

Original Research Article

Dynamics of contraceptive use among women attending multi-speciality hospital in Faridabad district of Haryana

Shweta Mendiratta¹, Bhushan D. Kamble^{2*}, Pooja Chaudhary Thukral¹

¹Department of Obstetrics and Gynaecology, Asian Institute of Medical Sciences, Faridabad, Haryana, India

²Department of Community Medicine and Family Medicine, All India Institute of Medical Sciences, Bibinagar, Hyderabad, Telangana, India

Received: 10 March 2021

Revised: 25 April 2021

Accepted: 29 April 2021

*Correspondence:

Dr. Bhushan D. Kamble,

E-mail: dr.bhushan@hotmail.com

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ABSTRACT

Background: Population of India is growing at a very fast rate while its resources are limited which will lead to decrease in per capita availability of resources. Contraceptive methods are the simplest way to address this issue of population explosion by preventing the unwanted pregnancies. The objective of this study was to assess awareness and practices regarding contraceptive use and its determinants among women attending gynecology OPD of multi-speciality hospital in Faridabad district of Haryana.

Methods: A cross-sectional study was planned among 200 patients from gynecology OPD in a multi-specialty hospital of Faridabad district of Haryana. The questionnaire consisted of questions about socio-demographic data and data related contraceptive awareness and practices. Data was analyzed by SPSS software version 21.0.

Results: Mean age of study subjects was 29.4±4.3 years. Out of 200 participants, about one fourth (77.5%) were aware about contraception and more than half (59.5%) of them were using contraception methods. Factors like age and education status, occupation and area of residence were found to be statistically significantly ($p < 0.001$) associated with contraception knowledge and practice. Barrier method was most common method of contraception followed by Oral contraceptive pills.

Conclusions: This study concludes that knowledge about contraception was high as about one fourth (77.5%) were aware about contraception while practice of contraception was relatively low as compare to knowledge as two fifth (40.5%) of them were not using any contraception methods. So, there is a need to increase awareness about importance of contraception practice among study population.

Keywords: Contraception, Knowledge, Practice, Adult women

INTRODUCTION

India ranks second in the list of countries by population.¹ According to United Nation data, India's population is estimated at 138 crore people at midyear in the year 2020.² India's population is equivalent to 17.7% of world population while it accounts for only 2.4% of world's surface area.³ Population of India is growing at a very fast rate while its resources are limited which will lead to

decrease in per capita availability of resources. Use of modern contraceptive methods in India has steadily increased from 37 percent among married women aged 15-49 years in 1992-93 (IIPS 1995) to 48 percent in 2015-16 (IIPS and ICF 2017).³⁻⁵

Family planning is a way of thinking and living that is adopted voluntarily upon the bases of knowledge, attitude, and responsible decisions by couples and individuals.⁶

Contraceptive methods are the simplest way to address this issue of population explosion by preventing the unwanted pregnancies.⁷ India is a developing country with limited resources in many fields but in the past years due to various government initiatives and efforts, family planning methods are made available at all government and private hospitals.⁸ In spite of these efforts by the government, the extent of contraception knowledge and its use varies within societies and different cultural groups. According to various studies across India, the prevalence of contraception use is low in both urban as well as rural areas.^{9,10} Even if the knowledge regarding contraception is on the higher side in some areas, the practice rate of contraceptive methods is still low. Factors like low literacy rates, lack of family support, male dominating societies, cultural factors and myths regarding contraceptive methods are responsible for this low rate of contraception use in India.

Young adult reproductive age group women (18-49 years) should be the target population to address this important issue of population explosion in India. So, identification of various predictors of knowledge and contraceptive use should be the first step in this direction.

There is paucity of literature regarding awareness and practices regarding contraceptive use and its determinants among women in North India. The objective of this study was to assess awareness and practices regarding contraceptive use and its determinants among women attending gynecology OPD of multi-specialty hospital in Faridabad district of Haryana.

