

Original Research Article

A study of knowledge and practice of contraception in a rural area of Bareilly, Uttar Pradesh

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ABSTRACT

Background: It is very critical to understand that awareness of family planning and proper utilization of contraceptives is an important indicator for reducing maternal and neonatal mortality and morbidity. It also plays an important role in promoting reproductive health of the women in an underdeveloped country. Objective was to assess knowledge and practice of modern contraception in rural area.

Methods: A community based cross sectional study. A cross-sectional descriptive study was carried out in the in a rural area of Bareilly, Uttar Pradesh. 458 randomly selected eligible couples were included in the study. A pre-structured questionnaire was used to collect information about family planning methods knowledge, source of knowledge and current practices and reasons of nonuse. The appropriate statistical analysis was done to present the results.

Results: 48.03% eligible couples had adopted one or the other current modern contraceptive measure. Female sterilization was the most common method used.

Conclusions: Overall usage of postpartum contraception was low need to focus at every step to contact with health facility or health workers.

Keywords: Factors, Modern contraception, Prevalence, Rural area, Usage

INTRODUCTION

India was one of the first countries to launch a national program on FP. However, today, India is the second most populous country in the world, ranking next only to China, with a population of 1.21 billion according to the year 2011 census. The population of India is estimated to overtake that of China by the year 2050. Even though India has nearly 2.4% of the world's surface, it is home for more than 17.5% of the world's population. Family planning is the main strategy for prevention of unwanted pregnancies and thousands of maternal deaths and also offers a host of additional health, social, and economic benefits. If these services were more widely available, up to 42 percent of maternal deaths could be prevented in

developing countries. The mean proportion of maternal deaths that could have been averted was 24% as per study.¹

METHODS

This was a community based cross-sectional study conducted on 458 randomly selected eligible couples in a rural area of Bareilly. Block Bhojipura was randomly selected from 15 blocks of district Bareilly. The data were collected for a period of one year from December 2016 to December 2018. 458 eligible couples enrolled in study after taking informed consent and were interviewed at their home after build up rapport and confidence. Their answer were noted in proforma of pre structured pretested

questionnaire. These couples were asked questions to know about their knowledge and practice about contraception and the various methods available thereof. They were counselled about various methods of family planning accordingly.

Sample size calculation

The contraceptive prevalence rate in western Uttar Pradesh was found to be 54.9 (SIFSA 2016) and taking this the sample size was calculated from the following formula:²

$$N = \frac{4pq}{L^2}$$

Where P is prevalence, for calculating sample size for our study P is taken as 54.9%,

Q is (100-P) = 100 - 54.9=45.1

L (absolute precision) as 5%,

$$N = \frac{4pq}{L^2}$$

$$= \frac{4 \times 54.9 \times 45.1}{5^2}$$

=396

Sample size after putting these values came out to be 396 after addition of 10% more for non-respondent, final figure was 436. After rounding of the figure, a sample size of 450 was taken for our study.

Sampling technique

Multistage random sampling method was used to select the requisite sample size.

Inclusion criteria

Married couples whose wives were in the age group 15-49 years residing in area more than 6 months and gave informed consent to participate in the study.

Exclusion criteria

Married couples who refused to give consent to participate in study. Divorced women or men, widows or, widowers. Guest residing in the family. Women who had undergone hysterectomy. Critically ill patient, bed ridden patient.

Data analysis

The data collected was entered in Microsoft Excel and checked for any inconsistency the data collected were entered in the Excel spread sheet and statistical analysis

was done using IBM SPSS v 24.0.0. Categorical variables were analysed using frequency with proportions and percentages.

RESULTS

Majority of women 150 (32.75%) were in age group of 25-29 years followed by 115 (25.11%) in the age group of 30-34 years. Mean age of women was 30.93 years in this study. It was found that 372 (81.22%) of participants were Hindus and remaining 82 (18.78%) were Muslims. Caste wise distribution of study participants revealed that majority 287 (62.66%) belonged to OBC category. 251 (54.80%) participants belonged to joint family and 207 (45.20%) to nuclear family. 169 (36.90%) women were illiterate and 173 (37.77%) women were educated up to Primary class.

Majority of women 79.26% were housewives, followed by unskilled workers (15.50%). Maximum number husbands were unskilled worker 213 (46.51%) followed by skilled worker 105 (22.93%). Majority of participants 246 (53.71%) belonged to lower class i.e. about ½ of participants followed by middle class i.e. 143 (31.22%) as per modified B.G. Prasad classification.

Table 1: Distribution of participants according to Knowledge of contraceptive methods.

