A comparative study between met & unmet need groups of contraception in rural area of Maharashtra, India

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ABSTRACT

Objectives To compare met & unmet need groups of contraception with socio-economic, demographic, accessibility & family Planning (FP) related factors.

Methods Community based cross-sectional, comparative study was conducted among 363 married women of reproductive age groups in rural area selected by stratified simple random technique. After collecting preliminary information, the study population then divided into two groups based on their contraceptive use i.e. MET Group & UNMET NEED Groups. Then the role of socio-economic, demographic, accessibility & family Planning (FP) related factors were studies to determine contraceptive use between these groups.

Results Mean age of study subjects was 24.12 ± 4.45 years & average number of children per women was 2.02. Males were more literate than females (69.1% Vs 47.2%). 51.8% women were belonging to lower socio-economic status. Early marriages were still prevalent in this study (53.7%). Prevalence of met group of contraception was 59.2% & that of unmet need for contraception was 44.1%. Met groups were mainly from 20-29 years age group (46.6%); most of them (46.8%) were literate & were from high socio-economic group (30.9%) compared to unmet need groups. On comparison to unmet groups, most of the met group (33.9%) got married after 18 years of age, residing within 5km area (26.4%), had visited to FP centre (49.0%) & ever visited by FP staff (43.3%).

Conclusion Education, income, marriage age, accessibility, FP staff related factors definitely has role among met & unmet need groups in their contraceptive use.

Keywords: contraception, met & unmet need groups, factors affecting

INTRODUCTION

Most of the population growth occurs in developing countries, where family size exceeds the minimum replacement level requirement. A future zero population growth level is the only hope. This seem a distant dream, but a possible one depending on whether simple replacement level is achieved, failure to achieve this level will mean the population will continue to grow[1]. The discrepancy between reproductive intentions and birth control practices was termed as "unmet need" [2, 3].

Though the Family Planning programme has experienced significant growth and expansion over the past half century, pregnancies continue to be unplanned & the unmet need for contraception remains substantially high. The contraceptive choice is conspicuous by its absence & quality of care is limited within the programme

& socio-demographic factors play important role in limiting the practice of contraception.

India is a vast country with population of 1.21 billion (121crores) [4] & about three-fourth of the country's population live in rural areas. It is one of the challenges to meet the contraceptive needs in rural area, where most of women live & give birth. A very few studies have been undertaken regarding current contraceptive methods & unmet need for contraception among rural population & comparison between these two groups. Given the diverse array of rural cultures it was decided to limit the study to rural areas.

MATERIAL & METHODS

The present community based cross sectional comparative study, carried out over a period of 13 months among married women of reproductive age group (eligible couples), in Parol PHC (one of the field practice area of Department of Preventive & Social Medicine of Topiwala National Medical College, Mumbai). Initially preliminary visit was made to Parol PHC to get an orientation of different areas such as total population, their demographic profile & accessibility & availability of health services to the people. Regular meetings with health workers were conducted to assess the family planning practices in the area. This served as preliminary information for structuring the questionnaire for the present study. Pretested Performa was prepared & study population was interviewed after taking verbal consent. Initially a pilot study was conducted, which helped to test & restructure the instrument for actual study.

Sample size

The total population of Parol PHC is 20,586 & total eligible couples are 2486 spread over Parol PHC & six Subcentres. These eligible couples constituted study population. A pilot study was carried out among 65 married women of reproductive age group (50% of eligible couple population of one of the selected village) wherein, the prevalence of unmet need for contraception was found to be 51.2%. Total sample of 381 women was finalized by using appropriate formula, $(4PQ/L^2)$, taking into account prevalence of unmet need of contraception in pilot study & 10% allowable error. Stratification was done as per sub centre area, to ensure representation of study subjects from entire PHC area. Out of these 381 women, 6 refused to give interview & 12 were not interested in using contraceptives in future at all, & hence were excluded, thus limiting the study group to 363 women (95.3% of the estimated sample size) who were selected by simple random sampling method.

The information was collected among 363 respondents using restructured Performa which includes Identification information (name, age, religion, education of self & of husband, address, type of family, total family members & total family income); Fertility information includes age at marriage & number of living children; information on knowledge & practice of contraceptive use. Based on contraceptive use, study population was classified into met & unmet need groups. Met group of contraception were those married couples in reproductive age group who were using contraception & satisfied. Unmet need group of contraception were those married couples in reproductive age group who desire to use for contraception (either for spacing or limiting) but not using any contraception during study period. The present study was undertaken to assess whether socio-economic, demographic, fertility, accessibility & Family Planning (FP) related factors has any role to play in contraceptive use in met & unmet need groups of contraception.

