
ORIGINAL ARTICLE**Assessment of Gap between Knowledge and Practice towards Contraceptive Methods among Nursing Personnel Serving in Underprivileged Region of Rural Haryana**

Mangla D¹, Singh A² and Wadhwa R.D³.

Associate Professor of Obstetrics and Gynaecology¹, Associate Professor of Community Medicine² and Professor & Head, Department of Obstetrics and Gynaecology³, Shaheed Hasan Khan Mewati (S.H.K.M.) Government Medical College and Hospital, Nalhar, Mewat, Haryana, India.

Abstract:**Background and Introduction:**

Knowledge and perceptions of nursing personnel towards contraception can grossly influence the contraceptive practice of the community as they act as both health educator and service provider.

Aims and Objectives:

To assess the gap between knowledge and practice towards the use of contraceptive methods among nursing personnel.

Materials and Methods:

This cross-sectional study was conducted among 220 nursing personnel working in a tertiary care hospital of rural Haryana. A pre-designed and semi-structured questionnaire was used to capture details about knowledge and practice towards contraceptive methods & perceived constraints to contraceptive usage.

Results:

One hundred and ninety six (89.09%) subjects had the knowledge about temporary and permanent methods of contraception. Majority of study subjects used male condoms (n=68, 30.91%) followed by tubectomy (n=58, 26.36%). 'Gap between knowledge and practice' was observed to be maximum towards Oral Contraceptives (91.82%), followed by Withdrawal & IUCD (89.56% & 86.82%).

Conclusion:

There exists a huge 'Gap between knowledge and practice' among nursing personnel. Study subjects had fair knowledge about various aspects of contraceptive methods but they failed to practice. They need to put into practice their knowledge about while providing services and/or persuading young girls and women of this underprivileged area in preventing unwanted pregnancy.

Key words:

Contraception, Gap between knowledge and practice, Contraceptive methods.

Introduction:

Millions of women across the globe would prefer to avoid becoming pregnant but not practicing contraception. The prevalence of contraceptive use has been increasing, but the unmet need for contraception still remains a problem¹. Despite the use of contraceptive over the years, there still exist a gap in the Knowledge, Attitude and practice regarding contraception². Only 15.5% married women aged 15–49 years used any family planning methods in the lone aspirational districts Mewat / Nuh of southern Haryana. Situation becomes grimmer as only 35.6% women are literate and 40% women aged 20-24 years are married before age 18 years³. Quality of Family Planning Services in the district Mewat can be understood by the fact that only 7.9% health workers ever talked to female non-users about family planning³. Nursing personnel may convince the target population in a

better way for more use of Family Planning methods regularly and correctly.

Contraceptive advice is a component of good preventive health care, as lack of knowledge and favorable attitude on part of healthcare providers can lead to low acceptance and compliance of beneficiaries resulting in underutilization of healthcare services, both by health care providers themselves and beneficiaries^{4,5,6}. This may result in increased cases of unsafe and septic abortions thus contributing to increased maternal mortality.

Aims & objectives:

- 1) To check the knowledge of contraceptive methods among nursing personnel.
- 2) To find out the practices of contraceptive methods by nursing personnel.
- 3) To assess the factors contributing towards gap between knowledge and practice.

Materials and Methods:

The present study was planned and rolled out under the aegis of the departments of Obstetrics & Gynecology at a tertiary care teaching hospital located in aspirational district Nuh, Haryana with Prior permission of IEC. Study was conducted for duration of 6 months during the months of March-August 2019. This was a descriptive institution based cross-sectional study. Nursing personnel serving at this institution formed the study population.

Nursing personnel were contacted and explained about purpose and importance of this study. This opportunity was utilized to request them for their full participation after ensuring them about confidentiality of the data. Adequate privacy was ensured while interviewing the subjects. All the nursing personnel serving at this institution and willing to participate were included in this study. Informed and written consent in vernacular language was obtained from study subjects.

A pre-designed and semi-structured questionnaire was used to study socio-demographic profile, Knowledge and Practice towards Contraceptive methods among

study subjects. A few questions were also framed to gather information regarding perceived constraints to contraceptives usage by them.

A complete list of all nursing personnel currently working was obtained from the office of medical superintendent along with their duty rosters. It was planned to interview them in a phased manner. Investigator contacted the individual just after their duty hours as per roster. It took around 15-20 minutes to fill questionnaire by one subject. It took around three months to interview all the study subjects.