METHODS

Study population and area

This was a cross-sectional study conducted in Asian Institute of Medical Sciences, a super-specialty hospital in Faridabad district of Haryana. Inclusion criteria were adult woman in reproductive age group (18-49 years) attending gynaecology OPD of multi-specialty hospital in Faridabad district of Haryana. Women who were pregnant, seriously ill, taking treatment for infertility and those who did not give consent were excluded from the study. The data collection was done over a period of 60 days from 1st December 2020 to 30th January 2021.

Sample size and sampling

According to a study conducted by Potdar et al, prevalence of contraceptive use is 58.05%; so, taking the prevalence

(p) to be 58.05 percent i.e., 0.58, absolute error (l) to be 7.5 percent; the sample size comes out to be 173 by the formula of $4pq/l^2$.¹¹ Further adding the non-response rate of 15 percent, the sample size comes out to be 198.9. It was rounded off to 200. Consecutive sampling method was used till achieving sample size of 200.

Study tools

A predesigned pre-tested semi-structured interview schedule in hindi language was used in the study to get relevant information. The questionnaire included questions covering the following components such as socio-demographic data and data related contractive awareness and practices.

Statistical analysis

The data was exported into Microsoft Office excel spreadsheet and analysis was done using SPSS version 21. Descriptive analysis was done by calculating proportions, means and standard deviation. Data was presented as tables and appropriate diagrams. Association between qualitative variables was assessed using Chi square/Fisher's exact test. Logistic regression was used to study the determinants of contraceptive use. P value<0.05 was taken as significant level.

Ethics

Study protocol was approved by institutional ethics committee of Asian Institute of Medical Sciences, Faridabad. Study purpose was explained to participants and written informed consent was obtained. Personal identifying information was kept confidential.

RESULTS

We analysed the data of 200 participants in this study. The mean±SD age of the study participants was 29.4±4.3 years. Maximum (48.5%) number of study participants belonged to age group 26-30 years. About two third (63.0%) of participants were graduate while only (10%) were postgraduate. Half (49.5%) of the study participants had their business as occupation. About half (43.5%) of them had only one child.

Majority (88.5%) of the study participants were Hindus while only (2.5%) were Christian. About one fourth (71.5%) of them were living in urban area. Mean±SD age of marriage was 24.3±2.92 years (Table 1).

Table 1: Distribution of study participants according to socio-demographic profile (N=200).

Variables	Number (%)	
Age group in years	20-25	38 (19)
	26-30	97 (48.5)
	31-35	44 (22.0)
	36 or more	21(10.5)
	10 th or less	18 (9)

Variables	Number (%)	
Education	12 th	36 (18)
	Graduation	126 (63)
	Post-graduation	20 (10)
Occupation	Housewife	92 (46)
	Service	99 (49.5)
	Business	9 (4.5)
Parity	0	23 (11.5)
	1	87 (43.5)
	2	76 (38.0)
	3	14 (7.0)
Religion	Hindu	177 (88.5)
	Muslim	18 (9)
	Christian	5 (2.5)
Area of residence	Urban	143 (71.5)
	Rural	57 (28.5)

Among the study participants, about one fourth (77.5%) were aware about contraception and more than half (59.5%) of them were using contraception methods (Table 2).

Table 2: Distribution of study participants according to awareness and practices regarding contraception (N=200).

Variables	Number (%)	
Awareness about contraception	Yes	155 (77.5)
	No	45 (22.5)
Use of contraceptive method	Yes	119 (59.5)
	No	81 (40.5)

Among the study participants who had knowledge reading contraception, major source of information was peer group (47.1%) followed by electronic media (27.7%) (Figure 1). In this study, out of total participants, more than (57.0%) of them were using barrier methods for contraception while only (5%) were using calendar method (Figure 2).

