A study of knowledge, attitude, and practice of contraception among nursing staff in All India Institute of Medical Sciences, Jodhpur, Rajasthan

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ABSTRACT

Objective: Despite the increase in contraceptive usage over the years, there still exists a gap in the knowledge, attitude, and practices regarding contraception. The study has been designed to assess the knowledge, attitude, practice, and preferences on contraceptive methods among the nursing staff, to determine the association between knowledge and attitude on contraceptive methods with the variables. Materials and Methods: A cross-sectional descriptive study of 173 nursing staff using a structured questionnaire on knowledge, attitude scale, and practice and preference were done at AIIMS, Jodhpur during June 2018 to August 2019. Results: It was observed that 82.6% were of 21–30 years of age, 86.7% were Hindus, 67% were from the nuclear family, 41% were married between 19 and 25 years, 86.7% were nulliparous, 75.7% had access to various contraceptives through health workers, 79.8% got information through media. 73.4% were willing to use postpartum contraception. In our study, a major reason for 80.9% to use family planning was to prevent unintended pregnancies. Majority 71% had the favorable attitude and 14.4% had an unfavorable attitude toward contraceptive methods. In this study, 64.1% preferred male condom as Rank 1, intrauterine device 57.8% as Rank 2, and Lactational Amenorrhea Method 58.3% as Rank 3 for postpartum contraception. There was an association between the practice of family planning and marital status, age, and family size. Conclusions: The study showed that the majority of the females nursing staff had moderate knowledge and favorable attitude toward contraception use.

Keywords: Attitude, contraceptive methods, knowledge, practice, preferences

Introduction

The population growth rate for 2019 is projected at 1.08%. India will add a whopping 1.49 crores in 2019, contrary to the fact that India accounts for just 2.4 percent of the world surface area of 135.79 million square km yet it sustains 17.75 percent of the world population.[1]

WHO defines family planning as a way of thinking and living that is adopted voluntarily upon the basis of knowledge, attitude, and responsible decisions by individuals and couples to promote health and welfare.

About one-third of unintended pregnancies each year result from improper use or failure of contraceptives. A lack of knowledge of contraceptive methods, source of supply, cost, or poor accessibility are the barriers that exist in developing countries.

Currently, short-term modern family planning methods are available at all levels of governmental and private health facilities,
whereas long-term methods are being provided in health centers, hospitals, and private clinics. The study done in Ethiopia showed that good knowledge about family planning does not necessarily coexist with their good practice.\(^2\)

The global population today stands at over 6 billion, one-sixth of which is in India. Uncontrolled population growth creates a major loophole for national development. Even though India was the first country in the world to implement a national population control program in 1952, the country is still struggling to contain the baby boom. A lot of efforts and resources have been used in the National Family Welfare Programme but the results are disappointing.

The United Nations Fund for Population Activities notes that future population trends will hinge on the fertility decisions of adolescents. Use of contraceptives can prevent at least 25% of all maternal deaths by allowing women to prevent unintended pregnancies and unsafe abortions, and protect themselves from sexually transmitted diseases including HIV.

Globally, the prevalence of contraceptive use has been increasing but the unmet need for contraception remains a problem. Health care providers play a key role in imparting information related to contraceptive measures in reproductive health. There is an immense need to know the preferences of health care providers as they directly influence the information provided to clients. This warrants an investigation into the knowledge and attitude of this group regarding fertility control and contraception and constraint in practices. Their beliefs and choices influence their counseling so the study aims to decipher the outlook and various myths among nursing staff that refrains them from the use of contraception.

**Materials and Methods**

This was a cross-sectional descriptive study conducted among the nursing staff at AIIMS, Jodhpur.

They were interviewed using pretested, self-administered structured questionnaires. The collected information included sociodemographic characteristics, knowledge, attitude, and practice toward the use of contraceptives. The dependent variables were knowledge, attitude, practice, and preferences of contraceptive methods. The independent variables were age, age at marriage, religion, educational status, occupation, duration of the marriage, number of pregnancies, number of living children, type of family, income, and source of information.

The Chi-square tests were used to determine the association between categorical variables. A \(P\) value of less than 0.05 was considered statistically significant.

