraceptive Methods among Women in Reproductive Age in Rural Community

Valekar SS, Pandve HT*, Chawla PS and Mane AB

Department of Community Medicine, Smt. Kashibai Navale Medical College and General Hospital, Pune, India

*Corresponding author: Pandve HT, Associate Professor, Department of Community Medicine, Smt. Kashibai Navale Medical College and General Hospital, Narhe, Pune, India, Tel: 912024106268; E-mail: dr_harshalpandve@yahoo.co.in

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Abstract

Background: 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. The concept of unmet need points to the gap between these women's reproductive intentions and contraceptive behaviour. The sum of the unmet need for limiting and the unmet need for spacing is the unmet need for family planning. NFHS III showed that there is 22% of overall unmet need of family planning. The reasons are multiple to not to use the contraceptive methods. These reasons need to be attended.

Materials and methods: The cross-sectional study conducted amongst 378 women in reproductive age group in rural health training centre of tertiary care hospital with the study tool of semi-structured questionnaire. Women in reproductive age group from 35 villages of primary health centres were participated in the study.

Results: The result showed that 42% women are having unmet need for family planning with higher (63%) unmet need for limiting method than spacing method (37%) and the most preferred method for future use was female sterilization (63%) followed by OC pills (23%). The most common reason among non-users was fear of side effects (34%) of use of contraceptive methods.

Conclusion: Study concludes that there is an unmet need of family planning higher for limiting than spacing methods amongst the rural women.

Keywords: Unmet need of family planning; Women in reproductive age; Contraceptive methods; Female sterilization

Introduction

Unmet need for family planning is an important indicator for assessing the potential demand for family planning services. Currently married women who are not using any method of contraception but who do not want any more children are defined as having an unmet need for limiting and those who are not using contraception but want to wait two or more years before having another child are defined as having an unmet need for spacing. The sum of the unmet need for limiting and the unmet need for spacing is the unmet need for family planning [1]. According to these definitions, 13% of currently married women in India have an unmet need for family planning. The unmet need for limiting (7%) is slightly higher than the unmet need for spacing (6%) [1].

The International Conference on Population and Development (ICPD), held in Cairo in 1994, defined reproductive rights as human rights and consequently the governments worldwide have committed to provide sexual and reproductive services available to all. But there still exists a high unmet need for modern contraceptives. A recent study estimates that round 215 million women in the developing world as a whole have an unmet need for modern contraceptives [2].

The concept of unmet need points to the gap between these women's reproductive intentions and contraceptive behaviour. In doing so, it possess a challenge to family planning program of reaching and serving millions of women whose reproductive attitude resemble those of contraceptive users but who for some reason or combination of some reasons, are not using contraception [3]. Since the launch of nationwide family planning program in 1951 attempt has been made from time to time to encourage the women to accept and adopt the contraception. In spite of efforts of the programmers there are women who have never used a method of family planning throughout their reproductive life and there are many who are likely to follow their footsteps [4].

Women who reported that they did not intend to use contraception any time in future (or that they were unsure) were asked about the main reason for their intentions. This information is crucial for understanding obstacles to contraceptive use so that suitable information programmes can be designed. The reasons are multiple to not to use the contraceptive methods. These reasons need to be attended to achieve a greater success in family planning program. This study was carried out to assess unmet needs of family planning.

Objectives

- To assess the unmet need of family planning in study area

- To find out the reasons for non-use of contraceptive methods
- To determine the association between socio-demographic variables and types of unmet need of family planning.

Materials and Methods

The Cross-sectional study was carried out in the field practice area of a rural health training center of teaching institute in Pune city which covers 35 villages.

Period of study: From January 2012 to December 2012

Study area: Villages under Primary Health Centre (PHC) Karla, Tal. Mawal, Dist. Pune, Maharashtra. Karla PHC is having 7 sub centers and 35 villages. According to the census 2011, total population of Karla PHC was 36760.

Sample size: With the reference to National Family Health Survey-3 (NFHS-3), the prevalence of contraceptive methods was taken to be 56% for the any contraceptive methods. Using Epi Info Software Sample size for Population Survey, sample size was calculated with the Confidence limit of 5%. The Sample Size calculated for the survey was 378. A cross-sectional study conducted in PHC Karla, under rural field practice area of medical college in Maharashtra. PHC Karla has 35 villages. The data on population of these villages was obtained from PHC Karla. The calculated sample size is divided proportionately into 35 villages.

