Prevalence of usage of different contraceptive methods among married women of reproductive age in an urban slum area

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Abstract

Background: Increasing population is a worldwide problem particularly in developing countries like India. The extent of acceptance of contraceptive methods still varies within societies, different castes, and religious groups. Present study was done to find out prevalence of contraceptive use in married women of reproductive age in urban slum area.

Objective: a) To know the prevalence of contraceptive use in married women of reproductive age group. b) To find out reasons for not using contraceptive methods. c) To educate married women of reproductive age group to promote for use of contraceptive methods based on study observations.

Materials and Methods: A community based, cross- sectional study was conducted in an urban slum area under urban health center. Participants included 350 women of reproductive age group, selected by simple random sampling. Statistical analysis: Chi-square test for association and goodness of fit.

Result: Contraceptive prevalence was found to be 58.57% in urban slum area. Tubal ligation was most common method of contraception (73.65%) followed by oral pills (14.15%), intrauterine device (6.82%), and condom (4.39%). Contraceptive use was higher between age group of 30–34 years (14.57%) followed by age group 25–29 (13.71%). Contraceptive use was higher among women having 3 or more children (24.85%). Among subjects who were not using contraceptives, most common reason was desire for more children (42.76%).

Conclusion: Prevalence of use of contraceptive was low in urban slum area. Younger age of women, low socio economic class, illiteracy, no living children in the family were found to be associated with low use of contraception. Motivation of couples through media and health personnel can help to achieve positive attitude for effective use of contraceptives.

KEYWORDS: Contraceptive prevalence, slums, married women

Introduction

Increasing population is a worldwide problem today particularly in developing countries like India. India is the second most populous country in the world with a population of 1210 million as per Census 2011.[1] The population growth rate of India is 1.64% as compared to the world which is 1.23%. India was the first country in the world to formulate the National Family Planning Programme in the year 1951. However, one criticism that has often been reiterated for the family welfare programme of India is that it has not become a people's own programme. The family welfare programme focused purely on demographic goals and concentrated on numerical, method specific contraceptive targets till the advent of the target free approach. National Population Policy 2000 envisages universal access to various methods of contraception and fertility regulation. It is anticipated that if this policy is fully implemented, India's population in 2016 will be 1263 million. The extent of acceptance of contraceptive methods still varies within societies and also among different

castes and religious groups. The factors responsible for such varied picture operate at the individual, family, and community level with their roots in the socio-economic and cultural milieu of Indian Society.[2] Presently a variety of different methods of contraception are available, which are generally extremely safe compared to risks associated with pregnancy and child-birth. Family planning can reduce the maternal mortality rate (MMR), infant mortality rate (IMR), and poverty.

The aim of this study is to study prevalence of contraceptive use in married women of reproductive age group in urban slum area. Objectives are a) To know the prevalence of contraceptive use in married women of reproductive age group. b) To find out the reasons for not using contraceptive methods. c) To educate married women of reproductive age group to promote for use of contraceptive methods based on study observations.

Materials and Methods

A community based cross-sectional study was conducted in an urban slum area under urban health center. Study was conducted from 1st January 2013 to 30th June 2013 for duration of 6 months. This study was undertaken in the field practice area of urban health center. There are 13 slum areas having total population of 14353 with total households 2860. Married women of age group 15–49 were considered in the study. Total number of married women of age group 15–49 is 22%. The sample size was calculated by using prevalence of usage of contraceptive methods in married women as 56%. With allowable error of 10%, using the formula for calculating sample size i.e. $n = 4pq/L^2$. By considering 10% non-response error, sample size of 345 obtained. To take the round off number sample size of 350 was calculated. All houses in the field practice area were numbered and houses were selected on the basis of simple random sampling technique until 350 women of reproductive age group were covered. A pre-tested and pre-structured questionnaire was used to interview the women about use of different contraceptive methods, number of living children, reasons for not using

contraceptive methods, etc. Verbal consent was taken before filling the questionnaire. Data was collected, compiled, and analysed with the help of statistical test like Chi-square test for association and goodness of fit.

