

The article "Knowledge, attitude, and practice of contraception among women attending a tertiary care hospital" is retracted by the Editor-in-Chief, due to violation of the policies and practices of International Journal of Reproduction, Contraception, Obstetrics and Gynecology.<sup>1</sup> The article is retracted due to dispute in authorship.

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Original Research Article

## Knowledge, attitude, and practice of contraception among women attending a tertiary care hospital

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### ABSTRACT

**Background:** This study was carried out to assess the knowledge, attitude and practice of contraceptive methods among women attending a tertiary care hospital, to know the influence of various factors on use of contraceptives and to identify the reasons for not using contraception.

**Methods:** A cross sectional, observational study was conducted in Obstetrics OPD, Santosh Medical College, Ghaziabad. 408 married women of reproductive age group (15-45 years), randomly selected, were interviewed with the help of a predesigned questionnaire to elicit information regarding their demographic profile, knowledge, attitude and practice of contraception.

**Results:** In our study 73.3% women interviewed were aware about family planning methods. Awareness was lowest among adolescents less than 20 years of age (28%) and highest among 31-35 yr age group (84.1%). The main source of knowledge was "friends/relatives" (37.8%) and mass media (26.8%). Awareness was high in Para-1 (96.5%), higher SES (97.4%), with higher education (90.7%), in working women (80.4%), women living in nuclear families (80.2%) and Hindu females (73.7%). But in spite of high level of awareness, contraception usage was less (54.4%), the main reason being fear and misconceptions regarding contraceptives.

**Conclusions:** It can be concluded that high level of knowledge and awareness does not match with contraceptive usage rate. Converting family planning knowledge into practice is the real challenge for India. Hence, we recommend sustained efforts to increase awareness and motivation for contraceptive use through more information, education and communication with the reproductive age couples, and improved social and welfare services.

**Keywords:** Attitude, Contraception, Knowledge, Practice

### INTRODUCTION

India is the second most populous country in the world having a rapidly growing population which is currently increasing at the rate of 16 million each year. India was the first in the world to launch the National Family Planning Programme in the early 1950's with the aim to reduce the birth rate and to stabilize population. Since then many programs have been planned and implemented by Government of India and International organizations

with an idea of introducing various family planning methods to the couples in order to avoid unwanted pregnancies. There is rising trend in the acceptance of family planning methods but not to the extent that was targeted, and so the population continues to rise which is a major threat to India's health, political, social growth and development.<sup>1</sup>

The National population policy (NPP) 2000 aimed at bringing down Total Fertility Rate (TFR) to 2.1 by 2010.<sup>2</sup>

But the TFR of India is still 2.33 and that of UP is 3.1 in 2016.<sup>3</sup> Despite constant efforts by the government, the unmet need of contraception still remains. According to National family Health Survey-IV (NFHS-IV, 2015-16), there is unmet need of 12.9% in our country.<sup>2</sup>

The non-acceptance of contraceptives may be due to various reasons like illiteracy, fear of complications, religious beliefs etc. The awareness and acceptance of contraceptive methods and fertility patterns vary within societies and also among different castes and religious groups.<sup>4</sup> The factors responsible for such variation operate at the individual, family and community level.<sup>5</sup>

A thorough understanding of socio-demographic determinants, knowledge, attitude and practice (KAP) of family planning is essential to know the reasons for these unmet needs, for better understanding of the situation and to help the Government in formulation of appropriate policies.

With this background, this study was carried out to assess the socio-demographic determinants and knowledge, attitude and practice of contraceptive methods among women attending a tertiary hospital.

The objective of this study was to study the knowledge about various contraceptives. To study the prevalent attitude and practices regarding family planning. To study the influence of social factors affecting contraceptive use. To find out reasons for not adopting contraception.

## METHODS

A cross sectional, observational study was conducted in OPD, Department of Obstetrics and Gynaecology, Santosh Medical College, Ghaziabad.

408 married women of reproductive age group (15-45 years), randomly selected from Obstetrics and Gynaecology OPD, were interviewed with the help of a predesigned questionnaire. Post menopausal women, pregnant women, unmarried women of reproductive age were excluded.

Ethical clearance was obtained from the Institutional Ethics Committee prior to the start of the study. After obtaining written informed consent, all participants were interviewed based upon a pre-designed and semi structured questionnaire to elicit information regarding their age, parity, religion, educational status, occupation, type of family, family income, socio-economic status, knowledge about family planning methods, source of knowledge, adverse effects, non contraceptive benefits, the current use of any contraceptive method, method preference, name of the decision maker in family planning issues, husband's/family's influence in choosing contraceptive method and reasons for not using contraception. The data collected was tabulated and

analyzed using Excel 2007 data analysis tool for descriptive statistics.

