

## Original Research Article

# Study of contraceptive use in married women of reproductive age group in urban slum area of western Maharashtra

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## ABSTRACT

**Background:** India is world's second most populous country next to China. Family planning is a key intervention for population control. In urban field, most of population (60%) resides in urban slum area with deprived and vulnerable population. This study was conducted to determine the prevalence of contraceptive use in married women of reproductive age group also to study socio-demographic factors and sources associated with the contraceptive use and the reasons behind not using.

**Methods:** A community based descriptive cross sectional study of 5 months duration was conducted among married women in reproductive age group (15-45 year) resident of urban slum area. 234 samples were selected by simple random sampling method. Data was collected through interviews of study subjects using a semi structured questionnaire.

**Results:** Out of 234 women, 98 (41.9%) women said that they are using some method of contraception, which are condom (6.8%), OC pills (4.3%), copper-T (4.7%) and female sterilization (26.1%). Religion, socio-economic status is not significantly associated with acceptance of contraception, but the education and employment are the key influencers for the contraceptive use. The major sources of information are doctors from the government hospitals and auxiliary nurse midwives.

**Conclusions:** The prevalence of contraceptive use in married women of reproductive age group (15-45 year) in urban slum area is found to be 41.9%. Spacing methods including the modern methods of contraception are not getting accepted. More efforts should be taken to remove fear and misconceptions about contraceptive use.

**Keywords:** Contraceptives, Reproductive age, Slum

## INTRODUCTION

India is world's second most populous country next to China. A continuing high rate of population growth is presenting major changes to social and economic development in developing countries like India. This alarming increase in population growth is slowing down the socioeconomic development, lowering quality of life,

degrading our environment and putting a further strain on our already overburdened resources. Family planning is recognized as a key intervention for population control.<sup>1</sup>

The Urbanization of different parts of the world constitutes demographic issue of the twenty first century. This is especially true for India where it is estimated that the urban population is one of the largest in the world. Urban India has 31.16% of the national population and is

predicted to increase to 33% by 2026.<sup>2</sup> According to census 2011, there is increase in urban population more than rural population which is 9.1% and 9% respectively with respect to previous population.<sup>3</sup> In urban field, most of population (60%) resides in urban slum area. Urban slum is having deprived and vulnerable population as poverty, literacy and ignorance is more common.<sup>4</sup>

India launched the National Family Welfare Programme in 1951 with the objective of reducing the birth rate to the extent necessary to stabilize the population at a level consistent with the requirement of the National economy. The Family Welfare Programme in India is recognized as a priority area and is being implemented as a 100% centrally sponsored programme.<sup>5</sup>

The extent of acceptance of contraceptive methods still varies within societies and also different castes and religious groups. 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.<sup>6</sup> Hence, this study was designed to find out the contraceptive prevalence and identify the different variables which affect the contraceptive prevalence among the urban slum community.

## METHODS

A community based descriptive cross sectional study of 6 months duration from 01/07/2018 to 31/12/2018 was conducted among married women in reproductive age group (15-45 year) resident of urban slum area catered by urban health center of department of community medicine, Dr. V. M. Government Medical College, Solapur. The urban field practice area consists of total approximately 16,600 populations residing in slum area.

According to National Family Health Survey-4 data (NFHS 4, 2015-16), the prevalence of married women of reproductive age group (15-49 year) using any of the

methods of contraception in Solapur is 64.4%.<sup>7</sup> With allowable error of 10% and level of significance set at 5% with 95% confidence interval, sample size calculated by  $4pq/L^2$  came 222. Considering 5% non-response by study subjects, total 234 sample sizes was taken for the study.

Study sample was selected by simple random sampling method. A complete list of married women in reproduction age group 15-45 year was obtained from family survey register from anganwadi workers in urban slum area. The list was serially numbered. Total 2906 women were listed in sampling frame. Out of these 234 women were selected by simple random sampling method using random number generated by statistical software. Widow, divorcee, critically ill and not willing women were excluded during selection of study subjects.

