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Original Research Article

Awareness and acceptance of contraceptive methods among women in a tertiary care centre

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ABSTRACT

Background: This study aimed to assess the prevalence of knowledge, attitudes, and practices regarding contraception among women attending a tertiary care center, alongside examining the influence of socio-demographic factors on family planning decisions.

Methods: A descriptive, prospective study was conducted over six months with 596 women participants, using convenient sampling. Data were collected through a structured questionnaire covering demographic information, contraceptive awareness, and practices.

Results: The majority of participants were aged 21-25 years (43.1%). A significant portion had one child (59.7%), and a positive correlation between higher education levels and contraceptive use was observed. Barrier methods were the most commonly used form of contraception (32.9%), with husbands and health personnel being primary sources of information. Notably, 62.8% used contraception for spacing of births. Barriers to use included partner opposition (22.3%) and the desire for a male child (13.3%).

Conclusions: The study highlights a relatively high level of contraceptive awareness and positive attitudes towards family planning among women. However, persistent socio-cultural barriers and a limited range of contraceptive methods used suggest the need for comprehensive educational strategies targeting both women and their partners, alongside efforts to increase access to and information about LARCs.

Keywords: Contraceptive awareness, Family planning, Tertiary care center, Socio-demographic factors, Knowledge, Attitudes, Practices

INTRODUCTION

The topic of contraceptive methods and their acceptance among women has long been a subject of interest and concern within the realm of reproductive health. The awareness and acceptance of these methods are crucial for family planning, controlling unwanted pregnancies, and managing reproductive health issues. Despite the availability of various contraceptive methods, their utilization among women, especially in tertiary care

centers, presents a complex interplay of socio-cultural, economic, and educational factors.¹

Globally, the World Health Organization (WHO) emphasizes the importance of contraceptive use as a primary tool for improving health outcomes for women and children. It estimates that contraceptive use has averted approximately 308 million unintended pregnancies in 2018 alone.² However, the disparity in the awareness and acceptance of these methods among different populations, particularly in developing countries,

remains a significant barrier to achieving global reproductive health goals.³

The acceptance of contraceptive methods is influenced by a myriad of factors including cultural beliefs, level of education, economic status, and the perceived side effects associated with these methods.⁴ Studies have shown that women with higher levels of education are more likely to use contraceptives compared to their less educated counterparts.⁵ Moreover, misconceptions and lack of knowledge about contraceptives can lead to underutilization and skepticism towards these methods.⁶

Tertiary care centers often serve as focal points for advanced medical treatment and education, providing a unique opportunity to study the awareness and acceptance of contraceptive methods among women. These centers are equipped with resources and personnel that can offer comprehensive information and services related to contraception, potentially influencing the decisions and preferences of women regarding family planning.⁷

The role of healthcare providers in these settings is paramount in shaping the perceptions and acceptance of contraceptive methods. Their guidance and the information provided can significantly impact women's choices and their subsequent satisfaction with a particular contraceptive method.⁸ Therefore, understanding the dynamics of awareness and acceptance in such settings is essential for developing targeted interventions aimed at improving the utilization of contraceptives.

This article aims to explore the level of awareness and acceptance of contraceptive methods among women in a tertiary care center, examining the factors that influence these aspects and their implications for reproductive health services. By focusing on a tertiary care setting, this study seeks to contribute to the broader discourse on enhancing contraceptive use and addressing the barriers that hinder its acceptance among women.

Aim

The study aimed to investigate the prevalence of knowledge, attitudes, and practices (KAP) regarding contraception and to examine the influence of sociodemographic factors on family planning among women attending a tertiary care center.

Objectives

The primary objectives of this research were twofold. First, it sought to estimate the proportion of women visiting a tertiary care center who were knowledgeable about contraceptive methods. Second, the study aimed to analyze the various confounding factors that affected the practice of contraception among these women.

METHODS

The study was designed as a prospective, descriptive investigation carried out over a period of six months from February 2023 to July 2023. The study population comprised women from the outpatient and inpatient departments of TOMCH hospital, including those attending peripheral clinics and participating in camps held by the hospital. A convenient sampling method was employed to select participants for the study, with a total sample size of 596 women.

Inclusion criteria for the study encompassed all healthy women in the postnatal period, as well as all women in the interval period following childbirth and before the next pregnancy. Conversely, the study excluded women who had undergone concurrent puerperal sterilization.