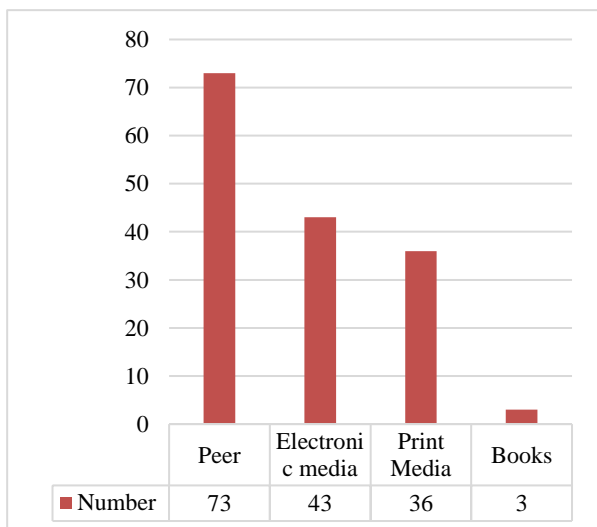


Figure 1: Source of information for contraceptive awareness (N=155).

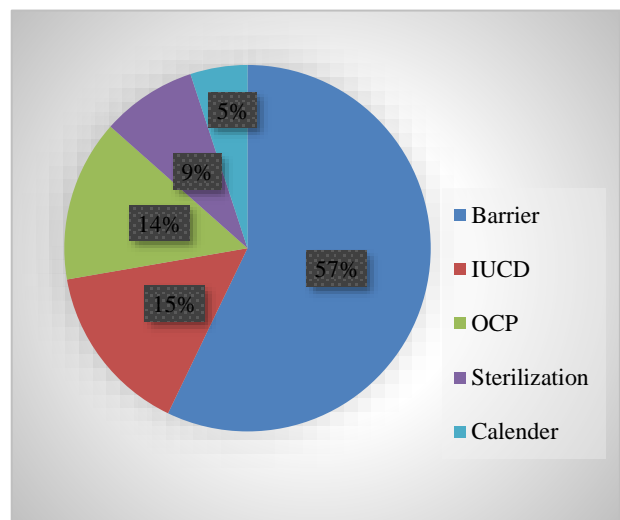


Figure 2: Distribution of participants according to the method of contraception used (N=119).

On analysing presence of knowledge about contraception with sociodemographic factors, it was observed that age and education status, occupation and area of residence were statistically significantly ($p < 0.05$) associated. Factors like religion and parity of participants had no statistically significant association with knowledge about contraception (Table 3).

On analysing about practice of contraception among study participants with their sociodemographic factors, it was observed that age and education status, occupation and area of residence were statistically significantly ($p < 0.05$) associated. Factors like religion and parity of participants had no statistically significant association with use of contraception (Table 4).

In univariate analysis, it was observed that age and education status, occupation and area of residence were statistically significantly ($p < 0.05$) associated with contraceptive use. Factors like religion and parity of

participants had no statistically significant association with use of contraception (Table 5).

In multivariate analysis, only age and occupation found to be significantly associated with contraceptive use.

Table 3: Distribution of study participants according to awareness of contraception and socio-demographic factors (N=200).

Variables	Awareness regarding contraception		Total	P value	
	Yes Number (%)	No Number (%)	Number (%)		
Age group (years)	20-25	22 (57.9)	16 (42.1)	38 (100)	0.001
	26-30	73 (75.3)	24 (24.7)	97 (100)	
	31-35	41 (93.2)	3 (6.8)	44 (100)	
	36 or more	19 (90.5)	2 (9.5)	21 (100)	
Religion	Hindu	137 (77.4)	40 (22.6)	177 (100)	0.99
	Muslim	14 (77.8)	4 (22.2)	18 (100)	
	Christian	4 (80.0)	1 (20.0)	5 (100)	
Area of Residence	Urban	120 (83.9)	23 (16.1)	143 (100)	0.001
	Rural	35 (61.4)	22 (38.6)	57 (100)	
Education	10 th or less	8 (44.4)	10 (55.6)	18 (100)	<0.001
	12 th	24 (66.7)	12 (33.3)	36 (100)	
	Graduation	103 (81.7)	23 (18.3)	126 (100)	
	Post-graduation	20 (100)	0 (0.0)	20 (100)	
Occupation	Housewife	57 (61.9)	35 (38.1)	92 (100)	<0.001
	Service	89 (89.9)	10 (10.1)	99 (100)	
	Business	9 (100.0)	0 (0.0)	9 (100)	
Parity	0	20 (86.9)	3 (13.1)	23 (100)	0.42
	1	66 (75.9)	21 (24.1)	87 (100)	
	2	60 (78.9)	16 (21.1)	76 (100)	
	3	9 (64.3)	5 (35.7)	14 (100)	

Table 4: Distribution of study participants according to use of contraception and socio-demographic factors (N=200).

