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Original Research Article

A community cross-sectional study to assess the awareness and perception among women regarding contraceptive methods in Gautam Budh Nagar, U.P.

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ABSTRACT

Background: Pregnancy and childbirth carry risks for both morbidity and mortality. Couples who use contraceptives to avoid pregnancy may face some health risks, but there are also important non-contraceptive health benefits. The present study aimed to assess the awareness and perception among women regarding contraceptive methods.
Methods: A community based cross-sectional study was conducted in the year 2023 and non-probability purposive sampling technique was chosen to recruit 200 the women of age between 18-28 years. A structured questionnaire was adopted to gather data. Descriptive statistics like Frequency, percentage, mean and standard deviation and inferential statistics of chi square and Karl Pearson correlation coefficient was used in the study.
Results: Among the 200 women, 39.1% are between the ages of 25 and 26, 89.6% are Hindu, 52.5% are from nuclear families, 48.5% have secondary education, 85.6% are housewives, 41% have an annual income between 10,000 and 15,000, and 45.5% have learned about contraception from the media whereas 25.7% learnt from friends. 20.5% of women scored a sufficient level of awareness. According to the perception score, 74.5% have a favourable perception. The correlation coefficient turned out to be (r)= 1.00, which shows that there was a positive relationship between level of awareness and level of perception.
Conclusions: All women of reproductive age should understand about contraception so they are better prepared to make wise and healthy decisions. Improving awareness and perception regarding the use of contraception in rural communities necessitates enhancing access to and education regarding reproductive health among adolescents.

Keywords: Awareness, Perception, Contraception, Women, Reproductive age, Community

INTRODUCTION

"Birth control is the first important step woman must take toward the goal of her freedom." — Margaret Sanger

Women, men, and couples at different stages of their lives must consider a range of criteria while deciding on the appropriate method of contraception. These elements consist of acceptability, efficacy, accessibility, and availability (including price). The voluntary informed selection of contraceptive methods is a fundamental guiding principle, and, when necessary, contraceptive counselling may have a substantial impact on the successful use of contraceptive methods.[1]

When births are separated by less than two years compared to births that are separated by two to three years, the infant mortality rate is 45% higher, and when births are separated by four or more years, it is 60% higher. For women, particularly teenage girls, contraception lowers the health risks of pregnancy.[2]

In India, several unplanned pregnancies lead to unlawful and unsafe abortions. For every legal abortion, ten to eleven illegal ones occur, putting the lives and health of the women in peril. Young women are now having more unwanted and unplanned pregnancies than ever before. Use of emergency contraception (EC) aids in the prevention of unplanned pregnancy and encourages a better way of life. In accordance with the MTP preview legislation, abortions have been permitted in India since 1971 for specific conditions. Up to 20,000 women die as a result of abortion-related issues each year. Therefore, unintended and unplanned pregnancies significantly affect the reproductive health of young adults. Early sexual activity is becoming more prevalent in both developed and developing countries. By the age of 18, 40 to 80 percent of females begin having sexual relations. They have lower levels of awareness than developed countries, though. Due to unexpected pregnancies or unsafe/illegal abortions, young women without access to education and resources commonly face major problems with their reproductive health. India is battling these difficulties, just as other countries.[3-5]

Adolescent females can be a part of the awareness campaign for informing them about the advantages of contraception and help them prevent unexpected pregnancies.[6] Reducing the tremendous unmet need for family planning, however, continues to be a major issue for nations and the international health community. Social restrictions and service delivery continue to exist, and many settings still have inadequate or non-existent services.[7]

According to the National Family Health Survey, Mizoram (19%) and Meghalaya (27%) have the most unmet family planning method needs. Most of the remaining states have unmet demands of less than 10%, with the exception of Maharashtra, Punjab, Gujarat, Assam, Jharkhand, Sikkim, Manipur, Arunachal Pradesh, Kerala, Uttar Pradesh, and Bihar, where it ranges between 10 and 15%. Delhi, Karnataka, and Telangana have the highest percentages of unmet demands (6% each), with Andhra Pradesh having the lowest number (5%).8Birth control only works when you use it correctly and consistently. Forms of birth control that are more convenient and don't require much maintenance are usually most effective. These forms include the birth control implant, intrauterine devices (IUDs) and sterilization.[9]

Giving people the freedom to choose their own birth control options not only improves health results but also advances social progress and gender equality. People are more equipped to pursue stable family life, employment, and education when they have control over their reproductive lives. Additionally, using contraception responsibly lowers the rate of unwanted births, maternal deaths, and the transmission of STDs. Thus, it is crucial to establish an atmosphere that encourages candid communication, easy access to medical treatment, and respect for individual preferences. Making the decision to use birth control is about taking control of your future with freedom, knowledge, and self-assurance.[10]

