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RESEARCH ARTICLE

The pattern of unmet need of contraceptive use in married couples attending a tertiary care hospital in Eastern India

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ABSTRACT

Background: Knowledge regarding contraceptives and practice of their use or nonuse decide the health outcomes of married women. There appears to be an unmet need of contraceptive use making a gap between the reproductive intentions and women's contraceptive behaviour. This has led to many women being deprived of their needs of contraception as well as exposing them to unnecessary child birth. **Aims and Objectives:** The aims of this study were (1) to determine the knowledge and practice of various contraceptive methods in married couples attending a tertiary care teaching hospital, (2) to know about their use, nonuse, or discontinuation among them, and (3) to suggest methods to improve their use and making them more safe and effective. **Materials and Methods:** A cross-sectional observational study was conducted for 6 months. Married women (n = 200) attending the obstetrics and gynecology outpatient department of KIMS hospital Bhubaneswar participated in the study. They were given a questionnaire after obtaining their informed consent. The information from them on sociodemographic variables, awareness, and knowledge was documented, and the practices of their use/nonuse were analyzed. **Results:** Majority of women were aware of contraceptive usage (87%). The main reason for discontinuing of contraceptives was to get a child (49.2%). Among the nonusers, 29% attributed the reason to apprehension of side effects. Media (64.5%) was the most common source of information. 5% of women used medical termination of pregnancy kit to terminate the pregnancy without knowing the grave consequences of such usage. **Conclusion:** The knowledge for contraceptives was high, but their usage was low. Hence, there is a need for improving the contraceptive use among married women. The approach to contraception should be designed taking into consideration of the patient's reproductive intentions so that child birth could be a planned process and unwanted pregnancies can be avoided.

KEY WORDS: Knowledge; Practice; Contraceptive; Health Education

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INTRODUCTION

One of the major problems for the global community is an increase in population. This is alarming, disturbing, and a serious concern of fundamental human rights.[1] According to the World Health Organization, it has been estimated that 210 million women get pregnant every year, and only, two-third of them deliver live

infants. The rest one-third ends in stillbirth, miscarriage, and abortion.[2] Family planning has reduced the number of unwanted and unintended pregnancies and thereby saving women from high-risk pregnancies and unsafe abortions. It has been reported from India that the use of oral contraceptives is less because of social taboos and beliefs.[3] In Ethiopia, fertility rates are high, and in average, each woman is having 4.8 children.[4] India is the second most populous country in the world having a rapidly growing population. In 1952, the Government of India declared a family planning program whose main aim was to promote contraceptive use. Discontinuation of the use of contraceptives due to many reasons attribute to unnecessary and unwanted pregnancies reported from many countries. Within 2 years of using contraceptives, almost half of them discontinued in Egypt, Indonesia, and Zimbabwe. In Bangladesh, Columbia, and Peru, two-thirds of women discontinue within 2 years making women more vulnerable to pregnancy.[5] Although the discontinuation rate is clearly increasing as shown by Ali et al. in the health survey report from 19 countries, the reasons for the same are not well documented.[6]

Therefore, the present study was undertaken at Kalinga Institute of Medical Sciences, Bhubaneswar, India, to make a community-based cross-sectional study to assess both qualitatively and quantitatively the reasons for discontinuation and nonuse of contraception methods. This will help the policy makers, program officers, and women organizations to give a fresh look at this and understand the lacuna in family planning programs in general and the use of contraceptive measures in particular. The aim of the study was to probe into the knowledge and practice of the study subjects in their contraceptive use.

Objectives of the study were as follows:

1. To know the pattern of contraceptive use in a tertiary care teaching hospital
2. To find the reasons of discontinuation of contraceptives and ascertain their nonuse
3. To suggest methods to improve the contraceptive use making them more safe and effective.

MATERIALS AND METHODS

After obtaining approval from the Institutional Ethics Committee of KIMS Hospital, an observational, cross-sectional study was conducted for 6-month duration between January and July 2017. This study was an interdisciplinary study of the Department of Obstetrics and Gynecology in collaboration with the Department of Pharmacology. A sample size of 200 was taken for this study.