Result

The total of 350 married women in reproductive age group of 15–49 years was studied during the study period. The prevalence of contraceptive use in married women of reproductive age group was found to be 58.57%. Proportion of married women was highest (19.71%) in the age group of 20–24 years. Majority of the women were Hindu (40.29%).

Table 1 shows the association between age and use of contraceptive methods. Contraceptive use was maximum in the age group of 30–34 years (14.57%). The most commonly used method was tubectomy (73.65%). Among spacing methods, OCP, IUDs, and condoms were used by 14.15%, 6.82%, and 4.39% of the couples, respectively. The difference of contraceptive use in different age groups was statistically significant ($p < 0.001$).

Table 2 shows the distribution of study subjects by religion. Contraceptive use was high among Buddhists (73.13%), Hindus (62.41 %), and Christians (69.23%), but it was low among Muslims (45.74%). The difference was found to be statistically significant ($p < 0.01$).

Table 3 shows that most of the women belonged to lower socio-economic class, majority (43.14%) belonging to socio-economic class V and rate of contraceptive use was lowest (45.69%) among them.

Figure 1 shows the association between education of women and contraceptive use. It was found out that contraceptive use rate was 8% among illiterate women, while it was 30% among women educated up to higher secondary school. This difference was found to be statistically significant ($p < 0.001$).

Figure 2 and Table 4 reveals that contraceptive use was higher among the women having 3 or more children (24.85%) followed by women having less than 2 living children (23.71%).

Table 1: Association between age group and contraceptive use (*n* = 350)

Age (yrs)	Contraceptive method (%)					Contraceptive use (%)		Total
	Condom	O.C. pills	IUCD	Depot Preparation	Tubal ligation	Yes	No	
15–19*	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	27 (7.71)	27 (7.71)
20–24*	6 (2.93)	10 (4.88)	1 (0.49)	0 (0.00)	4 (1.95)	21 (6.00)	48 (13.71)	69 (19.71)
25–29	3 (1.46)	12 (5.85)	5 (2.44)	2 (0.97)	26 (12.68)	48 (13.71)	36 (10.28)	84 (0.24)
30–34	0 (0.00)	7 (3.41)	6 (2.93)	0 (0.00)	38 (18.54)	51 (14.57)	11 (3.14)	62 (17.71)
35–39	0 (0.00)	0 (0.00)	2 (0.97)	0 (0.00)	35 (17.07)	37 (10.57)	9 (02.57)	46 (13.14)
40–44	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	33 (16.10)	33 (9.43)	8 (2.28)	41 (11.71)
45–49	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	15 (7.32)	15 (4.28)	6 (1.71)	21 (6.00)
Total	9 (4.39)	29 (14.15)	14 (6.82)	2 (0.97)	151 (73.65)	205 (58.57)	145 (41.43)	350

$\chi^2 = 86.2$, d.f. = 5, $p < 0.001$
* = clubbed together for χ^2 purpose

Table 2: Distribution of study subjects by religion

Religion	Methods of Contraception		Total (%)
	Using (%)	Not Using (%)	
Hindu	88 (62.41)	53 (37.59)	141 (40.29)
Muslim	59 (45.74)	70 (54.26)	129 (36.86)
Buddhist	49 (73.13)	18 (26.87)	67 (19.14)
Christian	9 (69.23)	4 (30.77)	13 (3.71)
Total	205 (58.57)	145 (41.43)	350

$\chi^2 = 16.1$, d.f. = 3, $p < 0.01$

Table 3: Socio-economic status and use of contraceptive methods

Socio-economic Class	$n = 350$	Contraceptive use	Total (%)
I	00	00	00
II	00	00	00
III	81	57	70.37
IV	118	79	66.95
V	151	69	45.69