Sampling unit: The women in reproductive age group (15-49 years)

Sampling techniques

a. Sampling technique for selection of household: Assuming at least one woman in the reproductive age group, sampling technique used for the selection of household was systematic random sampling method in each village

b. Sampling technique for selection of study subject in the household: In the selected household if more than one eligible subject (more than one female in the reproductive age-group) were available, all subjects were included. Total 378 households with women in reproductive age group were planned to be surveyed at the start of the study (assuming one woman in the age group of 15-49 Yrs per household). In case the sampled household did not have a woman in the reproductive age group then subsequent house was taken. The household, where desired sample size is achieved was the last household surveyed in the study.

Study tool: The study was conducted by using a Questionnaire. The questionnaire was based on NFHS-3 Questionnaire. Semi structured, Pre-tested Questionnaire was used.

Data analysis: Epi Info 3.5.3, Primer software Data will be analyzed using chi-square test and statistical significance is taken if p value is less than 0.05. Written approval from ethical committee, at the institute level was obtained. Informed consent was taken from the study subjects before conducting an interview.

Results

Total 378 women in reproductive age group were participated in the study. Out of surveyed women, 59 were unmarried women in reproductive age group. Because of this, results of 319 women are presented here. Out of 319 married women, 217 (68%) women were using some or the other method for contraception while 102 (32%)

women were Non-Users of contraceptive methods. When the information about Unmet need of family planning among non-users were collected, following results were found. Out of 102 women who are not using any method of contraception, 43 women reported that they want to use some or the other method of contraception thus giving the total unmet need for family planning is 42%. When the detail information about unmet need of family planning was obtained the following results were shown in Table 1.

Unmet Need of Family Planning	Frequency (%)
For Spacing Methods	16(37%)
For Limiting Methods	27(63%)
Total	43(100%)

Table 1: Detail information about unmet need of family planning.

Of the total 43 women, 27 women wants to undergo female sterilization followed by 10 women wanted to use OC pills, 5 women want to use any method of contraception and 1 woman wanted to use Cut as a method of contraception. The most preferred method for use in the future is Female sterilization followed by O.C Pills (Figure).

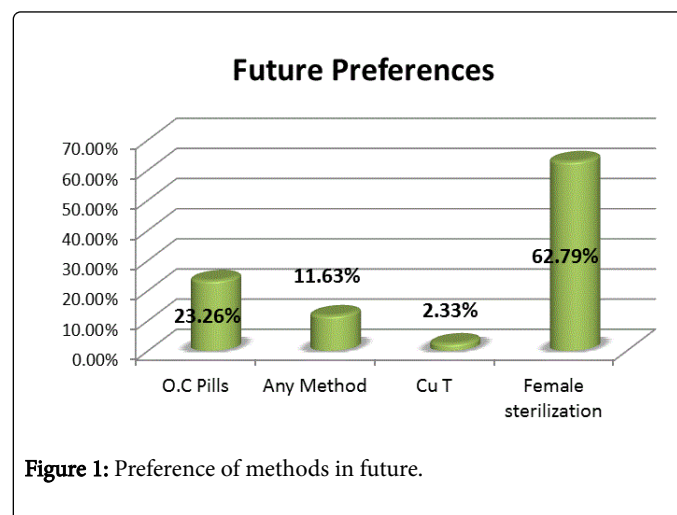


Figure 1: Preference of methods in future.

When the attempts to find out reasons for Non-use of contraceptive methods were made, following results were given by the respondents in Table 2.

Sr. No.	Reasons from Non-Users	Frequency (%)
1.	Fear of side effects	35(34.4%)
2.	Lactational amenorrhea	10(9.8%)
3.	Want a male child	30(29.4%)
4.	Want to conceive	9(8.8%)
5.	Newly married	3(2.9%)
6.	Now ANC	15(14.7%)
Total		102(100%)

Table 2: Reasons for non-use of contraceptive methods.

The most common reasons for not using contraceptive methods were “Fear of side effects” (34.4%) followed by “Want a male child” (29.4%). The 15 women, who were pregnant at the time of survey, gave

the information that the current pregnancy was mistimed or unplanned showing the importance of unmet need of spacing methods Table 3.