## RESULTS

### *Socio-demographic profile*

Total 408 married women of reproductive age were included in the study. Socio-demographic characteristics of the women along with their awareness of family planning methods are presented in Table 1 and 2.

**Table 1: Knowledge of contraception.**

Variable	Number (n=408)	%
<b>Knowledge of contraceptive methods</b>		
Yes	299	73.3
No	109	26.7
<b>Source of information (n=299)</b>		
Formal education	39	13
Media	80	26.8
Magazine	2	0.6
Internet	5	1.7
Doctor/health facilities	60	20.1
Friends/relatives	113	37.8

About 29.7% of the women were aged 26-30 years, 34.8% women were below 25 years, i.e. the women with highest fertility. Mean age was 28.8±6 years. 28.7% were P1, 36% were P2, 20.3% were P3 and above. 13.4% were illiterate, 47% had education up to class 12<sup>th</sup>. 56.7% lived in joint families. 66.1% were housewives. 43.4%, 37.5% and 19.15 belonged to lower, middle and upper socio-economic status.

### *Knowledge and awareness about contraceptives*

Table 1 shows that 73.3% of the women interviewed were aware about family planning methods; whereas 26.7% had no knowledge about contraceptives. In 37.8% of the respondents main source of knowledge about different contraceptive methods was "friends/relatives" followed by mass media (26.8%) and health personnel (20.1%). Less common source of information was formal education (13%), internet (1.7%) and magazines (0.6%) because of low educational status of the population.

Table 2 shows awareness to be lowest among the adolescents less than 20 years of age (28%) and highest among 31-35 year age group (84.1%), closely followed by 26-30 years (83.5%). 73% women of >35 years group and 65% of 21-25 years age group were aware of contraceptive methods.

Contraceptive awareness increased with the increase in the parity of the women. P0 females had least knowledge (67.2%) and P1 females had most knowledge (96.5%). Paradoxically, awareness was less (55.4%) in P3 and above.

In our study only 27.3% illiterate women knew about contraceptives whereas, as education of the women

increased to secondary and higher level, the awareness also increased to 65.6% and 90.7%.

**Table 2: Socio- demographic characteristics of women and knowledge of contraceptive methods.**

Variable	Total number (n=408)	Knowledge of contraceptive methods (Yes) n (%)	Knowledge of contraceptive methods (No) n (%)
<b>Religion</b>			
Hindu	380	280 (73.7)	100 (26.3)
Muslim and others	28	19 (67.9)	9 (32.1)
<b>Age (years)</b>			
20 or less	25	7 (28)	18 (72)
21-25	117	76 (65)	41 (35)
26-30	121	101 (83.5)	20 (16.5)
31-35	82	69 (84.1)	13 (15.9)
> 35	63	46 (73.0)	17 (27)
<b>Mean age±SD</b>	28.8±6	29.4±5.7	27.2±6.7
<b>Number of living children</b>			
One	117	113 (96.5)	4 (3.5)
Two	147	99 (67.3)	48 (32.7)
Three and above	83	46 (55.4)	37 (44.6)
None	61	41 (67.2)	20 (32.8)
<b>Occupation</b>			
Housewife	270	188 (69.6)	82 (30.4)
Working	138	111 (80.4)	27 (19.6)
<b>Educational status</b>			
Illiterate	55	15 (27.3)	38 (72.7)
1-12	192	126 (65.6)	66 (34.4)
12+	161	146 (90.7)	5 (9.3)
<b>Type of family</b>			
Joint	231	157 (68)	74 (32)
Nuclear	177	142 (80.2)	35 (19.8)
<b>Socio-economic status</b>			
Lower	177	93 (52.5)	84 (37.5)
Middle	153	130 (85)	23 (15)
Upper	78	76 (97.4)	2 (2.6)

Working women had more knowledge of contraceptives (80.4%), than housewives (69.6%).

Muslims had lower rates of contraceptive awareness (67.9%) than Hindus (73.7%).

Women living in joint families had less knowledge (68%) than those of nuclear families (80.2%).

Awareness for different socio-economic classes was 52.5% for lower, 85% for middle and 97.4% for upper class.

