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Research Article

AWARENESS REGARDING DIFFERENT FAMILY PLANNING METHODS AMONG MARRIED WOMEN OF REPRODUCTIVE AGE GROUP IN URBAN SLUMS OF BERHAMPUR, ODISHA: A CROSS SECTIONAL STUDY

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ABSTRACT

Objectives: To determine knowledge and practice of contraception and to find out the association between contraceptive practices and different variables.

Methods: A cross-sectional, community-based study was conducted among 300 married women of 15–49 year age group of urban slums of Berhampur, Odisha, using a pretested and predesigned schedule.

Results: Majority of women (93%) were aware of different types of FP methods but only 79.7% of females had known where the services are available. Health worker females (77.3%) act as the most influential source of information about contraceptive practices followed by the ASHA (71.6%). The contraceptive prevalence rate was 78.7%. Out of 236 Current users, temporary methods were being adopted by 65.3% and permanent methods by 34.7% respectively. Among the temporary method users, 24.1% of women used oral contraceptive pills, IUCD and injectables were being used by 6.4% each and condoms were being used by the partners of 28.4% of women as a means of contraception. Acceptance of family planning methods was significantly associated with variables such as increasing age, nuclear family, and level of literacy.

Conclusion: The prevalence of contraceptive use was high among the study population, but the use of a modern and safe method of contraception was low. Continuous IEC activities by the service providers such as ASHAs, AWWs, and HWFs with support from the supervisor matters for better adherence to contraceptive methods.

Keywords: Knowledge, Practice, Family planning, Urban slums.

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INTRODUCTION

The population of India has been growing with a growth rate of 16 million each year. The result is that our country is the second most populous in the world. Unregulated fertility led to this growth in the population.

India launched the first national program in the world on family planning. The purpose of this program was "to stabilize the population at a level consistent with the requirement of the national economy" [1]. Since its launch, the program has reached every corner of the country through primary health centers, subcenters, urban family welfare centers, and post-partum centers.

The family planning programme is implemented on the cafeteria approach and is client-centered, demand-driven, and need-based. The need-based approach starts from the bottom and the need is calculated from the population in subcenter by the health workers. Hence, this is otherwise called a bottom-up approach [2].

However, this program has not been very successful. This could be because Indian belong to different religions, follow various customs and have a different levels of awareness and acceptance of family planning [3]. People live in urban slums which are commonly associated with poverty, illiteracy, ignorance and superstitions acceptance of family planning not easy among these slum dwellers.

A thorough understanding of socio-demographic determinants, knowledge, and practice of family planning is essential to stabilize our population which is the ultimate goal of the implementation of the family welfare program. Hence, the study was undertaken among married females of reproductive age group in the urban slum areas of Berhampur with the following objectives:

1. To assess the knowledge level of respondents about contraceptive methods
2. To assess the current practice of family planning methods
3. To determine the factors associated with contraceptive usage.

METHODS

Place of study

A cross-sectional study was done in the urban slums of Berhampur Municipal Corporation.

Study period

The present study was undertaken from 2018 to 2020.

Inclusion criteria

Married females in the reproductive age group (15–49 years) capable of giving valid consent were included in the study.

Inclusion criteria

Those who were widowed, divorced, had undergone hysterectomy or attained menopause, all women in the antenatal period and puerperal

period (within 42 days of delivery), not willing to participate, very sick, mentally challenged excluded.

Sample size calculation

- The sample size was calculated by using the formula $(z_{\alpha/2})^2pq/l^2$

Where, p=prevalence of the contraceptive practice in Ganjam district, i.e., 59% as per NFHS-4 data [4].

q=1-p

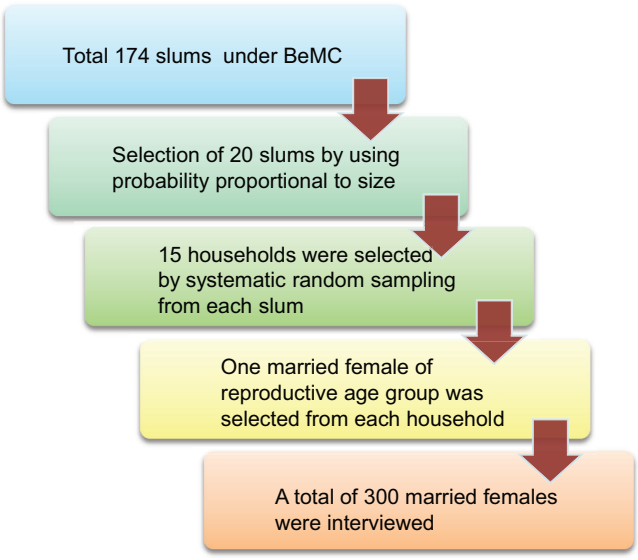
l=Relative precision (5.9%), i.e., 10% of the prevalence

- On applying the formula, it was found 267. After considering 10% nonresponse rate, the final sample size was calculated as 293. A total of 300 married females of the reproductive age group (15–49 years) were sampled for data collection.