Variables	Practicing contraception		Total	P value	
	Yes Number (%)	No Number (%)	Number (%)		
Age group (years)	20-25	11 (28.9)	27 (71.1)	38 (100)	<0.001
	26-30	59 (60.8)	38 (39.2)	97 (100)	
	31-35	32 (72.7)	12 (27.3)	44 (100)	
	36 or more	17 (80.9)	4 (19.1)	21 (100)	
Religion	Hindu	107 (60.4)	70 (39.6)	177 (100)	0.19
	Muslim	11 (61.1)	7 (38.9)	18 (100)	
	Christian	1 (20.0)	4 (80.0)	5 (100)	
Area of Residence	Urban	95 (66.4)	48 (33.6)	143 (100)	0.002
	Rural	24 (42.1)	33 (57.9)	57 (100)	
Education	10 th or less	7 (38.9)	11 (61.1)	18 (100)	0.003
	12 th	15 (41.7)	21 (58.3)	36 (100)	
	Graduation	80 (63.5)	46 (36.5)	126 (100)	
	Post-graduation	17 (85.0)	3 (15.0)	20 (100)	
Occupation	Housewife	41 (44.6)	51 (55.4)	92 (100)	<0.001
	Service	70 (70.7)	29 (29.3)	99 (100)	
	Business	8 (88.9)	1 (11.1)	9 (100)	
Parity	0	14 (60.9)	9 (39.1)	23 (100)	0.089
	1	46 (52.9)	41 (47.1)	87 (100)	
	2	53 (69.7)	23 (30.3)	76 (100)	
	3	6 (42.9)	8 (57.1)	14 (100)	

Table 5: Socio-demographic determinants of contraceptive use among the study participants.

Determinants	Contraceptive use N (%)	Unadjusted		Adjusted		
		OR (95% CI)	P value	OR (95% CI)	P value	
Age group in years	20-25	11 (9.2)	1			
	26-30	59 (49.6)	3.81 (1.69, 8.57)	0.001	1.88 (0.72, 4.91)	0.194
	31-35	32 (26.9)	6.54 (2.49, 17.1)	0.000	3.64 (1.14, 11.6)	0.029
	≥36	17 (14.3)	10.4 (2.85, 38.1)	0.000	11.4 (2.15, 60.6)	0.004
Religion	Other	12 (10.1)	1		1	
	Hindu	107 (89.9)	1.40 (0.52, 3.67)	0.44	1.26 (0.46, 3.42)	0.64
Residence	Rural	24 (20.2)	1		1	
	Urban	95 (79.8)	2.72 (1.38, 5.37)	0.001	1.60 (0.61, 4.16)	0.33
Education	10 th or less	7 (5.9)	1		1	
	12 th	15 (12.6)	1.12 (0.35, 3.56)	0.84	0.58 (0.13, 2.49)	0.47
	Graduate and above	97 (81.5)	3.11 (1.13, 8.52)	0.027	0.92 (0.20, 4.16)	0.91
Occupation	Housewife	41 (34.4)	1		1	
	Working	78 (65.6)	3.23 (1.72, 6.08)	0.0001	3.19 (1.43, 7.08)	0.004
Parity	0	14 (11.8)	1		1	
	1	46 (38.7)	0.72 (0.28, 1.84)	0.49	1.12 (0.40, 3.14)	0.81
	2	53 (44.5)	1.48 (0.56, 3.90)	0.42	2.48 (0.73, 8.46)	0.14
	3	6 (5.0)	0.48 (0.12, 1.85)	0.28	0.58 (0.08, 4.06)	0.58