Inclusion Criteria

- Married women in reproductive age group (18-49 years)
- Women attending the outpatient department (OPD) who were using any kind of contraceptive measures or advised to use contraceptives by doctors of Department of Obstetrics and Gynaecology
- Those who gave consent to participate in this study after going through the information.

Exclusion Criteria

- Those who have disagreed or did not give their consent
- Those who wanted to withdraw from the study
- Unmarried women were excluded from the study.

Data Collection

A questionnaire was designed for women of reproductive age group based on the previous studies and included demographic details. The married couple attending the OPD of the obstetrics and gynecology department was given the questionnaire after their signing in the consent form. For the convenience of the participants, the languages used in English and Odia. The present use of contraception methods, their nonuse, or discontinuance was documented. The knowledge about contraception, the accessibility to contraceptives, and their residential status was collected from them. The filled in forms were collected, and the data were entered into the Microsoft excel.

Statistical Analysis

The analysis was done using the standard statistical software Stata 14.1/IC. For a continuous variable, mean ± SD was reported. For categorical variables, frequencies and percentages were reported. Chi-square test was applied to see the association between any two categorical variables. Fisher's exact test was applied in case of any particular cell frequency in the contingency table was < 5. One-way analysis of variance test was applied to compare the mean age across the contraceptive status. Pie charts as well as box-and-whisker plot were shown for the important parameters for graphical illustration. A $P > 0.05$ was considered as statistically significant.

RESULTS

Table 1 shows that out of total 200 subjects, 43 (21.5%) are currently using contraceptives, 63(31.5%) discontinued contraceptives, and 94 (47%) were nonusers. Regarding knowledge, out of 200, 26 (13%) subjects had no knowledge of any contraceptive 31 (15.5%) about one contraceptive and 143 about ≥ two contraceptives. In the nonusers group, out of 94 subjects, 26 had no knowledge, but the majority of nonusers had knowledge about one or more contraceptive (68 out of 94), i.e., 72.3%. There is a significant ($P < 0.001$) association between status and knowledge observed.

Regarding the source of knowledge, most common was media, i.e., 64.5%. Other sources of knowledge were friends (18.7%), family (12.1%), and partner (4.8%).

Table 1: Factors associated with the status of contraception use

Parameter	Status of contraception use (*n* (%))				*P* value
	Total (*n*=200)	Current user (*n*=43)	Discontinued (*n*=63)	Non-users (*n*=94)	
Knowledge of number of contraceptive					
None	26 (13.0)	0	0	26 (100.0)	<0.001
Single	31 (15.5)	10 (32.2)	9 (29.0)	12 (38.7)	
≥ two	143 (71.5)	33 (23.1)	54 (37.8)	56 (39.2)	
Source of knowledge					
Friends	31 (18.7)	8 (25.8)	11 (35.5)	12 (38.7)	0.757
Family	20 (12.1)	6 (30.0)	6 (30.0)	8 (40.0)	
Partner	8 (4.8)	0 (0.0)	4 (50.0)	4 (50.0)	
Media/others	107 (64.5)	24 (22.4)	42 (39.2)	41 (38.3)	
Accessibility					
Yes	128 (97.7)	42 (32.8)	53 (41.4)	33 (25.8)	0.017
No	3 (2.3)	0 (0.0)	0 (0.0)	3 (8.3)	
Residential area					
Urban	163 (81.5)	35 (21.5)	55 (33.7)	73 (44.8)	0.313
Rural	37 (18.5)	8 (21.6)	8 (21.6)	21 (56.7)	

Among the responders, a total of 128 (97.7%) subjects had accessibility to contraceptives which was significantly higher. In the nonusers group, 33 out of 128 (25.8%) had accessibility, whereas 3 subjects had no accessibility to any contraceptives. Subjects from urban area were higher (81.5%) as compared to the rural area Figure 1 shows the reason of discontinuation of contraceptives. A total of 63 out of 200 (31.5%) discontinued the use of contraceptives. The most common cause was child bearing (49%), followed by side effect (16%), and in 13% of cases, fear of side effect was the reason. No specific cause was found in 9% of cases.