Sampling

Multistage random sampling was used for selecting study participants for the cross-sectional study. The steps of sampling are mentioned below.

- Sampling frame-Berhampur Municipal Corporation is divided into 40 wards which include 174 slums. There were 18857 households in 174 slums [5]
- Probability Proportional to Size sampling method [6] was used to select 20 slums
- A systematic random sampling method was used to select 15 households each from 20 slums. In this study total of 300 households were selected. To maintain an equal probability of selection of all study participants, irrespective of the size of their slums, the same no of households were selected from each slum
- One married female was selected from each household and a simple random sampling method was used to select a study participant if more than one eligible female were present in a household
- Flow chart showing sampling method



After a thorough review of the literature, the questionnaire was prepared under the supervision of guide. Prior to data collection pre-testing was done in the study area and the necessary correction was done.

Data collection and analysis

Data were collected by interview method twice a week, i.e., Tuesday and Friday. Each day data was collected from 6 to 7 women and all were contacted in the morning hours. The study population was explained about the purpose of the study. After obtaining consent, the interview was conducted by using a pre-tested, pre-designed questionnaire.

Table 1: Socio-demographic profile of the study population (n=300)

Variable	Number (%)
Age group (in years)	
15–24	144 (48)
25–34	76 (25.3)
35–44	71 (23.7)
≥45	9 (3)
Religion	
Hindu	285 (95)
Muslim	13 (4.3)
Christian	2 (0.7)
Caste	
General	83 (27.6)
OBC	35 (11.7)
SC	163 (54.3)
ST	19 (6.3)
Type of family	
Nuclear	168 (56)
Joint	130 (43.3)
Three generation	2 (0.7)
Educational status of respondents	
Illiterate	37 (12.3)
Primary school	123 (41)
Middle school	87 (29)
High school	36 (12)
Intermediate/diploma	12 (4)
Graduate and Prof. degree	5 (1.7)
Educational status of spouse	
Illiterate	19 (6.3)
Primary school	68 (22.7)
Middle school	86 (28.7)
High school	74 (24.7)
Intermediate/diploma	36 (12)
Graduate and Prof. degree	17 (5.7)
Socio-economic status	
Upper class	0
Upper middle	0
Lower middle	93 (31)
Upper lower	188 (62.7)
Lower	19 (6.3)

Table 2: Knowledge of the study population about family planning methods (n=300)

Variables	Number	Percentage
Awareness about FP methods		
Aware	279	93
Not aware	21	7
Contraceptive method		
Condom	230	76.7
OCP	243	81
IUCD	194	64.6
Injectable	141	47
Female sterilization	257	85.6
Male sterilization	51	17
Other methods	17	5.6
Sources of information		
ASHA	215	71.6
HWF/ANM	232	77.3
AWW	177	59.0
Doctor (Government and private)	99	33.0
Husband	79	26.3
Neighbors and friends	73	24.3
Relatives	35	11.6
Media	23	7.6

OCP: Oral contraceptive pills

Data collected were compiled and analyzed using statistical package for social scientist version 17. Descriptive and inferential statistics were

used to describe and make inferences from the data where applicable. $p<0.05$ at 95% CI was used as criteria for statistical significance.

Ethical consideration

Ethical approval for the study was obtained from the Institutional Ethical Committee of MKCG Medical College and Hospital before the initiation of the study.

RESULTS

The majority of the married females (48%) were in the age group of 15–24 years. Most of the women were Hindu (95%). Scheduled caste contributed 54.3% of the study population. More than half (56%) of the study population belonged to the nuclear family. Majority of them were from lower socioeconomic status according to the Modified Kuppuswamy classification (Table 1).

Majority of the women (93%) were aware of different types of FP methods. But only 79.7% of females knew where the services are available. 85.6% of the respondents were aware of female sterilization as a permanent method of contraception. This may be due to the print and electronic media and government-run incentive programmes. Among the temporary methods, 81% were aware of Oral contraceptive pills (OCP) followed by condoms (76.7%). Only 5.6% knew other methods like lactational amenorrhoea and traditional methods including rhythm methods. In the study area, the health worker females (77.3%) were the most common source of information about contraceptive practices followed by the ASHA (71.6%) which is desirable (Table 2).

Table 3: Distribution of study population as per the practice of contraception (n=300)

Contraceptive use	Number	Percentage
Current users	236	78.7
Non-current users	54	18
Never used	10	3.3

Table 4: Distribution of study participants according to use of different contraceptive methods (n=236)

Temporary methods	Number	Percentage
Condom	67	28.4
OCP	57	24.1
IUCD	15	6.4
Injectable	15	6.4
Permanent methods		
Tubectomy	82	34.7
Vasectomy	0	0

OCP: Oral contraceptive pills

Table 3 shows 78.7% of the respondents adopted some or other forms of contraception at the time of the study, giving the prevalence rate as 78.7%. Around 18% were not using any type of contraceptive currently. However they had adopted some method at least once after marriage.