Anonymity and confidentiality was maintained during data collection as well as data storage by keeping file containing identity related details password protected. Data was first entered into a Microsoft Excel sheet and then analyzed using IBM SPSS Statistics for Windows, Version 22.0 (IBM Corp. Armonk, NY, and USA). Results were expressed using appropriate statistical methods.

Results:

Out of 234 nursing personnel employed in the institution, 220 were eligible candidates. Thus data of two hundred and twenty subjects was captured and analyzed in this study. Out of total enrolled participants, 60.45% respondents were in age group of 20 to 30 years. Majority (70.91%) of them belonged to Hindu religion & rest were Muslims (29.09%). 92.73% respondents were married & 65% of them had work experience of 5 to 10 years followed by 25.45% with work experience of less than 5 years. Majority (61.82%) respondents had 2 children followed by 16.36% with no child.

Knowledge of various contraceptive methods:

Among 220 respondents, 92.27% had knowledge of various contraceptive methods while 85.91% knew about correct time of starting the contraceptive methods. 9.09% respondents were not sure about knowledge of temporary & permanent method of contraception. Only 48.64% had adequate knowledge of contraindications related to various methods but

46.36% were not sure about various contraindications. 94.09% knew that barrier methods prevent STD. 84.5% respondents were aware about free of cost availability of contraceptive methods in S.H.K.M. Government Medical College & Hospital & 8.6% respondents were not sure about the same (Table 1).

Contraceptive methods such as male condoms, IUCD, oral contraceptive pills, tubectomy & vasectomy were known to 100% of the respondents while female condoms (7.7%) and vaginal rings (4.1%) were least known. (Table 2)

Practice of various contraceptive methods:

Regarding practice of contraceptive methods, majority of study subjects used male condoms (n=68, 30.91%) followed by tubectomy (n=58, 26.36%). Oral Contraceptives were used by 8.18% (n=18) whereas none of the subject used female condom.

Among 220 subjects, 7.27% were not using any contraceptive methods at the time of this study. The respondents were satisfied with the method of contraception they were using. 7.5 % of respondents faced failure at one time or the other. On inquiring about the possible reasons for failure, incorrect and inconsistent use was found to be the main reason for failure. The study also revealed that multiple constraints exist in study group regarding use of contraception in spite of being health care providers. 13.18% respondents had personal reasons and 6.36% had partner reasons. 5.91% told that they had religious constraints. (Table 2)

Gap between Knowledge and Practice towards contraceptive methods:

Gap between knowledge and practice was observed to be highest towards Oral Contraceptives (91.82%), followed by Withdrawal & IUCD (89.56% & 86.82%). In case of Male and female Condom, this gap was observed to be 69.09% and 7.7% respectively. (Table 2)

Constraints to contraceptives usage:

Regarding constraints to contraceptives usage, majority of them had no reason. Most common (n=29, 13.18%) reason was personal as perceived by them. Out of 220, 14 (6.36%) and 13 (5.91%) subjects cited 'Partner not comfortable' and 'religious reasons' respectively for not using contraceptives (Table 3).

Discussion:

The World Health Organization describes 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 family groups and thus contribute effectively to the social development of a country"⁷. It is worthy to note that concept of family planning is related to practices that empowers individuals to control interval between pregnancies thus helping them in avoiding unwanted births.

In this study, we observed that most respondents had knowledge about male condoms, IUCD, oral contraceptive pills, tubectomy and vasectomy. In the survey, 89.09% of study subjects revealed that they know about temporary and permanent methods of contraception. The result of this study is in agreement with findings of National family health survey (NFHS)-4. Report of NFHS-4 states that knowledge of contraceptive methods is almost universal in India, with 99 percent of currently married women and men age 15-49 know at least one method of contraception⁸. These results are also in agreement with another study from Chandigarh⁹. A study from Uttar Pradesh¹⁰, observed that most commonly known methods of contraception were male condoms (55.6%) followed by female sterilization (55.4%). Authors of this study also concluded that contraceptive practice is low. It could be due to differences in educational and socio-economic background.

In our study, it was observed that 30.91% of study subjects used male condoms and 26.36% practiced tubectomy.