**Results**

**Sociodemographic characteristics of respondents**

A total of 173 nursing staff were recruited in the study. Approximately, 82.6% of the participants were aged between 21 and 30 years, 41% were single. Majority 86.7% were Hindus. Male partners of 19.6% staff were illiterate while among wives of male nursing staff only one was found to be illiterate. Among the participants, 32% had a family income of less than 30,000 rupees per month. Majority 67.5% belonged to the nuclear family. About 41% got married at the age of 19–25 years and 86.7% were nulliparous.

**Knowledge status of respondents [Figure 1]**

All participants were well aware of family planning methods. The main sources of family planning services were health centers (89.6%) followed by pharmacies (54.9%) and clinical personnel (54.3%). The common side effects reported by respondents were heavy bleeding, irregular bleeding, and abdominal cramps. Knowledge of methods of contraception was assessed by scoring the responses of participants on the various methods of contraceptives.

Regarding the overall knowledge of study participants, 161 (42.3%) had good knowledge of family planning.

**Attitude toward contraception [Figure 2]**

The majority (65.3%) of the respondents discussed on family planning issues with their partners and both were willing to use it in the future. About 93.6% of the participants reported that they believe family planning is beneficial. Almost 73.4% expressed their willingness for postpartum contraception. Regarding the overall attitude, 71% of the participants had a favorable attitude toward family planning. 94.2% of these health workers themselves were involved in propagating family planning.

Most did not know about the failure rates of different methods. None had heard of the medical eligibility criteria. Only 29.9% knew about missed pills and its effect menstrual cycle. Only 29% knew methods like implants and injectable contraceptives as postpartum contraceptives. Many nurses used natural methods of contraception even though they knew it had a high failure rate. Barrier (98.2%) and natural (91.3%) methods were the most popular methods followed by hormonal (87.8%), sterilization (86.7%) and intrauterine contraceptive device (IUCD) (80.34%), 58.3% were willing to adopt lactational amenorrhea method followed by minipills (31.7%) as the choice for postpartum contraception [Figure 3].

The study revealed that media 79.8% was the main factor that influenced the choice of contraception among the staff.

**Practice on family planning**

About three fourth 71% of study participants reported prior use of the contraceptive method. Almost 70.5% of study participants had a good practice and the rest had poor practice. The most common current reasons for not using were a desire to have a child 32%. Prevention of unwanted pregnancies was found to be the most common reason for using contraception rather than for spacing. Fear of side effects, need for more children, opposition by the partner, and in-laws and husband working away were the reasons found for non-use of contraception.
Other reasons mentioned for non-practice were non-access to the health facility, felt pregnancy was naturally spaced, religious beliefs, inconvenient to use, cost and family pressure. Most thought that contraceptives were used to prevent unwanted pregnancy (80.9%) and about 45% thought that they could be used to prevent infections. In 67% of study group safety profile of the method and 41.6% cost were the major determinants that governed the choice of contraceptive method.

Majority of the females 58% preferred male condom as Rank 1. Around 22% of women oral contraceptive pills as Rank 2. Around 8.7% preferred injection as Rank 3. Only about 1% chose implants. Surprisingly, natural methods were quite commonly used in spite of high failure rates. About 29% had never used any method of contraception in their lifetime. Among the reasons for not using contraception: partner works out of town (1.1%) is against religious beliefs (3.4%), the prohibition of family and husband each were 2.8% and fear of side effects (11.56%). Health centers were the most common source of contraception (89.6%).

Association among various variables
Women who belonged to the age group of 20–30 years were more likely to practice FP than those who were more than 30 years. There was no significant association found between attitude and practice of contraception. It was also seen that residence, educational status, and monthly income did not have a significant association with the practice of FP. The study revealed no statistically significant association between the practice of family planning and sociodemographic characteristics. The study showed that those participants with higher parity followed a better practice of family planning. Respondents who were married practiced family planning more effectively than their unmarried counterparts.