With help of anganwadi workers study subjects were traced and called in anganwadis at specified time as per their convenience. Data was collected through interviews of study subjects using a semi structured questionnaire. Before starting the interview, every respondent was well informed regarding purpose of study and motivated to participate in the study and verbal consent was taken. Confidentiality and security of collected information was assured. Approval for the study was taken from Institutional Ethical Committee. The collected data was entered in Microsoft Office Excel 2007. Data was analyzed using Microsoft Office Excel 2007 and presented in the form of tables, figures, graphs wherever necessary. Statistical methods like chi square test and other appropriate statistical tests of significance were used.

## RESULTS

Among 234 women there were many factors which affect contraceptive use and non-use in reproductive age group women. Distribution of common socio-demographic characteristics in 234 women is given Table 1.

**Table 1: Socio-demographic characteristics of married women of reproductive age group.**

Characteristics	Groups	Number	%
<b>Women's age group (in years)</b>	<25	94	40.2
	25-30	48	20.5
	30-45	92	39.3
<b>Education of women</b>	>Secondary	70	29.9
	≤Secondary	164	70.1
<b>Education of husband</b>	>Secondary	78	33.3
	≤Secondary	156	66.7
<b>Occupation of women</b>	Employed	39	16.7
	Unemployed	195	83.3
<b>Religion</b>	Hindu	107	45.7
	Muslim	127	54.3
<b>Socioeconomic status</b>	Upper	6	2.6
	Upper middle	32	13.7
	Lower middle	60	25.6
	Upper lower	136	58.1

**Table 2: Distribution of married women of reproductive age group according to contraceptive use.**

Type of contraception	Method of contraception	Number	%
<b>Spacing</b>	Condom	16	6.8
	OC pills	10	4.3
	Copper T	11	4.7
<b>Limiting</b>	Female sterilization	61	26.1
<b>Not using contraception</b>		136	58.1

**Table 3: Association of socio-demographic factors and contraception use.**

Socio-demographic factors	Groups	Contraceptive users		Contraceptive non users		Total	$\chi^2$ value	P value
		Number	%	Number	%			
<b>Age of women (in years)</b>	<25	16	17.0	78	83.0	94	39.99	<0.001
	25-30	29	60.4	19	39.6	48		
	>30	53	57.6	39	42.4	92		
<b>Religion</b>	Hindu	42	39.3	65	60.7	107	0.559	0.455
	Muslim	56	44.1	71	55.9	127		
<b>Socio economic status</b>	Upper	4	66.7	2	33.3	6	2.825	0.419
	Upper middle	15	46.9	17	53.1	32		
	Lower middle	27	45.0	33	55.0	60		
	Upper lower	52	38.2	84	61.8	136		
<b>Woman's education</b>	>Secondary	39	55.7	31	44.3	70	7.853	0.0051
	≤Secondary	59	36.0	105	64.0	164		
<b>Husband's education</b>	>Secondary	41	52.6	37	47.4	78	5.487	0.0192
	≤Secondary	57	36.5	99	63.5	156		
<b>Woman's occupation</b>	Employed	22	56.4	17	43.6	39	4.059	0.0439
	Unemployed	76	39	119	61	195		

It shows that maximum numbers (40.2%) of women were in the age group of less than 25 years. Out of all 234 women, maximum numbers (70.1%) of women were educated below secondary school. The maximum numbers (83.33%) of women were unemployed or housewives. 54.3% women were Muslim and 45.7% were Hindu. Majority of women (58.1%) were belonging to upper lower socioeconomic status and only 2.6% were of upper socioeconomic status.

As shown in Table 2, out of 234 married women of reproductive age group 98 (41.9%) women said that they are using some method of contraception, which are condom (6.8%), OC pills (4.3%), copper-T (4.7%) and female sterilization (26.1%). None of the women are using injectable contraception and none of the women's husband has done male sterilization.