#### **Current practice of contraceptives**

Although 73.3% women of the study population were aware of contraceptives only 54.4% were currently using any contraceptive method.

Use of contraceptives was least in women less than 20 years of age (20%) and maximum in 31-35 years age group (76.8%). It was 60.3% in 26-30 years, 57.1% in >35 years and 38.55% in 21-25 years age group. Most of the non-users were below 30 years (only 47% below 30 years were using contraceptives), i.e. females at the peak of their reproductive period.

Regarding parity and contraceptive usage, in our study population, 117 had 1 child, of which 60.7% used contraception, 147 women had 2 living children, of which 58.5% used contraception. 83 had 3 or more children, of which 42.2% used contraception. 61 had no living children, of which 32.8% used contraception.

As the women's education increased, the usage of contraceptive methods also increased. In our study 55 respondents were illiterate and only 18.2% of them followed contraception. 192 were qualified up to 12<sup>th</sup>

class, of which 45.8% followed contraception. 161 had intermediate or higher qualification of which 77% followed contraception.

The next parameter assessed was women's occupation. 63% of working women used contraception in comparison to 50% of housewives.

**Table 3: Socio-demographic characteristics of the study population with family planning awareness and practice.**

	Total number	FP Awareness (Yes) N (%)	Current FP practice N (%)
<b>Religion</b>			
Hindu	380	280 (73.7)	213 (56.1)
Muslim and others	28	19 (67.9)	9 (32.1)
<b>Total</b>	408	299 (73.3)	222 (54.4)
<b>Age (years)</b>			
20 or less	25	7 (28)	5 (20)
21-25	117	76 (65)	45 (38.5)
26-30	121	101 (83.5)	73 (60.3)
31-35	82	69 (84.1)	63 (76.8)
> 35	63	46 (73)	36 (57.1)
<b>Number of living children</b>			
One	117	113 (96.6)	71 (60.7)
Two	147	99 (67.3)	86 (58.5)
Three and above	83	46 (55.4)	35 (42.2)
None	61	41 (67.2)	20 (32.8)
<b>Occupation</b>			
Housewife	270	188 (69.6)	135 (50)
Working	138	111 (80.4)	87 (63)
<b>Educational status</b>			
Illiterate	55	15 (27.3)	10 (18.2)
1-12	192	126 (65.6)	88 (45.8)
12+	161	146 (90.7)	124 (77)
<b>Type of family</b>			
Joint	231	157 (68)	110 (47.6)
Nuclear	177	142 (80.2)	112 (63.3)
<b>Socio-economic status</b>			
Lower	177	93 (52.5)	58 (25.1)
Middle	153	130 (85)	101 (66)
Upper	78	76 (97.4)	63 (80.9)

**Table 4: Reasons for non use of contraceptives in women having knowledge of contraception.**

Variable	Number	Percentage
Family issues	10	13
Religious prohibition	9	11.7
Planning next child	22	28.6
Recent delivery	2	2.6
No reason (lack of motivation, fear of side effects, various myths regarding contraception)	34	44.2
<b>Total</b>	77	100

About 68% of Muslim women were non-users in comparison to about 44% of Hindu non users.

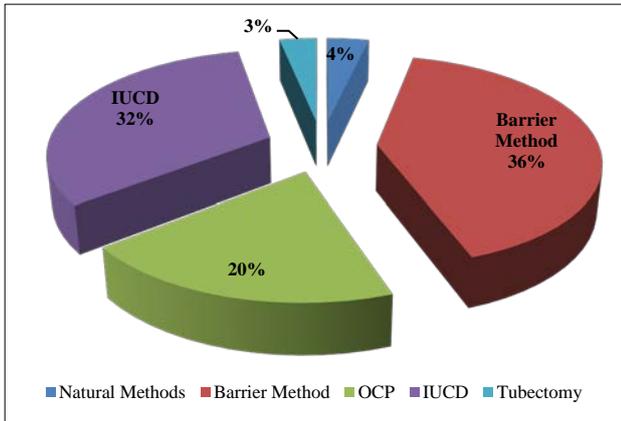
63.3% women in nuclear families used contraception in comparison to 47.6% women from joint families.

The next parameter studied was socio economic status and contraceptive usage. In our study 25.1% of women of

lower socio economic status used contraception while 66% women of middle socio economic status and 80.9% women of upper socio economic status used contraception. We found that as the income increased, the use of contraception increased.