Table No. 1: Status of knowledge about contraceptives among study subjects

Knowledge statement	Response	N	%
1.Knowledge of various contraceptive methods	Yes	203	92.27
	No	17	7.73
2.I am aware that there are temporary and permanent methods of contraception	Yes	196	89.09
	No	4	1.82
	Not sure	20	9.091
3.Knowledge of correct use and timing of different contraceptives	Yes	189	85.91
	No	9	4.09
	Not sure	22	10.00
4.I am aware that contraceptive methods can have failures	Yes	215	97.73
	No	2	0.91
	Not sure	3	1.36
5.I know that barrier methods prevent STD	Yes	207	94.09
	No	4	1.82
	Not sure	9	4.09
6.Knowledge of contraindications of particular contraceptive	Yes	107	48.64
	No	11	5.00
	Not sure	102	46.36
7.I am aware about various methods of contraceptives available in our hospital	Yes	156	70.909
	No	23	10.455
	Not sure	41	18.6
8.I am aware that contraceptive methods are available free of cost in our hospital	Yes	186	84.545
	No	15	6.818
	Not sure	19	8.636

Table No. 2: Assessment of ‘Gap between Knowledge and Practice’ to various contraceptive methods among study subjects

Contraceptive Methods	Knowledge		Practice		Gap between Knowledge and Practice		P value*
	N	%	N	%	N	%	
Oral Contraceptives	220	100	18	8.18	202	91.82	< .001
Withdrawal	216	98.2	19	8.64	197	89.56	< .001
IUCD	220	100	29	13.18	191	86.82	< .001
Spermicidal Jelly	178	80.9	0	0.00	178	80.9	< .001
Injectables	187	85	10	4.55	177	80.45	< .001
Tubectomy	220	100	58	26.36	162	73.64	< .001
Male Condom	220	100.0	68	30.91	152	69.09	< .001
Calendar Method	98	44.5	2	0.91	96	43.59	< .001
Female Condom	17	7.7	0	0.00	17	7.7	< .001
Vaginal Rings	9	4.1	0	0.00	9	4.1	< .05

*Comparison of proportions

Figure No. 1: Bar chart showing ‘Gap between knowledge and practice’ to various contraceptive methods in ascending order