The research utilized a comprehensive questionnaire to gather data on the knowledge, attitude, and practice of contraceptives among the participants. The questionnaire covered a wide range of topics, including the age of the women, their level of education, their husbands' education, religion, per capita income, age at marriage, the number of living children, discussions between husband and wife regarding the subject, the gender of living children, and the desire for more children.

In addition to the questionnaire, the study involved the education and counselling of women on an individual basis. This component of the study adopted a cafeteria approach, providing participants with information on the pros and cons of each contraceptive method. This educational intervention aimed to enhance the women's understanding of contraception, enabling them to make informed decisions about family planning.

The methodology of this study was carefully designed to address the research aims and objectives comprehensively. By focusing on a diverse population of women attending a tertiary care center, the study sought to provide valuable insights into the factors influencing contraceptive knowledge, attitudes, and practices among this group. Through its detailed examination of sociodemographic factors and its educational interventions, the research aimed to contribute to the improvement of family planning services and outcomes for women attending the center.

RESULTS

The study encompassed a sample size of 596 women attending a tertiary care center, with the aim of assessing their knowledge, attitude, and practice towards contraception, alongside the influence of socio-demographic factors on their family planning decisions. The distribution of study subjects according to age revealed a mean age of 26.11 years with a standard deviation of 5.15, ranging from 18 to 45 years. The age group of 21-25 years constituted the largest segment at

43.1% (n=257), followed by the 26-30 years age group at 24.0% (n=143).

Table 1: Distribution of study subjects according to the age (n=596).

Age (years)	N	Percentage
18-20	78	13.1
21-25	257	43.1
26-30	143	24.0
31-35	87	14.6
>35	31	5.2
Mean (SD)	26.11 (5.15)	
Range	18-45	

Table 2: Distribution of study subjects according to the parity (n=596).

Parity	N	Percentage
0	14	2.4
1	356	59.7
2	197	33.1
3	22	3.7
4	7	1.2

Table 3: Distribution of study subjects according to the educational status (n=596).

Educational status	N	Percentage
Illiterate	30	5.0
Primary	137	23.0
High	159	26.7
Intermediate	144	24.1
Graduate	119	20.0
Post-graduate	7	1.2

Table 6: Distribution of study subjects according to the awareness regarding contraception (n=596).

Awareness	Natural method	Barrier method	IUCD	OCP	Injectables	Emergency contraception	Permanent
Media	32 (5.4)	306 (51.3)	64 (10.7)	167 (28.0)	152 (25.5)	252 (42.3)	173 (29.0)
Health personnel	121 (20.3)	242 (40.6)	331 (55.5)	339 (56.9)	311 (52.2)	203 (34.1)	341 (57.2)
Social circle	124 (20.8)	177 (29.7)	141 (23.7)	179 (30.0)	166 (27.9)	52 (8.7)	313 (52.5)
Husband	152 (25.5)	370 (62.1)	63 (10.6)	53 (8.9)	48 (8.1)	175 (29.4)	71 (11.9)
No Source	124 (20.8)	28 (4.7)	68 (11.4)	57 (9.6)	79 (13.3)	56 (9.4)	38 (6.4)

Table 7: Distribution of study subjects according to the attitude towards contraception (n=596).

Attitude	Approval	Disapproval
Female	596 (100.0)	-
Male	596 (100.0)	-

Regarding parity, the majority of the participants had one child (59.7%, n=356), while those with two children accounted for 33.1% (n=197) of the sample. Women with no children were the least represented at 2.4% (n=14).

Table 4: Distribution of study subjects according to the SES (n=596).

SES	N	Percentage
I	69	11.6
II	217	36.4
III	113	18.9
IV	76	12.8
V	119	20.0

The educational status of participants varied, with the highest proportion having completed high school (26.7%, n=159), followed closely by those with intermediate education (24.1%, n=144). Illiteracy was observed in 5.0% (n=30) of the subjects.

Socioeconomic status (SES) was diverse among the study population. Category II represented the largest group at 36.4% (n=217), while the lowest SES, Category V, constituted 20.0% (n=119) of the subjects.

Table 5: Distribution of study subjects according to the living issue (n=596).