According to NFHS4 data in urban population of India, use of condom, OC Pills, IUCD, female sterilizations and male sterilizations are 9%, 3.5%, 2.4%, 35.7% and 0.5% respectively.

Table 3 shows the relationship between various socio-demographic parameters and contraceptive usage. Age of the study participants is found to be significantly associated with contraceptive usage as out of 94 women below 25 year only 16 (17%) are using contraceptive

measures at present. This proportion increases to 60.4% in age group 25-30 year.

Education of women as well as education of husband is significantly associated with contraceptive use. Contraceptive use is maximum in women and their husband educated secondary school or above which is 55.7% in women and 52.6% in case of husband.

Occupation of wife is significantly associated with contraceptive use in women. 56.41% of the women engaged in any type of job prefer the contraception than the housewives where contraception is accepted by only 38.97% of unemployed or housewives.

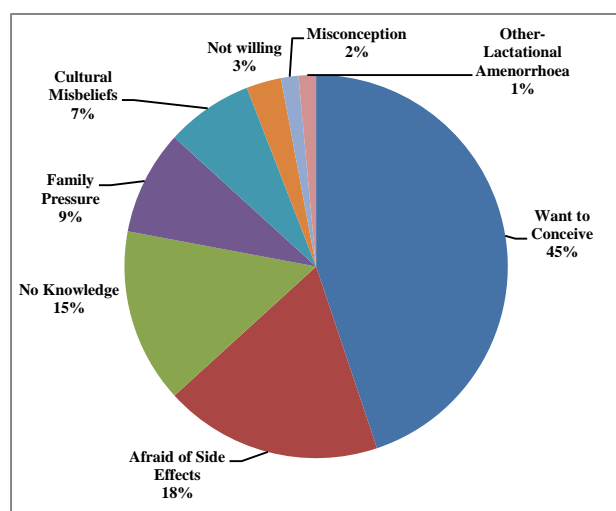
Religion is not significantly associated with the contraceptive use. 39.25% Hindu married women of reproductive age group are using contraceptive methods and 44.09% of Muslim women using the contraceptive methods.

Socio-economic status is not significantly associated with the contraceptive use. But it shows that proportion of contraceptive use increases with the increase in socio-economic status. It is minimum (38.24%) in women belonging to upper lower SES, while maximum (66.67%) in women belonging to upper socio-economic status.

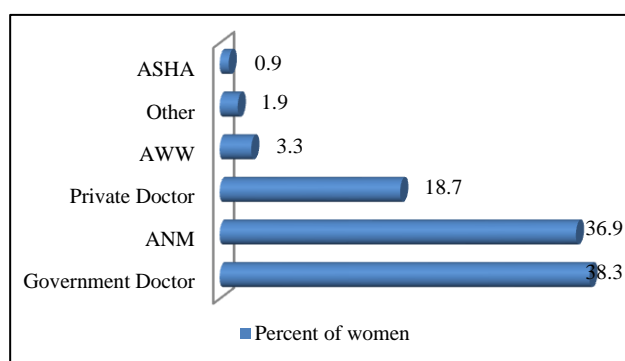
Distribution of women using contraceptives according to duration since marriage showed that maximum use of contraceptives is being done by women having 11-20 years since marriage (61.64%) as compared with women married before 1-10 year in whom it is 32.69%.

Figure 1 shows the reasons of not using contraceptives cited by the married women of reproductive age group who are not using any method of contraception at present. Majority of the women (45%) want to have baby so they are not using the contraceptives. 18% of women are not using the contraceptives because they are afraid of the side effects of the contraceptives. 15% of women do not know about the contraceptive methods which to prefer and so not using it. This depicts the need of reaching up to such women and counselling them about contraception.

Figure 2 shows that among 234 married women of reproductive age group, 214 women knew about methods of contraception. They received this information from various sources; the major source of information is doctors from the government hospitals and auxiliary nurse midwives.