Contraceptive method	Number of respondents	Percentage
Oral pills	346	75.55
Male sterilization	343	74.89
Female sterilization	414	90.39
Injectables	209	45.63
Male condom	382	83.50
Female condom	0	0.00
IUCD	325	70.96
Traditional (LAM, rhythm, withdrawal)	213	46.51
Knowledge of any method	440	96.07
No knowledge of any method	18	3.93

Knowledge of various contraceptive methods among 458 women. Maximum numbers of women 440 (96.07%) knew about contraception. Female sterilization was the most common known method i.e. 414 (90.39%), followed by male condom 382 (84.50%). 346 (74.55%) study subjects knew about OCP while IUCD was known to 325 (70.96%) participants. Knowledge of traditional methods (LAM, rhythm, and withdrawal) was in 213 (46.51%) study subjects. Very few 18 (3.93%) participants had never heard about any contraceptive measures (Table 1).

The source of knowledge for contraception among eligible couples (458). In this study, the health workers contributed to 416 (90.83%) as the main source of knowledge for contraception followed by the mass media

345 (75.33%). The percentage for contribution by the doctors was 57.21% (Table 2).

Table 2: Distribution of participants according to source of knowledge regarding contraceptive methods.*

Source of knowledge	Number	Percentage
TV/mass media	345	75.33
Magazine/newspaper	261	59.99
Friend/relative	24	5.24
Spouse	51	11.14
Health worker	416	90.83
Doctors	262	57.21

*(Multiple responses)

Table 3 shows that out of total 458 participants, 251 (54.80%) were using both traditional and modern contraceptive methods and 220 (48.03%) were using only modern methods.

Out of 251 (48.03%) current users, female sterilization was the most common method practiced 83 (37.73%) followed by male condom 72 (32.73%). 49 (22.27%) study subjects were using IUCD and 6.36% were using OCP. Very few of them preferred to use male sterilization method (0.91%).

None of participants or their spouse were using injectables and female condom. Traditional methods were used by 6.77% of respondents at the time of study.

Table 3: Distribution of study participants according to current uses of contraceptive methods.

Contraceptive method	Current user	
	Number	Percentage
Oral pills	14	6.36
Male sterilization	2	0.91
Female sterilization	83	37.73
Injectables	0	0
Male condom	72	32.73
Female condom	0	0
IUCD	49	22.27
Total (modern contraception)	220	48.03
Traditional (LAM/rhythm/withdrawal)	31	6.77
Contraceptive (modern and traditional)	251	54.80

Out of 238 non contraceptive users, it was found that majority of the study subjects were not using any modern contraceptive methods due to fear of side effects (68.90%), 33.19% faced opposition from the family members. Husband opposition and breast feeding 33.19% and 22.69% respectively were the reasons (Table 4).

Table 4: Distribution of participants according to Reasons of non-use of contraception (n=238).*

Reasons	Number	Percentage
Fear of side effects	164	68.90
Want more children	46	19.33
Feel no need to use	39	16.39
Husband opposed	63	26.47
Family members opposed	79	33.19
Religious reasons	53	22.27
Health reasons	8	3.36
Economic reasons	0	0
Infertility	6	2.52
Breast feeding	54	22.69

*Multiple responses

DISCUSSION

In present study knowledge of contraceptive methods was 96.07%, female sterilization (90.39%) was most heard about method followed by male condom (84.50%), which is comparable to study by Jahan et al where knowledge of contraceptive methods was 93.1% and OCP were most commonly heard methods (74.8%), condom (68.8%) female sterilization (36.4%).³ According to NFHS III survey 2005-06, 98% of women knew one or more methods of contraception.⁴ Female sterilization was the most widely known method among women (97%). A similar study done by Nair in where knowledge of contraceptive methods was 100% and knowledge about female sterilization was 94% followed by knowledge for barrier methods (70.2%), these differences may be due to demographic changes and characteristics of study participants.⁵ Kripa et al found that about 88% of the women knew that there are methods to prevent pregnancy whereas the rest were unaware of the idea of contraception, 79% of the patients were aware of Cu-T followed by female sterilization by 26%.⁶ Dhupdale found that Knowledge of modern contraceptive was 95%.⁷ 95% of the subjects were aware of condoms, 59% about oral pills, 53% about both cut and sterilization and 22% about the injectable contraceptives. Srivastava et al reported that 71.22% females had awareness regarding any method of contraception.⁸ Most of women (95.8%) had knowledge about contraceptive methods in study by Wasnik et al 2013 and Singh et al who stated that more than 99% women in Varanasi city have heard about contraceptives and knew at least one method.^{9,10}

Present study showed that source of knowledge of contraceptive among study participant was health worker among 90.83%, followed by mass media 75.33%, followed by doctors in multiple response answers, similar study was conducted by Nair where awareness was 100% regarding any method of contraception and the main source of information was health personnel.⁵ Another study by Upadhyay reported that source of information were health worker (55%), hospital (48%), friends (44%), and newspaper (25%).¹¹ Pegu et al Shillong found that

knowledge about contraceptive methods was mainly obtained from health workers (58.6%) followed by media (24.1%) and social circle (15.5%).¹²