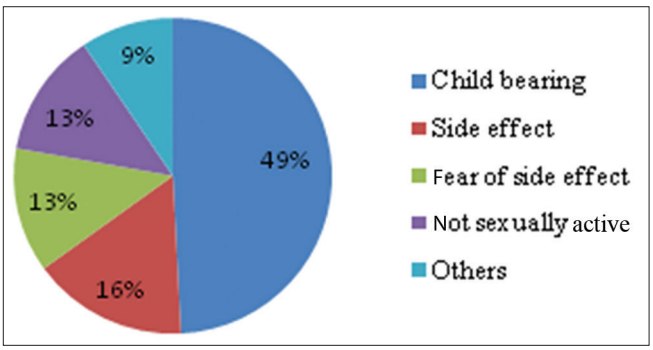

Figure 1: Reasons leading to discontinuation of contraceptive use

Figure 2 shows the reason of nonuse of contraceptives. A total of 94 out of 200 were found to be nonusers. Most common cause was fear of side effect (29%) followed by no specific reason is 26%. Lack of knowledge and child bearing was reason in 36% of cases (18% each).

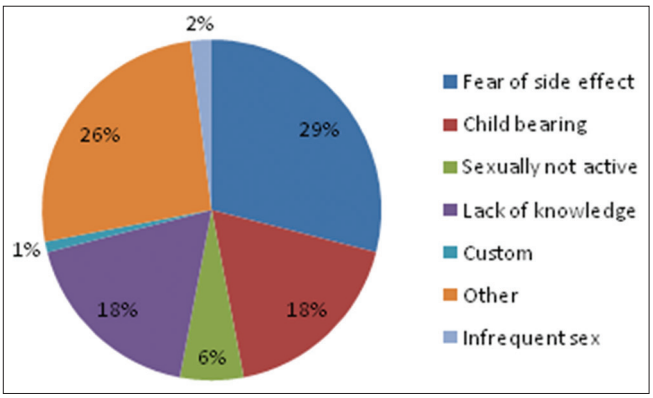

Figure 2: Reasons for nonusing any contraceptive

Figure 3 shows the relationship between age distribution and contraceptive status of female. As from the box plot, it is evident that the median in current user, discontinued, and nonuser group was 32, 32, and 29, respectively. The relationship between two parameters is not statistically significant ($P = 0.378$). The median age in nonuser group is slightly less than that in two other groups.

DISCUSSION

Contraceptives, particularly, in females determine the maternal, perinatal, and infant health. Hence, a good knowledge, attitude, and practice in family planning are essential for the society. A pre-designed questionnaire on sociodemographic variables and contraceptive methods, their current, and previous use or nonuse was documented from 200 women of KIMS Hospital, and the data were analyzed by Stata software. The "unmet need" is the gap between the women's reproductive intentions and their contraceptive behaviour. An estimated unmet need for 222 million women

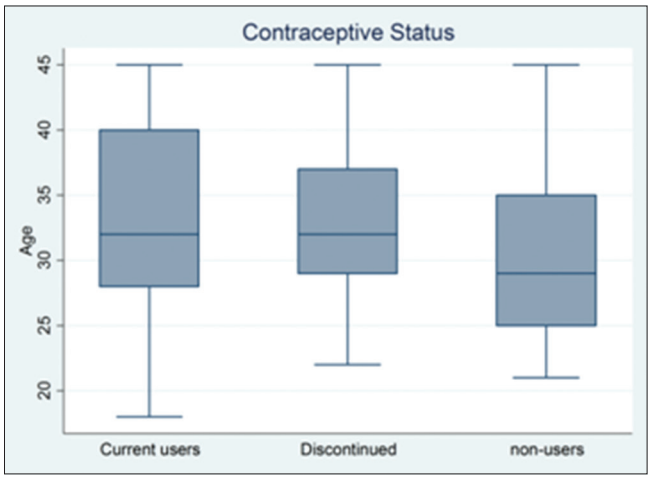

Figure 3: Relationship between age distribution and status of contraception use

had been documented in the developing world.[7] It has been a matter of discussion that reproductive and child health program should focus on individual aspiration which may increase the contraceptive prevalence.