**Figure 1: Reason for not using contraceptive methods.**



**Figure 2: Distribution of married women of reproductive age group according to source of information regarding contraception.**

## DISCUSSION

The present community based cross sectional study was carried out from June 2018 to October 2018 in field practice slum area attached to Urban Primary Health center, under Department of Community Medicine, at Tertiary care center. The study was undertaken with the aim to provide feedback to improve contraceptive services among married women of reproductive age group (15-45 year) in urban slum area. The study subjects (234) were selected by simple random sampling. The response rate was 100% in maximum 3 visits.

In the current study only 98 (41.9%) subjects were using contraceptives of any form in comparison to a study done in Raipur by Bandhi et al.<sup>8</sup> In 2011 where point prevalence rate of contraception was 53%. Also in a study carried out in Kanchipuram by Prateek et al contraceptive prevalence was 32.2%.<sup>9</sup> In a descriptive study carried out amongst women in reproductive age group in Sudan current usage of contraception was found to be 21.3%.<sup>10</sup> According to findings of National Family Health Survey-4, usage of any mode of contraception amongst women in reproductive age group in urban area in India was found to be 53.5%.<sup>11</sup>

In our study it was observed that 20 (8.5%) subjects said that they were not having any knowledge regarding various contraceptive methods. In a study done in urban slum of Maharashtra where 57.6% subjects revealed that lack of information about contraceptive method and its sources were the common reasons for non-acceptance of contraception.<sup>12</sup>

In a study carried out amongst European women, oral contraceptives was the most common contraceptive used in Germany (54.3%), France (50.5%) and Sweden (34.6%) as compared to female sterilization which was the most common contraceptive utilized in 61 (26.1%) study participants in the present study.<sup>13</sup> While in studies done in Andhra Pradesh and Eastern Delhi, tubectomy and condom were the most preferred methods of contraception respectively.<sup>14,15</sup>

In the current study significant association was observed between age groups of study participants and choice of contraceptive methods. Similar findings were observed in a study by Bandhi et al and Prateek et al.<sup>8,9</sup> In a study conducted in Dehradun it was observed that younger age of the women, illiteracy, Muslim religion, no living son in the family and experience of child loss were found to be associated with low use of contraception.<sup>16</sup> In this study significant association was found between contraceptive acceptance and literacy status, occupation and duration since marriage in married women in reproductive age group and no significant association was found between religion, socio-economic status and the contraceptive use. A significant association was found between contraceptive acceptance and literacy status,

occupation, type of family, socioeconomic status and age at marriage in married women in reproductive age group in the village Chanai, Beed district.<sup>17</sup> In study of Nazmul et al religion and income are not found significantly associated with contraceptive use similar as the finding of present study.<sup>18</sup> Changing trends in influencing factors is observed in present study as minimum or low association of religion or socioeconomic status on the contraceptive use and main associated factors are literacy, occupation

The study had its limitation in the form that controversial findings, negative associations found in the study need further en-mass and in-depth epidemiological inquiries and studies, also the scope of present study fixes the limits of time period, as the information collected today may be outdated later which emphasized need for frequent such surveys.

## CONCLUSION

The prevalence of contraceptive use in married women of reproductive age group (15-45 year) in urban slum area is found to be 41.9% which is less than the India's over all figure. This shows that there is tremendous need of reaching slum population and bringing them in national flow. Also the spacing methods including the modern methods of contraception are not getting accepted in such areas making threat to family welfare programme. So more efforts including IEC activities should be conducted in such areas to remove the fear or misconceptions regarding the contraceptive use.

As the trends are changing which shows that religion, socio-economic status will not interfere with the acceptance of contraception, but the education and Job or employment, these factors definitely are the influencers for the contraceptive use. So to get knowledge during learning age, topics such as contraception should be included in study curriculum and highlighted to get better results.

The major sources of information are doctors from the government hospitals and auxiliary nurse midwives.

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