$\chi^2 = 22.04$, d.f. = 4, $p < 0.001$

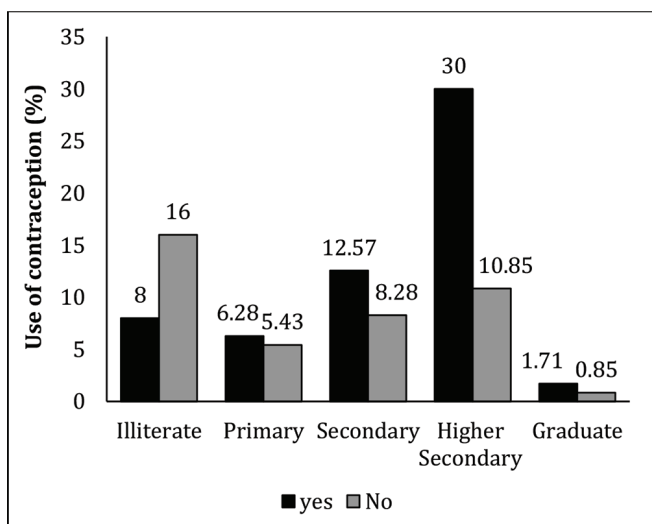**Figure 2:** Number of living children and contraceptive use.

Figure 1: Association between education of women and contraceptive use.

However only 2% of the women with no living children were contraceptive users. This difference was found to be highly significant ($p < 0.001$).

Table 5 shows that amongst the subjects who were not using contraceptives, the most common reason for not doing so was the desire for more children (42.76%). 13.10 % women were not using the contraceptive methods due to worry about the side effects. 8.27% women were not having knowledge about the source.
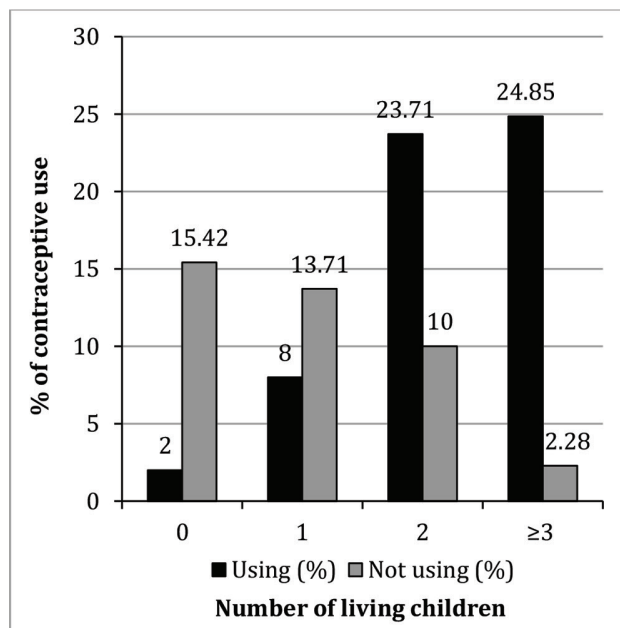
Discussion

In this study, prevalence of contraceptive use in married women of reproductive age group was found to be 58.57%. NFHS-4 has documented a couple protection rate of 60.7% in urban area of Maharashtra. Thus this finding of contraceptive usage is quite similar to NFHS-4 survey and studies done by Kansal et al.[4], Bhasin et al.[5] (59.8%), Balaiah et al.[6] and other studies in India.[7–10] The reason for so low prevalence of contraception in this study could have been due to low awareness in the slum dwellers.

The chi-square test results showed that there was a significant association between the independent variables such as age, religion, educational status of the women respondents, socio-economic status and the dependant variable use of contraceptives.

Use of Contraceptive method is dependent on age. In the present study, contraceptive use was found to be more in the age group of 30–34 years (14.57%) followed by age group 25–29 years (13.71%). Similar findings were noted by Ansuman et al.[11] The most commonly used method was tubectomy (73.65%) which is similar to study done by Taklikar et al.[12] (75.9%), but higher than that reported by NFHS-4 Survey[3] in Maharashtra (44.8% in urban area). Among spacing methods- OCP, IUDs, and condoms were used by 14.15%, 6.82%, and 4.39% of the couples, respectively. The difference of contraceptive use in different age groups was statistically significant ($p < 0.001$). This reflects the prevailing gender bias in reproductive health participation by men. Different studies have shown different preferences for methods of contraception used e.g. condom was the commonest