Our study revealed that the use of medical termination of pregnancy (MTP) kit among women was 5% which appeared to be on the higher side and was a matter of great concern. The readily available MTP kit (mifepristone and misoprostol) can be procured over the counter without a prescription might encourage the users to avail this facility. In our observation, some of them were repeated users repeating frequently even for three to five times. It was documented that availing the facility had led to severe and profuse bleeding, extreme anemia, and shock requiring blood transfusion which could have been used for some other deserving cases. This caused serious health concern, such as pelvic inflammatory diseases and prone to infertility. In one of the studies, it was reported that 62.5% had incomplete abortion, and out of them, 7.5% had sepsis. There was a need of the surgical evacuation in 67.5% of such cases.[8]

13% of females had no knowledge of any contraceptive. For some of the couples, sexual activities were not a regular practice. Acceptance of condom was less in most of practices because of the absence of feel during the intercourse as stated by the subjects. For some couples, they had loss of wages during visit to the hospital for procuring the contraceptives. There was no significant difference between the urban and rural residential areas regarding their status of contraceptive use. Probably, many women of middle-class socioeconomic status might have in fact migrated from rural areas. In a developing country like ours, this occurs in many states leading to minimal differences in their contraceptive status. Bajrachrya[9] has shown the awareness was 90.8% in Nepal, whereas awareness level was 92.5% in Okezie et al. study[10] in Nigeria, and more than 75% in a study by Bhasin et al.[11] in Delhi.

This study also focussed on the reasons of discontinuation and nonuse of contraception. Among the reasons of discontinuation in (31.5% users) most common cause was child bearing (49%), followed by side effect (16%). One study by Bekele et al. showed the main cause of discontinuation to be child bearing.[1] Another study by Kaushal et al. found unavailability (30.8%) to be the most common cause.[12] On the contrary, one study by Westhoff et al. has shown that the side effects are less important reasons for discontinuation.[13] Sarah Castle and Ian Askew released a new report on "Contraceptive Discontinuation: Reasons, Challenges, and Solutions" which mentioned the median duration of the use of contraceptive was 19.7 months, and among the users, intra uterine devices was used for the longest time (40 months).[14]

Our study found fear of side effect (29%) to be the most common cause for nonusing of contraceptives in 47% of cases. The second common cause was a lack of knowledge (18%). Bajracharya found no specific cause for the most of the nonusers.[9] Another study by Kaushal et al. showed the same that no specific cause for nonuser.[12] Our study also showed that 26% of nonuser has not stated any specific reason. Most common source of information was the media (64.5%) followed by friends (18.7%). However, Mao in a study showed friends (44%) as the most common source followed by media (22%).[15] Bajracharya concluded that the most common source of information was media (60.5%).[9] Television and radio were the most common source of knowledge in 70% of cases as shown by Ghike et al.[16]

The oral contraceptives, especially, the combination formulation of estrogen and progestin not only give as high as 99% effectiveness along with non-contraceptive benefits but also provide protection against certain cancers, iron deficiency anemia, regularization of menstrual cycles, acne, hirsutism, endometriosis, and osteoporosis.[17] The beneficial effects may be emphasized in the education programs to dispel the fears of adverse effects.

Limitation of the Study

This is a hospital-based small study in the eastern part of India, and hence, the results may not be generalized for the whole country. Level of education in terms of years of educational experiences was not explored in these subjects; however, education status as educated or not educated was recorded which could not be significantly associated with the contraceptive use.

CONCLUSION

The current study showed that, out of 200 subjects, 43 (21.5%) were currently using, 63 (31.5%) discontinued contraceptives, and 94 (47%) were nonusers. The knowledge about 2 or more contraceptive methods was high, but their usage was low. In

spite of high accessibility (97.7%), nonusers of contraception were more. This proves the earler finding that usage of contraceptives is low among Indian women. 5% of women used MTP kit which appears to be high and dangerous. The reasons for not using contraceptives were child bearing (49%), followed by side effects (16%), fear of side effects (13%), and not sexually active (13%). No specific cause was found in 9% of cases. Fear of side effects (29%) was the most common cause of nonuse contraceptive. Other causes were similar to the known causes of contraceptive discontinuation. The study suggested a method to plan for women education for safe and effective contraceptives use to make the current needs fulfilled, especially the proper usage of convenient and reversible methods. Health-care personnel should counsel women to adopt contraceptive methods according to their needs, acceptability, and convenience.

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