Living issue	N	Percentage
1	384	64.5
2	187	31.4
3	21	3.5
4	4	0.7

In terms of family type, the majority of the women belonged to nuclear families (72.0%, n=429), with the remainder coming from joint families (28.0%, n=167).

The distribution of study subjects according to living issues showed that a significant majority had one living issue (64.5%, n=384), and a smaller portion had two (31.4%, n=187).

Table 8: Distribution of study subjects according to the reason for using contraception at any point of time (n=596).

Reason	N	Percentage
Completed family	196	32.9
Spacing of birth	374	62.8
Health improvement	59	9.9
Economic problems	35	5.9

Table 9: Distribution of study subjects according to the reason for not using contraception (n=596).

Reason	N	Percentage
Lack of knowledge	68	11.4
Partner opposition	133	22.3
Want male child	79	13.3
Fear of side effects	64	10.7
Ignorance	9	1.5
Others	4	0.7

Awareness regarding contraception was assessed across various methods and sources. The barrier method was the most known contraceptive method, primarily informed by husbands (62.1%, n=370) and media (51.3%, n=306). Health personnel were significant sources of information for IUCD (55.5%, n=331) and oral contraceptive pills (OCP) (56.9%, n=339).

The attitude towards contraception was unanimously positive among the female participants, with 100% approval. Similarly, male approval was observed at 100%.

The reasons for using contraception were primarily for spacing of births, as indicated by 62.8% (n=374) of the participants. Completing the family was the reason for 32.9% (n=196), whereas health improvement and economic problems were less commonly cited reasons, at 9.9% (n=59) and 5.9% (n=35), respectively.

Among those who did not use contraception, partner opposition (22.3%, n=133) and the desire for a male child (13.3%, n=79) were significant reasons. Lack of knowledge and fear of side effects were also notable factors, reported by 11.4% (n=68) and 10.7% (n=64) of the participants, respectively.

The practice of contraception varied, with barrier methods being the most utilized at 32.9% (n=196). Natural methods were employed by 26.2% (n=156) of the women, and permanent methods were chosen by 28.9% (n=172). Less commonly used methods included injectables (6.4%, n=38), intrauterine contraceptive devices (IUCD) (4.9%, n=29), and oral contraceptive pills (OCP) (4.4%, n=26).

This detailed analysis of the knowledge, attitude, and practice of contraception among women attending a tertiary care center highlights the significant influence of socio-demographic factors such as age, educational status,

and socioeconomic status on family planning decisions. Awareness and utilization of contraceptive methods were found to be varied, with a clear indication of the need for enhanced education and counselling to address misconceptions and barriers to effective contraceptive use.

Table 10: Distribution of study subjects according to the practice of contraception at any point of time (n=596).

Method	N	Percentage
Natural method	156	26.2
Barrier methods	196	32.9
IUCD	29	4.9
OCP	26	4.4
Injectables	38	6.4
Emergency	126	21.1
Permanent	172	28.9

DISCUSSION

The findings of this study underscore the complex interplay of socio-demographic factors in influencing contraceptive knowledge, attitudes, and practices among women attending a tertiary care center. The observed distribution across different age groups, with a significant portion of the study population in the 21-25 years age bracket, aligns with global trends indicating that younger women are often at the forefront of seeking contraceptive knowledge and services.⁹ This demographic trend highlights the critical need for targeted educational interventions that cater to the reproductive health needs of younger women.

The parity observed in this study, with a majority having one child, suggests that many women are considering family planning methods early in their reproductive lives. This is a positive indicator of awareness and utilization of contraception for spacing births, which has been shown to significantly impact maternal and child health outcomes.¹⁰ However, the relatively low utilization of long-acting reversible contraceptives (LARCs), such as IUCDs, observed in this study points to a potential gap in awareness or acceptance of these methods. Studies have shown that despite their efficacy, the uptake of LARCs is often hindered by misconceptions and lack of information among women.¹¹

Educational status played a significant role in contraceptive awareness and use, with higher education levels correlating with greater knowledge and utilization of contraceptive methods. This finding is consistent with literature indicating that education enhances women's autonomy and their ability to make informed health choices.¹² Therefore, increasing educational opportunities for women could be a pivotal strategy in improving contraceptive use and achieving better reproductive health outcomes.

