

## Original Research Article

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# A study of the factors influencing the utilization of family planning methods in urban slums of Allahabad district, Uttar Pradesh, India

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## ABSTRACT

**Background:** India was the first country to launch National Family Planning Program in 1952, but still the country's desired total fertility rate and contraceptive prevalence rate have not achieved. The use of family planning methods is better in urban areas as compared to rural areas and it is worse in urban slums. Objective of the study was to find out the utilization pattern of family planning methods and identifying the factors influencing it.

**Methods:** A community based cross sectional study was carried out on eligible couples selected from urban slums of Allahabad district by multistage random sampling and were interviewed by using pre-tested schedule. Data analysis was done by using SPSS version 21.

**Results:** A total of 356 eligible couples (age 15-49 years) were surveyed for a period of one year. It was observed that 45.78% (163/356) of eligible couples were using any of the family planning method and most commonly used method was female sterilization (53.98%), followed by condom (18.40%), then IUCDs (13.49%), injectables, OCPs and Natural methods (approx 4%) use. The use of family planning methods was found to be associated with women's age, duration of marriage, caste categories, men's education status, number of living children.

**Conclusions:** The use of family planning methods is low in slums areas and to improve the condition awareness should be created.

**Keywords:** Family planning, Urban slums, Utilization pattern, Eligible couples

## INTRODUCTION

WHO has defined family planning as “a way of thinking and living that is adopted voluntarily, upon the basis of knowledge, attitudes and responsible decisions by individuals and couples, in order to promote the health and welfare of the family group and thus contribute effectively to the social development of a country”.

Earlier family planning methods were not so common and instead abortions were done for avoiding unwanted child births. Later in 1564, an Italian physician “Fallopio” had first described about condom, after that other family planning methods had gained popularity.<sup>1</sup> In worldwide at present, 57.4% of eligible couples were using any of

the family planning method and 12% of eligible couples have unmet need for family planning.<sup>2,3</sup> As far as India is concerned, India is the first country in the world to launch National Family Planning program in 1952 later it was reorganized in 1963.<sup>4</sup> The current use of family planning methods in our country is 53.5% (NFHS 4) which is a reduction from 56.3% (NFHS 3).<sup>5</sup>

In urban areas of country it is 57.2% and in rural areas 51.7% and in urban slums of India it is much lesser that is 21.4%.<sup>6</sup>

As Uttar Pradesh is the most populous state of our country, and 45.5% of eligible couples were using any of the family planning methods.<sup>7</sup> Fifty six percentage of

eligible couples were using family planning methods in urban UP areas, 42.1% use in rural areas and only 35.7% of eligible couples were using in slums of UP.<sup>8,9</sup>

So, it is important to study the barriers that affect the Family Planning Services including Socio demographic, financial, environmental, religious factors.

Also since NRHM came into being in 2005, rural areas have been served well, but marginalized poor of urban areas had been neglected NUHM started later in 2013 but at many of the places many of its components have not been implemented yet. So, the indicators are still poor in urban areas. Based on these facts the present study was planned out in order to study socio-demographic profile of eligible couples and the utilization pattern of family planning methods among eligible couples in slum areas of Allahabad district.

## METHODS

It was a cross-sectional study carried out among eligible couples (age 15-49 years) selected from urban slums of Allahabad district. The duration of the study was of one year from October 2016 to September 2017.

A sample size of 356 eligible couples was calculated from the prevalence of unmet need of family planning practices in UP according to NFHS III (29.3%). With 95% of confidence interval and 5% margin of error.

Later, the sample size was adjusted to compensate for non response rate of 10%.

The participants were selected by multistage random sampling. In the first stage, slums were selected. For this, Allahabad city was divided into four quadrants.

From each quadrant, one slum was selected randomly. In the second stage, eligible couples were selected from within the selected slums and then moving in the fixed direction, consecutive households were selected and eligible couples after taking the informed consent and explaining the objective of the study, were interviewed. In case a total of 89 eligible couples could not be interviewed in one slum (because of no-cooperation, non response or total population <1000) in a selected slum, another nearby slum was selected to complete the sample size.

Pre-designed, pretested, semi structured questionnaire was used for collection of information. The socio-demographic profile, their utilization pattern of family planning methods and factors influencing it.

The eligible couples in which women had attained early menopause, women with complaints of infertility, women who were pregnant and newly married women before the gauna were excluded from the study (Gauna is a eastern India custom of child marriage. The ceremony takes

place several years after marriage. Before the ceremony the bride stays at her natal home).