Socio-Demographic Variables		Unmet need for Spacing	Unmet need for Limiting	Total	Chi-square Value (d.f) and P value
Age Group	15-19	3(60%)	2(40%)	5(100%)	6.049 (3) P=0.144; Not significant
	20-24	9(50%)	9(50%)	18(100%)	
	25-29	2(13%)	13(87%)	15(100%)	
	30-34	2(67%)	1(33%)	3(100%)	
	35-39	0	2(100%)	2(100%)	
Literacy status of Women	Illiterate	0	3(100%)	3(100%)	4.321 (3) P=0.306; Not significant
	Primary upto 4 th std	3(25%)	9(75%)	12(100%)	
	Secondary upto 10 th std	8(57%)	6(43%)	14(100%)	
	Higher Secondary	2(33%)	4(67%)	6(100%)	
	Graduate and Post graduate	3(37%)	5(63%)	8(100%)	
Socio-Economic Status	Class I	1(33%)	2(67%)	3(100%)	2.755 (4) P=0.600; Not significant
	Class II	4(50%)	4(50%)	8(100%)	
	Class III	6(50%)	6(50%)	12(100%)	
	Class IV	3(23%)	10(77%)	13(100%)	
	Class V	2(29%)	5(71%)	7(100%)	
Religion	Hindu	15(37%)	25(63%)	40(100%)	0.226 (1) P=0.635; Not significant
	Muslim	1(33%)	2(67%)	3(100%)	
Number of Children	No Child	7(78%)	2(22%)	9(100%)	15.179 (2) P<0.001; Highly significant
	1	8(50%)	8(50%)	16(100%)	
	2	1(7%)	13(93%)	14(100%)	
	More than 2	0	4(100%)	4(100%)	

Table 3: Association of socio-demographic factors and type of unmet need for family planning.

The association between various socio-demographic factors and types of unmet need of family planning revealed that there is significant association between number of children and types of unmet need of family planning concluding as the number of children increases the unmet need for family planning shifts from spacing methods to limiting methods.

The similar trend were shown by age group concluding as the age increases the unmet need for family planning changes from spacing methods to limiting methods. Literacy status of women in association with unmet need for family planning showed that when the women is illiterate the unmet need is more for limiting than spacing and as the level of education increases the unmet need is more for spacing methods than limiting methods. Socio-economic status does not revealed any trend as the unmet need for spacing and limiting is almost equal in all class of socio-economic status.

Discussion

Unmet need is when the women are willing to use contraceptive methods but she is unable to use it because of constraint like non-availability of information, influence of family member etc. In a study conducted by Puri et al. showed that, of 159 women were not using contraceptive methods, 22(6%) women were having the need for spacing and 27(2%) were having need for limiting. Thus, the total of 49(8%) women were having unmet need of family planning [5].

Similarly, the study conducted by Bhattacharya SK, Ram, et al. showed that Extent of unmet need for family planning was 41.67% of which 25.84% were limiters and 15.83% were spacers [6]. The intention to use a method of contraception in the future is an important indicator of the potential demand for family planning services. According to NFHS III, 22% reported that they intend to use contraception and 64% of prospective users said they would prefer

female sterilization and 14% cited the pill as their preferred method [1]. Women who reported that they did not intend to use contraception any time in future (or that they were unsure) were asked about the main reason for their intentions. This information was crucial for understanding obstacles to contraceptive use so that suitable information programmes can be designed.

Murarkar et al. [7] in the year 2005-06 conducted a study found out that the commonest reason for not accepting was desire for children by 68 (25.85%) women, fear of side effects was second by 43(16.34%) women. Also, Patro et al. [8] In the year 2005 conducted a study found out that the reasons for non-acceptance were either for an expectation of a male child (44%) or fear of side effects (29%). Similarly, Bhattacharya et al. [9] in the year 2010 conducted a study found out the most common reasons for non-acceptance of family planning among non-acceptors were, wanting a male child (14.3%).