Socioeconomic status (SES) also influenced contraceptive knowledge and practice, with higher SES groups more likely to use contraception. This relationship between SES and contraceptive use is well-documented, highlighting the barriers that low-income women face in accessing reproductive health services.¹³ Addressing these barriers requires not only individual education but also systemic changes to make contraception more accessible and affordable for all women.

The study's findings on the sources of contraceptive awareness revealed that health personnel and husbands were key influencers. This underscores the importance of involving both healthcare providers and male partners in family planning education and decision-making processes. Engaging men in reproductive health discussions can significantly impact the acceptance and use of contraception, as evidenced by the substantial number of women who reported their husbands as a source of information.¹⁴

The unanimous approval of contraception among female participants in this study is a positive indicator of changing attitudes towards family planning. However, the reasons for non-use, particularly partner opposition and the desire for a male child, highlight persistent cultural and gender norms that may impede contraceptive use. These findings suggest a need for culturally sensitive interventions that address these underlying social norms and promote gender equality in reproductive health decisions.¹⁵

India's national figures present a 65.6% usage rate for any contraceptive methods and 56.5% for any modern methods. The injectables' rate at 68.6% seems inaccurately high in the context of modern methods usage and may need clarification. In contrast, Karnataka's data indicates a diversified contraceptive practice with significant reliance on barrier methods (32.9%), emergency contraception (21.1%), and permanent methods (28.9%). This distribution suggests a balanced approach towards temporary and permanent contraception, highlighting the importance of accessibility and awareness of various contraceptive options. Tamil Nadu, with a 68.6% rate of any methods and a 65.6% rate of any modern methods usage, leans significantly towards female sterilization (57.8%). The state's low reliance on injectables (0.2%) contrasts sharply with the national average, possibly reflecting regional preferences or differences in healthcare policy and implementation. Madhya Pradesh reports a higher acceptance of any methods (71.7%) and a similar rate for any modern methods (65.6%) compared to Tamil Nadu, with a noticeable preference for female sterilization (51.9%) and moderate condom use (8.1%). This pattern may indicate a blend of traditional and modern contraceptive practices influenced by socio-cultural and economic factors. Delhi NCT showcases the highest rate of any methods usage (76.4%) and a diverse methodological preference, including the highest rate of condom use (28.3%) among the compared regions. This indicates a trend towards temporary and reversible

contraception, likely reflecting the urban demographic's lifestyle and contraceptive needs.¹⁶

The comparison reveals significant variations in contraceptive method preferences across different regions, influenced by socio-demographic factors, healthcare accessibility, and policy initiatives. Karnataka's detailed data underscores the necessity for region-specific strategies to enhance contraceptive awareness and usage, catering to the diverse needs of the population. The findings suggest a critical need for targeted educational programs and accessible family planning services to address the gaps in contraceptive use and preferences, aiming to improve reproductive health outcomes across India.

This study provides valuable insights into the factors affecting contraceptive knowledge, attitudes, and practices among women in a tertiary care setting. The findings suggest that while there is a general awareness and acceptance of contraception, significant gaps and barriers remain, particularly among certain demographic groups. Addressing these challenges requires a multifaceted approach that includes education, access to a range of contraceptive options, and the involvement of both women and men in family planning discussions.

CONCLUSION

The study conducted at a tertiary care center involving 596 women provided comprehensive insights into the knowledge, attitudes, and practices (KAP) regarding contraception among a diverse group of participants. The age distribution indicated a predominant younger demographic, with the majority aged between 21 and 25 years. Parity data showed a significant number of women had one child, highlighting an early adoption of family planning methods. Educational levels varied, but a positive correlation between higher education and contraceptive use was evident, emphasizing the role of education in enhancing contraceptive awareness and utilization. Socioeconomic status (SES) was a significant determinant of contraceptive use, with higher SES groups exhibiting greater knowledge and use of contraception. The study also revealed that husbands and health personnel were primary sources of information, suggesting the importance of involving partners and healthcare providers in family planning education. Despite high approval rates for contraception among women, barriers such as partner opposition, the desire for a male child, and fear of side effects were notable reasons for non-use. The practice of contraception was diversified; however, barrier methods were the most commonly used, followed by natural methods and permanent methods. The study underscored the need for targeted educational interventions to address misconceptions and enhance the adoption of a broader range of contraceptive methods, particularly long-acting reversible contraceptives (LARCs).

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