The data was analyzed using statistical software, SPSS Version 21. Chi-square test was used to test the associations between different variables. P value less than 0.05 was considered as significant

## RESULTS

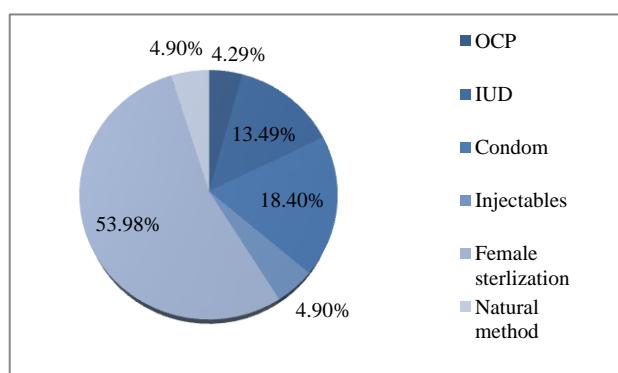
A total of 356 eligible couples were selected from urban slums of Allahabad district. Table 1 shows socio-demographic details of the selected eligible couples. It was observed that among couples, majority 49.43% (176/356) of the women belonged to 26-35 years group, and 32.30% (115/356) of eligible couples has duration of marriage less than 5 years.

Majority of couples were belonged to SC/ST category i.e 65.44% (233/356) followed by OBC category i.e 25.26% (91/356).

Majority of eligible couples were having 1-2 living children i.e. 50.28% (179/356).

The socioeconomic classification was based on Kuppuswamy's socioeconomic status scale, 2014, which shows majority of the eligible couples 65.17% (232/356) were in upper lower SES, followed by 17.97% (64/356) in lower middle class, 9.26% (33/356) in lower middle class and very few belonged to 4.77% (17/356) upper middle class and 2.80% (10/356) in upper class.

It was observed that out of the 356 selected eligible 45.78% (163/356) were using any of the family planning method and 54.21% (193/356) of eligible couples were not using any of the family planning method (Table 2).



**Figure 1: Distribution of eligible couples according to use of different types of family planning method.**

Out of 163 eligible couples those were using any of the family planning method, the most common method used was female sterilization (tubectomy/ tubal ligation) 53.98% (88/163) and least common use was of OCPs 4.29% (07/163). None of the male have undergone Vasectomy (Figure 1).

Among selected eligible couples, the use of any of the family planning method was found to be associated with woman's age, duration of marriage, caste categories,

men's education status and number of living children. These associations were found to be statistically significant ( $p<0.05$ ) (Table 3).

**Table 1: Socio-demographic profile of eligible couples in the study area.**

Variables	Number of eligible couples (n=356)	Percentage (%)
<b>Women's age categories</b>		
15-25 years	98	27.52
26-35 years	176	49.43
36-49 years	82	23.03
<b>Duration of marriage</b>		
0-5 years	115	32.30
6-10 years	103	28.93
11-20 years	112	31.46
More than 20	26	7.30
<b>Religion</b>		
Hindus	336	94.38
Muslims	20	5.61
<b>Caste Categories</b>		
General	32	8.98
OBC	91	25.56
SC/ST	233	65.44
<b>Type of family</b>		
Nuclear	203	57.02
Joint	153	42.97
<b>Number of live births</b>		
None	9	2.52
1-2	179	50.28
$\geq 3$	168	47.19
<b>Socio-Economic Status</b>		
Upper	10	2.80
Upper middle	17	4.77
Lower middle	64	17.97
Upper lower	232	65.17
Lower	33	9.26
<b>Occupation status of study participants</b>		
	Male Partners (N=356)	Female Partners (N=356)
Professional	13 (3.65%)	03 (0.84%)
Semi-professional	02 (0.56%)	05 (1.40%)
Clerical,Shop-owner,farm owner	41 (11.51%)	08 (2.24%)
Skilled worker	87 (24.43%)	02 (0.56%)
Semi-skilled worker	23 (6.46%)	31 (8.70%)
Unskilled worker	186 (52.24%)	32 (8.98%)
Unemployed/Housewife	04 (1.12%)	275 (77.24%)
<b>Education status of study participants</b>		
	Male Partners (n=356)	Female Partners (n=356)
Illiterate	154 (43.25%)	189 (53.08%)
Primary	57 (16.01%)	66 (18.53%)
Middle	63 (17.69%)	59 (16.57%)
High School	21 (5.89%)	06 (1.68%)
Intermediate	28 (7.86%)	08 (2.24%)
Graduate & PG	33 (9.26%)	28 (7.86%)

**Table 2: Distribution of eligible couples according to use of any of the family planning method.**

Use of family planning methods	Number of eligible couples (n=356)	Percentage (%)
Yes	163	45.78
No	193	54.21