RESULTS

Table 1 Socio-economic demographic characteristics & fertility pattern of study population (N=363)

Socio-economic, demographic & fertility characteristics		No.	%
1. Women's age (in years)	15-19	22	6.1
	20-24	195	53.7
	25-29	96	26.4
	30-34	31	8.5
	35-39	19	5.2
	40 & above	0	0.0
2. Religion	Hindu	359	98.9
	Muslim	4	1.1
	Others	0	0.0
3. Respondent's education	Illiterate	155	42.7
	Primary	40	11.0
	Middle	77	21.2
	Secondary	76	20.9
	College and above	15	4.1
4. Husband's education	Illiterate	112	30.9
	Primary	31	8.5
	Middle	77	21.2
	Secondary	111	30.6
	College and above	32	8.8
5. Respondent's occupation	House wife	149	41
	Unskilled	135	37.2
	Farming	55	15.2
	Self-employed	24	6.6
6. Husband's occupation	Unskilled	205	56.5
	Service	60	16.5
	Self employed	39	10.7
	Farming	51	14.1
	Skilled	8	2.2
7. Family type	Nuclear	145	39.9
	Joint	129	35.5
	3 generation	89	24.5
8. Per Capita Income (Modified Prasad classification 2007)	I Upper	10	2.8
	II Upper middle	46	12.7
	III Lower middle	119	32.8
	IV Upper lower	157	43.3
	V Lower	31	8.5
9. Age at marriage	</= 18 years	195	53.7
	> 18 years	168	46.3
10. No. of living children	None	7	1.9
	1 & 2	268	73.8
	3 & 4	75	20.7
	5 & more	13	3.6

Maximum women were in 20-24 years. Average number of children per women was 2.02. Hindu religion predominates in the community. Males were found more literate than females in the present study (69.1% Vs 47.2%). Most of the women & their husbands were doing labour work & were belonging to lower socio-economic status (51.8%). Early marriages are still very much prevalent in this area (53.7%).
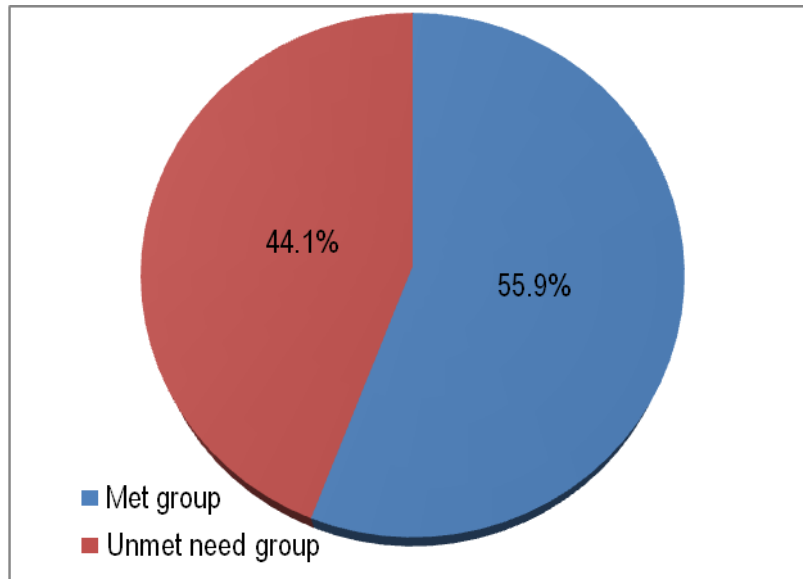
Figure 1 Distribution of study population into met & unmet need groups of contraception

88% of women were having knowledge about contraceptive methods but only few women (26.7%) had ever used contraception in the past & 55.9% were currently using contraception & were satisfied which constituted met group. Prevalence of unmet need for contraception was 44.1%.

Table 2 Comparison between met & unmet need groups with sociodemograhic & other factors

Variables	Met	Unmet need groups	P value 95% CL	OR
Age in Years (< 30 age Vs > 30 age)				
15 to 19	006	16	0.00	1.00
20 to 24	105	90	0.99 (NS)	
25 to 29	064	32	Df=1	
30 to 34	017	14		
35 to 39	011	08		
Education (Illiterate Vs literate)				
Illiterate	33	122	131.63	16.54
Primary	32	008	0.00 (S)	
Middle	53	024	Df=1	
Secondary	70	006		
College & above	15	000		
PCI *(HSES Vs LSES)				
Class I	10	00	8.94	1.89
Class II	33	13	0.02 (S)	
Class III	69	50	Df=1	
Class IV	78	79		
Class V	13	18		
Age at marriage				
>=18	123	045	37.93	3.93
< 18	080	115	0.00 (S)	
Knowledge about contraceptive method				
Yes	203	116	60.97(Yates corrected value) 0.00 (S)	-
No	000	044		
Distance of village/pada from PHC(<5km Vs > 5km)				
< 5 km	96	41	17.87	2.60
5-10 km	36	63	0.00 (S)	
> 10 km	71	56	Df=1	
Home visit by Health worker				
Yes	178	109	20.68	3.33
No	025	051	0.00 (S)	
Ever visited FP centre				
Yes	157	006	195.86	87.60
No	046	154	0.00 (S)	
Total	**203**	**160**		