Barrier method (41%) was the most commonly used contraceptive method followed by IUCD (32.4%) and OC

Pills (19.8%). 3.6% were using natural methods. Only 3.2% had ligation and no case of vasectomy was found in spite of moderate knowledge on vasectomy (Figure 1).



**Figure 1: Current use of contraceptive methods (n=222).**

### ***Reasons for non-use of contraceptives***

Majority (44.2%) of non-users did not use contraception because of lack of motivation, fear and misconceptions, 28.6% did not use contraception because they simply wanted a child. Family issues (13%) and religious prohibitions (11.7%) were important factors. Amenorrhoea since last child birth was also a reason for 2.6% of non users because most of them were mothers of infants.

### ***Knowledge about non contraceptive benefits and adverse effects of family planning methods***

In our study only 24% of the respondents had knowledge about non contraceptive benefits of family planning methods, whereas majority (76.0%) admitted ignorance of this. 27.0% knew about protection from STD/HIV with use of condom, 6.0% knew about benefits of oral contraceptive i. e. treatment of irregular bleeding and dysmenorrhoea.

Regarding knowledge of adverse effects, most of the respondents knew about more than one adverse effect. Only 28.0% of women had no knowledge about the adverse effects. Among the adverse effects known were displacements of IUCD (68.6%), irregular bleeding (38.1%), pain abdomen (27%), weight gain (24.4%), fear of infertility (23.4%), failure of contraception (15.3%), nausea/vomiting (14%)

### ***Attitude***

It was interesting to note that in most of the families (42.5%) the couple themselves made decisions on family planning issues, in 32.6 % husband alone was the decision maker. However, in 2.1% of cases only, the wife alone was the decision maker. A significant proportion of

the decision makers were mothers in law (22.8%), quite an expected finding within the prevailing social structure.<sup>5</sup>

## **DISCUSSION**

Our study revealed a moderate percentage of overall knowledge about methods of contraception, 73.3% of the respondents knew about at least one method. Similar awareness rate was found in studies by R Srivastava (82.2%), Mustafa et al (81%).<sup>6,7</sup> High level of awareness has been reported from Shendge et al (87.4%), P Ranjhen (94.2%), M Lakshmi (95.2%), National family health survey NFHS-4(97.8%), and even up to 100.0% in a study by Sunita TH.<sup>2,8,9</sup> Lower awareness was found by Sajid A et al (60%).<sup>11</sup> The credit for this high knowledge about contraceptives is widespread publicity shared by media, governmental as well as the non government agencies. The reasons for low awareness are mainly illiteracy, ignorance, social and religious taboos, and inadequate social welfare services in rural areas.<sup>1</sup>

Our study showed awareness to be lowest among the lower age group. With increase in age, awareness and usage of contraceptives also increased. S Ghosh, Patil SS, reported that use of contraceptives was very less in females at the peak of fertility i.e. below 30 years, similar to our study where only 47% used contraceptives although 70% were aware about it.<sup>5,12</sup>

About 54.4% of the study population in our study was using any contraceptive method, as also reported by NFHS IV (54%), P Renjhen (55.2%), KG Makade (68.4%), PR Walvekar (59.9%), Neelu Saluja et al (59.2%), S Ghosh (67.6%) due to either desire of child or lack of motivation.<sup>13-15</sup> This rate is lower than the prevalence rate of contraception in study by M Lakshmi (71.2%).

This high prevalence of use could be due to the effective spread of message regarding contraception by the state health machinery. In contrast, the prevalence of contraceptive use was found to be very low in study by Tuladhar (33.5%), TH Sunita (48%) and R Srivastava (45%). Fertility intention, fear of side effects, religious taboos, family issues, various myths and misconceptions were the most common reasons for not using any contraceptive.

Since the main source of information was relatives and very few received information from reliable sources like health personnel, Internet and magazines, we can conclude that misinformation and lack of information are also reasons for non-acceptance of contraceptives. Similar scenario was seen in studies by R Srivastava and S Ghosh.

We found that women's education is the prime influencing factor on contraceptive awareness and use. 13.4% respondents were illiterate out of which 27.3% had

knowledge of contraceptives but only 18.2% used them. 47% were qualified up to 12<sup>th</sup> class, of which 45.8% followed contraception although 65.6% were aware, and 39.5% had intermediate or higher qualification of which 90.7% had knowledge and 77% used contraception. So literacy status was found to exert a positive effect in reducing unmet need. Our findings were similar to studies by Sunita TH, S Ghosh and R Srivastava.