Table 4: Association between number of living children and contraceptive use

Number of living children	Contraceptive method (%)					Contraceptive use (%)		Total
	Condom	O.C. pills	IUCD	Depot Preparation	Tubal ligation	Using (%)	Not Using (%)	
0	4	3	00	00	00	7 (2.00)	54 (15.42)	61 (17.42)
1	2	11	8	1	6 (2.92)	28 (8.00)	48 (13.71)	76 (21.71)
2	2	13	6	1	61 (29.75)	83 (23.71)	35 (10.00)	118 (33.71)
≥3	1	2	00	00	84 (40.97)	87 (24.85)	8 (2.28)	95 (27.14)
Total	9 (4.39)	29 (14.15)	14 (6.82)	2 (0.97)	151 (73.65)	205 (58.57)	145 (41.43)	350 (100)

$\chi^2 = 109.6$, d.f. = 3, $p < 0.001$

Table 5: Reasons for not using contraceptive methods among non-users

Reasons	Number	Percentage (%)
Want more children	62	42.76
Breast feeding	4	2.76
Opposed to family planning	2	1.38
No knowledge about source	12	8.27
Worry about side effects	19	13.10
Cost too much	8	5.52
Inconvenient	5	3.45
Hysterectomy	4	2.76
Husband away	5	3.45
Others	24	16.55
Total	145	100

$\chi^2 = 205$, d.f. = 9, $p < 0.01$

method used (33.4%) followed by permanent method of sterilization (32.1%) in study done by Bhasin et al.[5] Ansuman et al.[11] also found the same (84.7%).

In present study, contraceptive use was high among Buddhists (73.13%), Hindus (62.41%), and Christians (69.23%), but it was low among Muslims (45.74%). The difference was found to be statistically significant ($p < 0.01$). Most of the women belonged to lower socio-economic class, majority (43.14%) belonging to socio-economic class V and rate of contraceptive use was lowest (45.69%) among them. It is similar to studies done by Ansuman et al.[11] (47.0%).

Education of women had influenced the contraceptive use. Contraceptive use was shown to be increased as education of women was higher. It was highest in women educated up to higher secondary school (30%), followed by secondary (12.57%); whereas 16% of illiterate women were not using any method of contraception. This difference was found to be statistically significant ($p < 0.001$). It is similar to studies done by Ansuman et al.[11], Taklikar et al.[12], Kaushal et al.[13]

Contraceptive use was higher among the women having 3 or more children (24.85%), followed by women having less than 2 living children (23.71%). But still 10% women having 3 or more children were not using any contraceptive method. This difference was found to be highly significant ($p < 0.001$). Similar findings were noted by Aggarwal et al.[14] in urban slum

population. However, Taklikar et al.[12] found that contraceptive use was more in those having 1–2 children.

In this study, the most common reason for not using contraceptives was the desire for more children (42.76%) followed by worry about the side effects (13.10%) and lack of knowledge (8.27%). The findings are similar to study done by Taklikar et al.[12] who found most common reason being desire for more children (32.78%) followed by lack of knowledge (26.23%). Das et al.[15] also found in their study that the main reason for not using any contraceptive as the eagerness to have more children (39%) followed by lack of information (26%) and side effects (25%). Another study conducted in a resettlement colony of Delhi by Khokhar et al.[16] found that want of children was a common reason for not using contraception followed by, recently married and too soon to use contraception.

Conclusion

The prevalence of contraception use (58.57%) was low among the urban slum dwellers. The common reasons for not using contraception were the desire for children, worry about side effects, lack of knowledge, etc. Use of spacing methods was low, which needs to be addressed, as it has a direct impact on the fertility. Based on the study observations, women of reproductive age group should be educated about importance of family size, intervals of births, use of contraceptives. They need to be convinced about the benefits of contraception. Motivation of couples through media and health personnel can help to achieve positive attitude for effective use of contraceptives.

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