HSES = high socio-economic status; LSES = low socio-economic status

Contraceptive use was maximum in 20-29 years age groups & they were met (83.2%) compared to unmet need groups (70%). Most of the unmet group was illiterate (76.2%) compared to met need groups (16.2%). Thus it proves that educated women are likely to use contraception than non-educated women (p < 0.05). Maximum met group (55.2%) was belonging to higher socio-economic class (I, II, III) whereas most of the unmet need women (60.6%) were from lower socio-economic class (Class IV, V) & it was statistically proved (p < 0.05) that higher the income, more the use of contraception. Only 39.4% women in met group got married before age of 18 years compared to

unmet need groups wherein 71.9% got married before 18 years of age which was statistically significant (p < 0.05). Knowledge proved statistically significant role in use of contraception as almost all the women in met group had knowledge about contraception. 47.3% women in met group were found residing within 5 km while only 25.6% women were found to reside within 5km area from unmet need groups, statistically significant (p < 0.05). Most of the met group had visited FP centre (77.3%) & visited by FP worker (87.7%) compared to unmet need groups who ever visited FP centre (3.7%) & visited by FP staff (68.1%).

On Univariate analysis age found to have no role in use of contraception (OR=1) among met & unmet need group. Educated is an important determinant in for contraceptive use. Most of the met groups were educated & they were using contraceptive methods then unmet need group (OR=16.54). Most of the met group were from higher socioeconomic status & are 1.89 times more in favor of using contraception i.e. met group then unmet need group. Most of the met group got married at or after 18 years & in favor of using contraception then unmet need group (OR=393). Similarly nearer the women's residence from FP centre more likely to use contraception as most of the met group were residing near the FP centre, they are more in favor of using contraception then unmet need group (OR=2.60). Even women's single visit with FP staff (either at home or at FP centre) is an important determinant in contraceptive use which is proved statistically. Met group are more likely to use contraception who visited by FP staff (OR=3.33) & those who ever visited FP centre (OR=87.60) then unmet need groups.

DISCUSSION

Prevalence of met group (satisfied use of contraception) was 55.9% which is low & that of unmet need was 44.1% which is high compared to NFHS – 3 data wherein prevalence of CPR was 67% & that unmet need was 13% (14.6% in rural area).[5]

In met group, majority of the respondents were in the age group of 25-29 years (83.2%). Unmet need for contraception was highest among 15-24 years age group (29.2%) & falls as age advances between age group 25-39 years it was 14.9%. In a study by Alok Ranjan, contraceptive prevalence rate has been found to be the lowest in the age group 15-19 years, and increases sharply after the age of 20 years reaching a high between ages 35-39 years[6]. Education plays a vital role in acceptance of contraception. It does not influence fertility directly but helps in raising general awareness of small family norm & better quality of life for children & thus contributing towards declining fertility. In met group maximum were literate (83.7%) while only 16.3% were illiterate while opposite result was found in unmet need groups wherein 76.2% were found illiterate. Similar results were obtained in a study by Kansal et al. (2005)[7] (wherein contraceptive use was 56.93% in literate & 46.17% among illiterates respectively). & S. Bisoi et al[8] wherein acceptance of contraception was significantly higher among literates (65.52%) than illiterates (55.8%).

An inverse relation was found between incomes among met & unmet need groups. Maximum met group (54.2%) were belonging to higher socio-economic Class (I, II, III) while 44.8% were belonging to lower socio-economic Class (IV, V) compared to unmet group wherein only 17.4% were from higher socioeconomic class (I, II, III). The Operation Research Group, Baroda, in 1971 for India as a whole carried out their first survey in 1971; it was found that contraceptive prevalence increases with family income[7]. In a study by Dr. Harvindar Kaur, it was found that higher monthly family income reduces the fertility rate by raising the age at marriage, educational status, use of contraceptive methods and inculcates desire for small family size[8].

33.9% met women got married after 18 years of age while most of the unmet need groups got married before 18 year of age. All women in the met group were having knowledge of contraception compared to unmet need groups' women where knowledge of contraception was only 32%. Lack of knowledge is always a barrier in acceptance of contraceptive methods. In a study by Khan et al, reason for non-use of family planning was found to be lack of knowledge of any family planning method[9]. As there were scarce transportation facilities in the study area & longer distance of beneficiaries from their

residential place to PHC found to be one of the obstacles in contraceptive use. The result obtained in the study shows that as distance increases from beneficiaries' residential place to PHC contraceptive use also decreases. Most of the met were residing within 5 km area compared to unmet need groups who were residing at longer distance (> 5 km). FP staff plays important role in contraceptive use by women as they motivate & counsel them for its use & also resolve if any obstacles in contraceptive use, hence even one contact of women with FP staff either at home or at FP centre has definite role in increase use of contraception which was proved statistically in the present study as maximum women (77.3%) had visited FP centre & 87.8% women were visited by FP staff from met group

compared to unmet need groups wherein only 68.1% women were visited by FP staff & 3.7% women has visited FP centre.

CONCLUSION

Education, income, marriage age, accessibility, FP staff related factors definitely play an important role to determine contraceptive use among met & unmet need groups. Therefore continuous awareness of contraceptive methods with regards to different methods, their usage, & their availability to the beneficiaries should be made by grass root workers at PHC, subcentre & village level to motivate them to accept contraceptive methods so as to improve contraceptive prevalence rate.

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