In our study we found that contraceptive awareness and use increased with the increase in the parity of the women. P0 females had least knowledge (67.2%) and P1 females had most knowledge (96.5%). Surprisingly knowledge was less in females P3 or more. Maybe illiteracy, orthodox mindset, advanced age and rural background were the reasons behind this.

There was significant association between prevalence of unmet need and number of living children, socioeconomic status and employment of women. Study by M Lakshmi and S Ghosh had similar results.

In our study, we found an association between religion and contraceptive usage. There were more non-users among Muslims than Hindus (68% vs. 44%) similar to study by S Ghosh, P Renjhan and M Lakshmi.

28.6% of non-users did not use contraception because they wanted a child. Lack of motivation, fear of side effects, various myths regarding contraception (44.2%) in spite of knowledge were important factors for not using contraceptives. Other minor reasons that are cited for not using contraceptives are family issues, religious prohibitions, health related problems, fear of hindrance to sexual pleasure and fear of sterilization.

There was a low (34.5%) level of knowledge of non-contraceptive benefits of family planning methods; in contrast, the knowledge about adverse effects was quite widespread as 63.0% of women knew about various adverse effects.

In our study Barrier method (41%) was the most commonly used contraceptive method followed by IUCD (32.4%). Similar observations were found in studies conducted in various urban areas of the country by R Srivastava and S Ghosh.

OC pills were the most common chosen method of contraception used in study by H Shendge (39.74%). It can be explained by the easy availability of the OC pills as over the counter drug, and free supply through government health channels.

Tuladhar study in Nepal showed a very low use of FP methods in contrast to the high level of awareness. 65.0% of the women had never used any methods, whereas only 33.5% were currently using one of the FP methods, among which depo provera was the most commonly used.

In our study, only 3.2% had ligation which corresponds with most of the other studies. In contrast Kansal A et al. reported that in rural Dehradun tubectomy was the most common method (28.9%). 18.53% had tubectomy in study by S Ghosh, 31.8% in study by M Lakshmi et al.

In our study none had vasectomy in spite of moderate knowledge on vasectomy. A study by KG Makade also indicated that vasectomy is not practised at all in the Mumbai slum population, though 49.12% were aware about it. Similar findings were noted in other studies by S Ghosh (0%), M Lakshmi (0.4%). Maybe the reason behind this disparity between female and male sterilization is because of the general concept that reproduction is mainly the function of women. Also there is a feeling that by getting sterilized, masculinity is lost.

Most of the female's attitude towards use of family planning method was positive. But most of them said that they have to follow their husband's or in law's decision. They have no choice related to child birth.

Patil SS reported unmet need for contraception was found in 59 (45.1%) women, need for spacing in 25 (19.1%) and need for limiting birth in 34 (26%) women. About 81.3% of women in the unmet group belong to the age 15-29 years, a finding similar to that of the present study where most of the non users belonged to <30 year age group.

## CONCLUSION

This study reveals good knowledge and favourable attitude of women towards contraception. But high level of knowledge and awareness does not match with contraceptive usage rate; there is a huge knowledge practice gap in the population. This phenomenon is uniformly observed in other studies conducted in urban, rural and tribal parts of India and also in other developing countries. Converting knowledge into practice is the real challenge for India as far as family planning is concerned. Among contraceptive choices, vasectomy and IUCD, two convenient one-time contraceptive methods are heavily neglected. Special emphasis should be given on IUCD as a spacing method, vasectomy as a safe permanent sterilization method. Efforts should be made to educate the public about the safety and convenience of modern, long-term, reversible methods of contraception as spacing methods. As the influence of mother-in-laws and husbands were found really significant in family planning issues, they should be the special target groups for counseling.

Sustained role of mass media like TV is to be intensified in spreading awareness especially among the lower socio-economic strata. Providing education to the teenagers and increasing communication with couple in reproductive ages and improved family welfare services both at Government and Private medical sectors, along with regular availability of contraceptives would also help in

improving adoption and use of family planning measures. Misconceptions regarding the ill effects of the family planning methods have to be removed. Family planning counseling needs to be universally included into routine antenatal clinics. The lactating mothers should also be educated about the fact that breast feeding alone cannot prevent conception.

Improving the status of women in the society and increasing their role in decision making about family planning issues will help India to achieve its long term family planning goals.

Hence, we recommend sustained efforts to increase awareness and motivation for contraceptive use. This can be brought about by facilitating the access to more information, education and communication with the reproductive age couples, and improved social and welfare services.

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