In contrast to study by Murugesan et al social circle (49%) and health care providers (42%) played a major role as source of knowledge.¹³ Ramaiah et al found 64.1% of women got information from mass media, 20.9% from health personnel and 14.8% from social circle.¹⁴ Shukla found that 91% had displayed an awareness of family planning method.¹⁵ Out of 91%, about 78% had procured the information from family and friends. 13% got their information through mass media. Only 9% of women had been counselled in detail by health personnel. Jahan et al observed that the most common source of information was mass media (53.2%).³ Chaudhary et al observed that most common source of knowledge was the exposure to family planning messages (72.0%), followed by discussion with doctors and other health care.¹⁶ Srivastava et al reported that the most common source of information on contraception was media.⁸

In presents study showed that 251 (54.80%) participant or their partners were using any form of contraceptive methods, out of which 48.03% were using modern methods of contraceptive and main reasons of use was completion of family. According NHFS-4 (2014-15) data contraceptive prevalence rate of India is 53.5% and for modern methods was 48.3%.³ Another study by Jasha showed contraceptive prevalence rate of 48.95%.¹⁷

In contrast to study by Gupta et al contraceptive prevalence was higher than our study i.e. 70.6%.¹⁸ Shukla et al observed that 62.5% were using contraception.¹⁵ In a study conducted by Jahan et al showed the higher contraceptive prevalence rate 62.9% as compared to our study.³ Kaushal et al observed that 45.4% were current users of contraceptive methods.¹⁹

It was seen in present study that use of contraception increases with age from 15-19 group (33.33%) to 20-24 year (50%) than same up to 39 years than decreases 40-49 age group (26%), most preferred type of contraceptive uses was female sterilization (37.73%), male condom (32.73%), IUCD (22.27%), OCP (6.36%), male sterilization was 0.9%. Male condom was preferred in Muslim communities in our study. In comparable to NHFS-4 total contraceptive use was 47.8% and female sterilization was (36%) near about similar to our study, IUCD was 1.7%, which is higher in our study because in the year 2016-18 IUCD use rate increased and use as a long term effective methods and is also a results of PPIUCD promotion and target of GOI in hospital deliveries and incentive to ASHA and provider (trained).⁴ In a study in Jammu, Gupta et al found that 36.79% of females had chosen tubectomy as a contraceptive method followed by other methods of contraception like oral contraceptive pill and condom.¹⁸ In contrast to study by Balgir et al contraceptive prevalence was 53.84% where temporary methods were mostly used among user

followed by 41.6% for condoms, 28.4% for OCPs and 8.0% for IUDs, while permanent methods use was very low tubectomy and vasectomy which accounted for 4.23% and 1% respectively.²⁰ Jahan et al observed that 62.9% had used at least one contraceptive method, three prevailing methods used were condom (65.1%), OCPs (31.8%) and IUCD (9.09).³ Jasha et al observed that among 48.94% contraceptive users 26.9% had undergone sterilization, 47.5% were using copper T, 13.5% used condoms and 11.9% used oral pills.¹⁷ Pegu et al observed that (38%) of women were using any of the contraceptive methods, such as condom (38.2%) followed by oral contraceptive pills (27.6%), intra uterine contraceptive device (15.8%).¹² Wasnik et al found that 72.3% of the respondents were using contraceptives.⁹ Most commonly used contraceptive methods were oral contraceptive pills 43% and condom 31%. Prateek found that contraceptive use rate was only 32.2%, out of these women 89.66% used temporary methods and 10.34% used permanent methods, Cu-T 41.37% was most preferred method.²¹ Chaudhary et al observed that the tubectomy was the most commonly used method 32% followed by condom 30.5%, OCP 5.8%, IUD 4.3%.¹⁶ Kumar et al observed that about 53.40% adopted IUCD, 38.83% OC pills and only 7.77% of their partners used condoms.²²

In present study reasons for not using modern contraceptive was fear of side effect (68.90%), other reasons were want more children (19.33%), husband and family member opposed were 26.47% and 33.19% respectively, religious reason was 22.27%, 16.39% felt no need to use, health related issues were 3.36%. Sudha et al stated the most common reason for nonuse for contraception was fear of side effects, and others were infrequent sex, insisted by family members.¹⁷ Another researcher Jahan et al observed that reasons precluding women from practicing contraception were desire to have a child (60.5%), lack of knowledge (42.4%), and unbearable side effects (25.5%).³ Chaudhary et al observed fertility related reasons (45.1%) were the main cause.³ Murugesan et al found that major reason of nonuse of contraception was desire of child (41%) and fear of side effects.¹³ Lekshmi observed that majority 55.7% were not using family planning because of fertility related reasons.²⁴ Top most reason for non-use of contraceptives responded was "husband out of home" (79.3 percent). Prateek et al found that 21.3% participants were not using any contraceptive because they were afraid of the side effects of contraceptives.²¹

CONCLUSION

Overall usage of contraception was low need to focus at every step to contact with health facility or health workers.

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Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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