**Table 3: Factors influencing the utilization of family planning methods.**

Variables	Number of eligible couples using any FPMs (n=163)	Number of eligible couples not using any FPMs (n=193)	P value
<b>Women's age categories</b>			<0.005*
15-25 years	19	79	
26-35 years	86	90	
36-49 years	58	24	
<b>Duration of marriage</b>			<0.005*
0-5 years	23	92	
6-10 years	48	55	
11-20 years	72	40	
More than 20	20	06	
<b>Religion</b>			>0.05
Hindus	154	182	
Muslims	09	11	
<b>Caste Categories</b>			<0.010*
General	21	11	
OBC	49	42	
SC/ST	93	140	
<b>Type of family</b>			0.7401
Nuclear	95	108	
Joint	68	85	
<b>Number of live births</b>			<0.005*
None	01	08	
1-2	66	113	
≥ 3	96	72	
<b>Socio-Economic Status</b>			>0.05
Upper	06	04	
Upper middle	11	06	
Lower middle	32	32	
Upper lower	97	135	
Lower	11	16	
<b>Occupation status of Women</b>			
Professional	02	01	
Semi-professional	03	02	
Clerical,Shop-owner,farm owner	03	05	
Skilled worker	01	01	
Semi-skilled worker	15	16	
Unskilled worker	16	16	
Unemployed/Housewife	123	152	
<b>Occupation status of Men</b>			>0.05
Professional	05	04	
Clerical,Shop-owner,farm owner	23	20	
Skilled worker	43	44	
Semi-skilled worker	12	11	
Unskilled worker	75	111	
Unemployed/Housewife	01	03	

Variables	Number of eligible couples using any FPMs (n=163)	Number of eligible couples not using any FPMs (n=193)	P value
<b>Education status of Women</b>			
Illiterate	79	110	
Primary	33	33	
Middle	25	34	
High School	03	03	>0.05
Intermediate	05	03	
Graduate & PG	18	10	
<b>Education status of Men</b>			
Illiterate	72	82	
Primary	20	37	
Middle	26	37	
High School	12	09	
Intermediate	15	13	
Graduate & PG	18	15	<0.005*

\*Significant

No association was seen between use any of the family planning methods and with religion, type of family, occupation status of both men and women, education of women and socioeconomic status (Table 3).

## DISCUSSION

In the present study it can be observed that, 45.78% of the eligible couples were using any of the family planning method and most commonly used method was female sterilization (53.98%) and least commonly used methods was injectables and OCPs (approx 4%). No case of male sterilization was found. Similar results were seen in NFHS 4 (2015-2016) data of Uttar Pradesh with 45.5% of eligible couples using any of the family planning method and most commonly used method being female sterilization (17.3%), least commonly method used being OCPs (4.1%) and male sterilization (0.1%).

Similarly according to NFHS 4 data of India, 53% of eligible couples were using any of the family planning and the most commonly used method was female sterilization, male sterilization (0.3%). As according to the present study and also in other data it was seen that the male sterilization is very low. So, the man power training, equipment, and research in this field won't improve the condition as it is clear that this method is not acceptable to men. Rather diverting these resources to other more acceptable methods will be beneficial.

Saba et al in their study conducted in Bangalore among 300 married couples had found the similar findings with 58.6% of eligible couples using any of the family planning methods and most common method being female sterilization (71.59%), least common method was OCPs (6.26%).<sup>10</sup> No case of male sterilization was found.

In the present study it was found that the association between women's age ( $p<0.005$ ), duration of marriage of eligible couples ( $p<0.005$ ), categories ( $p<0.010$ ), men's

education status ( $p<0.005$ ), number of living children ( $p<0.005$ ) and these association were found to be statistically significant. Similarly in the studies conducted by Shrivastava et al in Bhopal, Saba et al in Bangalore the use of any of the family planning method was found to be associated with women's age and number of living children.<sup>11,10</sup> In the study conducted by Prateek et al in Kancheepuram, the use of any of the family planning method was found to be associated with women's age and men's education.<sup>12</sup>

## CONCLUSION

As it was observed in the present study that the family planning methods use was very low and the unmet need is very high in slums as compared to urban and rural areas. NUHM is already there to cater the marginalized population of urban areas, but as of today, many components have not been implemented properly in all such area. So to improve the conditions in these areas, first components of NUHM should be implemented and then regular sensitization and direct supervision of health workers should be done.

### Relevance of the study

The strength of the study lies in the fact that very few studies were conducted in slum areas of Northern India, which will further help to find out the prevalence of contraceptives use and unmet need in this special population as the population of these areas were always been neglected, the prevalence is good among urban population and there is NRHM to cater the rural population of our country

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