Chi-square association between family planning practice and sociodemographic characteristics, income, marital status and age

| Residence  | Good FP practice | Poor FP practice | Chi-square | P    |
|------------|------------------|-----------------|------------|------|
| Urban      | 75               | 31              | 0.494      | 0.482|
| Rural      | 44               | 23              |            | NS   |
| Total      | 119              | 54              |            |      |
| Education  |                  |                 |            |      |
| Graduate   | 64               | 23              | 0.6241     | 0.42 |
| Postgraduate| 24              | 6               |            | NS   |
| Total      | 88               | 29              |            |      |
| Marital status |              |                 |            |      |
| Married    | 85               | 17              | 26.22      | 0.00001|
| Unmarried  | 33               | 38              |            | S    |
| Age        |                  |                 |            |      |
| 21–30      | 94               | 49              | 9.08       | 0.0025|
| >30        | 28               | 2               |            | S    |
| Monthly income |              |                 |            |      |
| 30,000 and less | 34             | 22              | 2.8        | 0.24 |
| 40,000–70,000 | 78             | 32              |            | NS   |
| >80,000    | 6                | 1               |            |      |

Discussion
This study was aimed to assess the knowledge, attitude, and practice of contraception methods among the nursing staff. This group of population is instrumental in influencing the
regional population and so it becomes important to know about their family planning practices. It is strongly recommended that all eligible women should have adequate awareness as well as favorable attitude and a correct and consistent.[16] We found the majority (82.6%) of our participants were 20–30 years of age. The findings from this study imply that the attitude of contraception was significantly associated with the age, marital status, and family size of the participants. The reported association is not uncommon, as the marital status and parity of an individual influence the use of contraception.[17] The majority (71%) of the respondents had a favorable attitude toward family planning and around three-fourths of study, participants practiced one or other method of family planning. This finding was similar to that observed by the study of Gupta v et al.[9] All participants knew about majority methods of postpartum contraception. They mostly mentioned condoms (64.1%) and lactational amenorrhea (58.3%) as their choices, which had higher failure rates. So despite knowing about contraception, their attitude and practices were lacking. This bridge needs to be filled to achieve our family planning goals. Regular medical educational programs should be organized to update them about newer methods as also proposed in similar studies. Our findings show that the most common source of information was the media (79.8%). Same was observed in studies conducted at Sikkim.[8] Participants showed mixed attitudes toward using contraceptives. Our findings show that the majority of respondents (93.6%) perceived contraception to be beneficial and propagated the same.

We further observed that most (89.6%) preferred to procure contraception from health care facilities. This is in line with findings reported in studies elsewhere.[7] Prevention of unwanted pregnancies and health issues was the major reason for using contraception. About half of them were very casual and had no reasons for not using any contraceptive method. Few 11% had a fear of side effects. Prohibition by family or religious beliefs did not account much for non-use. This is contrary to the study done by Quershi in Chhattisgarh.[8] Family planning practice among the nurses was 71%. This was higher than 60% reported in health workers in Uttar Pradesh, by Jahan et al.[9] despite having similar high knowledge scores.

Only 70.5% of respondents had used contraception which is incongruent with the high level of contraceptive knowledge. This trend has been prevalent in literature as well.[8] The major objective for contraception was to prevent unplanned pregnancies and avert its negative consequences. 75% of the respondents chose to depend on health professionals to suggest an appropriate method of family planning. The belief was that professionals were more knowledgeable about the side effect profiles. The other major chunk depended on partner’s choice.

Majority respondents were willing for use of contraception. There were several benefits encouraging family planning which include adequately planned families with the optimal number of children at par with resources, enhanced maternal, and child health.[11,14]

Our study showed that residence and income did not influence the practice of contraception, as they were overcome by education.[15–17]

Conclusions and Recommendations
Observations from the study suggest that proper training for family planning practices should be specifically incorporated in the curriculum of health workers.[14,15] Though health care providers have heard of family planning through various sources of information very few are aware of newer hormonal contraceptives (vaginal ring and implants), let alone their use. Knowledge builds an attitude and knowledge and attitude together carve a behavior. So, nursing staff should be equipped with recent information on all the available family planning methods through pieces of training, seminars/conferences.[16,17] This will keep them informed and reinforce the implementation of various new practices as well as help them suggest best suitable family planning methods. Further, more studies are needed in exploring reasons affecting the non-utilizing of family planning and how these can be addressed.

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Conflicts of interest
There are no conflicts of interest.

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