Out of 236 current users, temporary methods were adopted by 65.3% and permanent methods by 34.7% respectively. Among the temporary method users 24.1% of women used OCP, IUCD and injectables were being used by 6.4% each and condoms were being used by the partners of 28.4% of women as a means of contraception. Tubectomy as a permanent method of contraception was accepted by 82 (34.7%) women. None of the partners of the study subjects accepted vasectomy (Table 4).

The use of contraception increases with an increase in age ($p<0.001$). Acceptance was highest i.e. 91.5% in the nuclear family followed by 69.1% in joint family which was found to be statistically significant ($p<0.001$). The prevalence of contraceptive acceptance was 86.8% among females educated up to high school and above, whereas 76.9% among females having literacy status up to middle school. As the literacy level increased, the acceptance rate also increased. There is no association between occupation and contraceptive usage ($p>0.05$) and also between age at marriage and contraceptive usage ($p>0.05$) (Table 5).

DISCUSSION

A good number of the study population (93%) were aware of some or other methods of contraception. Similar findings were found in the study conducted at U.P by Singh [7]. Makade *et al*. in their study on contraceptive use among married women in slums in Mumbai revealed that the majority (87.71%) of women were aware of OCP and Cu-T,

Table 5: Association of contraceptive use with different variables

Variables	Current users n (%)	Non-users n (%)	X^2 value (p-value)
Age group			
15–24 years	88 (61.1)	56 (38.9)	53.429 (0.000)
25–34 years	68 (89.5)	8 (10.5)	
35–44 years	71 (100)	0	
≥45 years	9 (100)	0	
Type of family			
Nuclear	119 (91.5)	11 (8.5)	23.076 (0.000)
Joint	116 (69.1)	52 (30.9)	
Three generation	1 (50)	1 (50)	
Education			
Illiterate	17 (45.9)	20 (54.1)	38.288 (0.000)
Primary	95 (77.2)	28 (22.8)	
Middle	78 (89.7)	9 (10.3)	
High	31 (86.1)	5 (13.9)	
Intermediate/diploma	10 (83.3)	2 (16.7)	
Graduate and prof. degree	5 (100)	0	
Occupation			
Unemployed	109 (83.2)	22 (16.8)	2.855 (0.091)
Employed	127 (75.1)	42 (24.9)	
Age at marriage (in years)			
<18	110 (76.4)	34 (23.6)	5.055 (0.168)
18–21	109 (78.4)	30 (21.6)	
22–25	12 (100)	0	
26–29	5 (100)	0	

followed by female sterilization and condoms which were known to 80.4% and 77.5% women, respectively [8].

A study done by Divya and Bisoi *et al*. in Howrah, West Bengal reported contraceptive prevalence rates of 60.6% and 62.3% respectively [9,10]. In our study prevalence was 78.7%. Around 13% of females have not practiced any contraceptive method although they were aware of different methods of contraception.

Among the acceptors of contraception, 34.7% had undergone tubectomy. Temporary methods were adopted by 65.3% of respondents i.e. 24.1% of women were on OCP, 6.4% of women practiced IUCD and injectable by 6.4% of females. Vasectomy was not adopted by any of the spouses of the respondents. A study conducted among urban women of Puducherry by Sudha *et al*. revealed that 62% of women had undergone tubectomy, while others had used IUCD (14.90%), condom (9.94%), oral contraceptive pill (7.70%) [11].

The study shows highly significant acceptance of contraception as age increases ($p<0.001$). Puri *et al*. in the urban slum area of Delhi also found similar results as per our study [12]. However, Koringa *et al*. in their study found that the total acceptance rate of contraceptives was almost similar in different age groups [13].

Like our study, Gupta *et al*. in their study among eligible couples in urban slum in Bankura district, West Bengal observed that the difference in user rate was statistically significant with the type of family [14]. Prevailing norms in the society are controlled by senior members which have a major role in contraceptive acceptance.

Contraceptive acceptance is positively associated with the education of the respondents. ($p<0.001$) Similar findings were obtained in a study conducted by Vijayasree Literacy status had an impact on motivation to adopt any contraceptive method for spacing [15].

Prateek and Saurabh in their study also found that there was no association observed between age at marriage and contraceptive usage [16].

CONCLUSION

Male sterilization services should be promoted by changing the attitudes toward NSV and increasing demands for NSV through effective communication intervention involving the community. Currently available modern methods of contraception are safe and effective. Appropriate and consistent use of these methods is necessary for success. Sensitization of the beneficiaries as well as influential persons and peer groups through continuous IEC activities by the service providers such as ASHAs, AWWs, and HWFs is the need of the hour.

Women can be empowered by increasing their literacy status and hence enabling them to play a key role in decision-making regarding family planning which can help achieve the goal.

CONFLICT OF INTEREST

None.

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