The present study findings were comparable with the above studies

Besides availability of family planning services and knowledge, the unmet need for family planning depends on many socio-economic factors. The study conducted by Bhattacharya et al. [6], showed that with higher educational level, proportion of spacer in the unmet group was significantly increasing from 33% in the illiterate group to 100% in the highest educational status group with reciprocal decrease in the proportion of limiter. With increase in numbers of living children, the prevalence of spacers significantly decreased and limiter increased. In case of women having one child, the unmet need for spacing was seen to be highest (26.5%) and gradually decreased with each additional child. On the other hand unmet need for limiting births was low (18.30%) in women having one child and was gradually increased with each additional child. 44% of the women of unmet group had one child so it indicates even after first child the women are interested in controlling fertility. But in Ram et al, study showed that 92% of the mothers with unmet need had 2 or more children [10].

More than 200 million women in developing countries want to avoid pregnancy, yet are not using a modern contraceptive method [11]. Each year, such unmet need for contraception results in an estimated 54 million unintended pregnancies, as well as more than one million infant deaths and 79,000 maternal deaths [11,12]. At the July 2012 London Summit on Family Planning, world leaders and family planning experts emphasized the importance of addressing unintended pregnancy and unmet need for contraception in developing countries. The summit resulted in FP 2020, a global partnership with the goal of providing family planning services including access to effective yet reversible contraceptive methods to an additional 120 million women by the year 2020, thereby cutting unmet need in half [13].

An emphasis is made to compare the present study results with that of the other studies conducted in developing countries. The study conducted in Ethiopia by Assefa [14] revealed that in their country Unmet need for contraception increased from 35.1% in 2000 to 37.4% in 2005. Unmet need for spacing remained constant at about 25%, while unmet need for limiting increased by 20% between 2000 and 2005. Age, age at marriage, number of living children, place of residence, respondent's education, knowledge of family planning, respondent's work status, being visited by a family planning worker and survey year emerged as significant factors affecting unmet need.

Study conducted among married Nigerian women [15] between 2003 and 2013 stated that there was no significant change in the trends

in unmet need to space fertility. Unmet need to limit fertility was significantly higher in 2003, adjusted, and 2008 relative to 2013. Younger, low-parity, Muslim women were significantly less likely than older, high-parity, non-Muslim women to have an unmet need to limit fertility. A cross-sectional study conducted in Botswana [16] using data from Botswana family Health Survey 2007 revealed that Married women who had unmet need for family planning were 9.6% in 2007. Most of the unmet need was for limiting (6.7%) compared to spacing (2.9%). suggesting the similar trend with other developing countries.

Similar study conducted in Srilanka [17] using Data from the 2007 Demographic and Health Survey of Sri Lanka stated that Levels of unmet need for spacing births in 2007 were lower than 3% for all measures and for most subsamples. In contrast, levels of unmet need for limiting were generally higher and more varied, both in relation to the definition of unmet need used and across subsamples; suggesting the similar trend with other developing countries. Another study conducted in Bangladesh [18] in the year 2016 revealed that total demand for contraception was 71%, also the results suggested that region, place of residence, religion, husband's desire for children, visits of FP workers, decision-making power on child health care, reading about FP in newspaper/magazine and number of births in three years preceding the survey were significant predictors of unmet need for contraception.

These results are partially similar with our study suggesting that the developing countries are facing similar issues regarding unmet need of family planning. The role of care manager can be considered here to reduce the unmet need of family planning. The study conducted by Ciccone et al. [19] in Apulia region of Italy studied the impact of project Leonardo in primary health care system for patients with Diabetes and Heart Failure. In this project trained "care managers" were introduced in primary health care system with aim to improve patient health outcomes and promote appropriate resource utilization. Results showed that Leonardo was feasible and highly effective in increasing patient health knowledge, self-management skills, and readiness to make changes in health behaviors.

In a developing country like India optimum utilization of role of ASHA workers and Anganwadi workers can be considered as a Care manager to provide information about contraceptive methods and to bring out the necessary changes in behavioral pattern of community towards use of family planning methods.

Conclusion

This study concluded that there is higher unmet need for limiting methods of family planning than spacing methods of family planning. Unmet need preference was more for female sterilization and OC pills. The most common reason given by non-users was fear of side effects of contraceptive method in rural areas.

Recommendation

The role of ASHA worker and Anganwadi worker should be utilise to extensively promote the family planning methods to reduce the unmet need of family planning.

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