DISCUSSION

The present study was carried out among 200 adult women attending gynaecology OPD, the mean±SD age of the participants was found to be 29.4±4.3 years with maximum (48.5%) number of study participants belonged to age group 26-30 years. This is consistent with a study conducted by Rabbanie et al in Kashmir among female health workers in which it was also found that the mean age of participants was 30.3±4.9 years and maximum (41.5%) participants in the age group 25-29 years.¹² In this study, about two third (63.0%) of participants were graduate while only (10%) were postgraduate. In a study conducted by Potdar et al, it was found that maximum (31.0%) number of participants were illiterate.¹¹ Different study settings could be the reason behind this difference. In this study, about half (43.5%) of them had only one child while in a similar study by Potdar et al, it was found that about one third (34.1%) of participants had two or more children.¹¹

In the present study, majority (77.5%) were aware about contraception. In a study conducted by Kaushal et al in Kanpur, it was found that majority of participants had awareness about all types of contraception.¹³ In this study, prevalence of contraception use was 59.5%. Similar results were obtained in study conducted by Bhasin et al in Delhi in which it was found that contraceptive prevalence was also 59.8%.¹⁴ The prevalence of contraceptive use was almost similar (55%) in another study conducted by Vidya et al in Maharashtra.¹⁵ This study reports that out of total participants who were practicing contraception methods, more than (57.0%) of them were using barrier methods for contraception. In a study conducted by Nayak et al, most common method for contraception was also found to be

barrier method.¹⁶ Similar result was also found in another study by Bhasin et al in Delhi where most common method of contraception use was condom.¹⁴ Most common source of information for contraception was found to be peer group in our study while in a study conducted by Rabbanie et al in Kashmir, major source of information were health care providers (78.8%) followed by social media (9.8%).¹² Similar result was found in a study conducted by Sharma et al in Uttar Pradesh where major source of information was also health workers.¹⁷

In our study, age, education status, occupation and area of residence were found to be significantly ($p < 0.05$) associated with presence of knowledge about contraception among the study participants. Age and education status were also found to be significantly associated with knowledge of contraception in a study conducted by Rabbanie et al in Kashmir and Gambhir et al in Patiala.^{12,18} On analysing about practice of contraception among study participants with their sociodemographic factors in the present study, it was found that age and education status, occupation and area of residence were statistically significantly ($p < 0.05$) associated. Age of study participants was also found to be significantly associated with practice of contraception in studies conducted by Potdar et al in urban area of Karnataka as well as in Rabbanie et al in Kashmir.^{11,12} The reason behind this association could be that as the age increases the use of contraception also increases because they are closer to reach their family size. Similar results was also found in a study conducted by Potdar et al and Donati et al in Manipur that education was found to be significantly associated with practice of contraception.^{11,19} Education status of participants was not found to be significantly associated with contraception use in a study conducted by Mohanan

et al in Dakshina Kannada.²⁰ Occupation was also found to be singly associated with use of contraception in a study conducted by Potdar et al in urban area of Karnataka.¹¹

The self-reporting of contraception use and practice by the study participants is considered as the limitation of the present study. In addition, data on socioeconomic status, family support, cultural factors and access to health care by participants were not collected which can further influence the pattern of contraception use and practice. Qualitative research methods like focused group discussions can be utilized in further studies to have in depth knowledge of the reasons for low contraceptive use among women of reproductive age group.

CONCLUSION

This study concludes that knowledge about contraception was high as about one fourth (77.5%) were aware about contraception while practice of contraception was relatively low as compare to knowledge as two fifth (39.5%) of them were not using any contraception methods. Factors like age and education status, occupation and area of residence were found to be statistically significantly ($p < 0.05$) associated with contraception knowledge and practice. So, there is a need to increase awareness about importance of contraception practice among study population. As we can't conclude regarding causal relationship from results of this cross-sectional study so, additional prospective research is needed to determine the casual predictors of contraception knowledge and practice in order to design health promotion and education programs for adult women of reproductive age group.

Funding: No funding sources

Conflict of interest: None declared

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

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Cite this article as: Mendiratta S, Kamble BD, Thukral PC. Dynamics of contraceptive use among women attending multi-speciality hospital in Faridabad district of Haryana. *Int J Res Med Sci* 2021;9:1621-7.