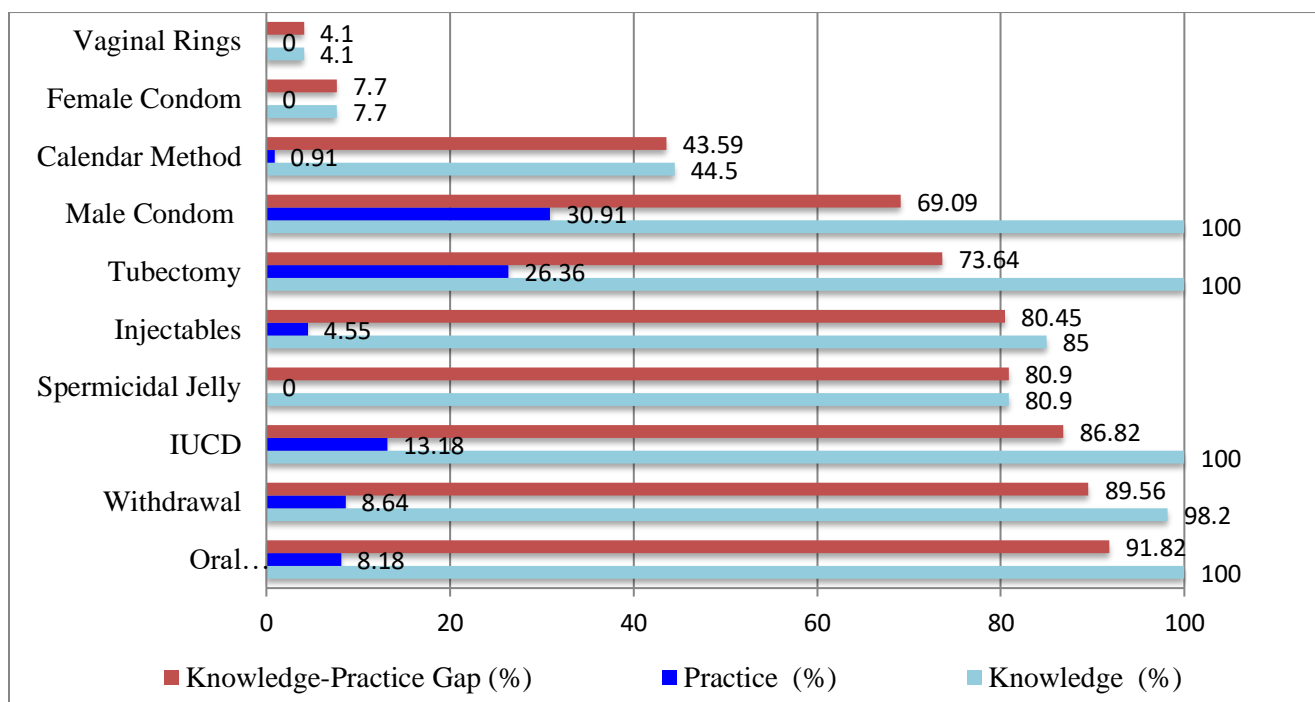


Table No. 3: Constraints to contraceptives usage by study participants (N=220)

Constraints to contraceptives usage	N=220	%
Religious reasons	13	5.91
Fear of family	6	2.73
Partner not comfortable	14	6.36
Non-availability in area	0	0.00
Personal reasons	29	13.18
No constraints	158	71.82

Only 8.18% used oral contraceptives whereas none of the subject used female condom. Another study from Punjab observed 39% and 37.6% practice temporary and permanent methods of contraception respectively¹¹. This is in contrast to the study from state of Haryana, in which 46.0% followed permanent methods of contraception that is higher as compared to this study¹². IUCD and condom being the most preferred temporary methods which corresponds to a study by Chopra S Dhaliwal et al¹³ whereas tubectomy i.e. female sterilization being the most common used permanent method that corresponds to study done by DR Gaur et al¹⁴.

Lakshmi MM et al¹⁵ from Karnataka investigated contraceptive practices among women of reproductive age in the rural field practice area of K. S. Hegde Medical College Hospital. She observed that 95.2% were aware of one or multiple methods of contraception, 87.2 % accepted the contraceptive practices, and 71.2% followed or are following contraception at the time of study. In the study it was reported that, 51.9% followed or used temporary methods whereas 32.2% followed permanent methods of contraception. Thus author observed big knowledge versus practice gap.

Religion influences behavior of a person both in social and personal context. Several studies have documented role of religion in determining role of contraceptive usage. In this study, we also observed low practice of contraceptive methods in the Muslim predominant area with very low literacy rate. Padma

Mohanani¹⁶ and Chandra et al¹⁷, have well documented the association of religion and contraceptive usage. Among various religious groups permanent methods of contraception is most popular among Christians (45.8%), followed by, Hindus (36.7%) and least among Muslims (19.5%). The results were found to be statistically significant as reported in an investigation performed at rural area of Haryana state¹⁴. Another author from South India¹⁶, studied fertility pattern and family planning Practices in a rural area of Dakshina Kannada and observed that Muslims followed permanent methods the least. Contrary to findings of these studies, another study¹⁵ did not find any influence of religion on contraceptive usage in her study. Girdhar et al¹¹, observed an association between literacy status of people and their use of contraceptive methods and the association was found to be statistically significant.

Regarding constraints to contraceptives usage, this study observed that most common (n=29, 13.18%) reason was personal. In this study, 14 (6.36%) and 13 (5.91%) subjects respectively cited 'Partner not comfortable' and 'Religious reasons' for not using contraceptives. Kartikeyan S studied female non-acceptors of contraception and revealed that rural women who were unwilling to accept family planning methods were concerned about child survival and viewed children as a source of support in old age¹⁸.

Health education is considered an important tool of

empowerment. Empowering health care personnel (nursing personnel in our study) can help us in obtaining desired outcomes about family welfare services. Effective counseling and persuading power are also equally important tools in this regard. Delivering effective counseling and bringing change in behavior are important skills need to be instilled in health care personnel to empower them.

Conclusion:

On the basis of findings of this study, it can be concluded that practice of selected contraceptive methods was low among nursing staff. 'Gap between knowledge and practice' appears to be huge. Nursing personnel do provide constellation of services including family welfare services. They need to put into practice their knowledge about contraception while providing services and/or persuading young girls and women of this underprivileged area in preventing unwanted pregnancy. Regular update of their knowledge on contraceptive methods along with recent advances would be useful.

Sources of Support - Nil

Conflict of Interest- Nil

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Address for correspondence: Dr. Divya Mangla, Associate Professor of Obstetrics & Gynaecology, Shaheed Hasan Khan Mewati (S.H.K.M.) Government Medical College and Hospital, Nalhar, Mewat, Haryana, India. Email: drdivyamangla@gmail.com Mobile: 8222003881

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