More than 40% of pregnancies worldwide are unintended leading to either an unplanned birth or unsafe abortions and maternal morbidity. India, being the most populous country, have an inherent requirement of knowing KAP of contraception among women of reproductive age to prevent unplanned pregnancies, so as to achieve optimal pregnancy outcome.[11]

A vital component of reproductive health, birth control gives people the ability to make knowledgeable decisions about their bodies, families, and futures. "Make Birth Control Your Choice" highlights the significance of individual liberty and the freedom to select the best technique for one's health needs, values, and lifestyle. Educating and motivating people, particularly young adults, to take control of their reproductive choices is still essential in a society where access to contraceptive methods and understanding of them are continuously increasing. Encouraging educated decision-making promotes equality, self-assurance, and prudent family planning in addition to physical well-being. The objective of the study was to assess the awareness and understanding of the health benefits and risks associated with contraceptive among women aged 18–28 years of selected community and to find the correlation between awareness and perception of the health benefits and risks associated with contraceptive among women aged 18–28 years of selected community. The research hypothesis of the study was to test the relationship between the level of awareness and perception regarding contraceptive.

METHODS

A quantitative research design was adopted for the present study. The study utilized a community based cross-sectional research design was used to gather data at a single point in time. It was conducted in the rural community areas of Gautam Budh Nagar district in May to July 2023. A non-probability purposive sampling technique was employed to select participants who met the inclusion criteria. A total of 200 women aged between 18 to 28 years were recruited for the study. Data were collected using a structured questionnaire. The inclusion criteria included the women who were available and were willing to consent for the study. Prior to data collection, ethical approval was obtained from the appropriate institutional ethics committee. Informed consent was also obtained from each participant after explaining the purpose and process of the study. Confidentiality and anonymity were ensured throughout the research process.

Statistical analysis

The collected data were entered in a Microsoft excel spreadsheet and analysed the data. The coded data were analysed as frequency, percentage, mean and standard deviation. The chi square was used for the association between two variables and Karl Pearson correlation coefficient was used to determine the relationship between the two dependent variables. Results were presented in the form of tables, frequencies, and percentages.

RESULTS

Total 200 women were included in the present study. Women in the age of 25-26 were 79 (39.1%.) Half of the sample i.e. 106 (52.5%) were belong to nuclear family and the minimum were from joint family.

The majority were Hindu (89.6%). 98 (48.5%) had a secondary education, 173 (85.6%) were housewives, 82 (41%) had an annual income between 10,000 and 15,000, and 92 (45.5%) get their information on contraception from the media (Table 1).

Table 2 shown that only 9% of women have inadequate awareness about contraception, compared to 70.5% who have average awareness and 20.5% who have adequate awareness, according to the level of awareness score.

Table 1: Frequency and percentage distribution of demographic variables (n=200).

S.no	Demographic variable	Frequency	Percentage
1	**Age in years**		
	18-21	27	13.4%
	22-24	48	23.8%
	25-26	79	39.1%
	27-28	46	22.8%
2	**Religion**		
	Hindu	181	89.6%
	Muslim	18	8.9%
	Christian	1	0.5%
3	**Type of family**		
	extended	8	4%
	nuclear	106	52.5%
	joint	86	42.6%
4	**Education**		
	No formal education	1	0.5%
	Primary	57	28.2%
	Secondary	98	48.5%
	Graduate	40	19.8%
	Post-graduate	4	2%
5	**Occupation**		
	Housewife	173	85.6%
	Working	27	13.4%
6	**family income**		
	5000-10000	33	16.5%
	10000-15000	82	41%
	15000-20000	55	27.5%
	20000 and above	30	15%
7	**sources of information**		
	friends	52	25.7%
	media	92	45.5%
	relatives	56	28%

Table 2: Findings Related to frequency and percentage of level of awareness on contraception (n=200).

Level of awareness	Score	Frequency	Percentage
Poor	1-10	18	9%
Average	11-20	141	70.5%
Adequate	21-30	41	20.5%

Table 3: Findings related to frequency and percentage of perception of contraception (n=200).

Perception	Score	Frequency	Percentage
Negative perception	0-50	7	3.5%
Neutral perception	51-65	44	22%
Positive perception	66-100	149	74.5%

Table 3 represent perception score and shows that only 3.5% women have Negative perception, 22% have Neutral perception and 74.5% have Positive perception about contraception.

Table 4: Correlation between awareness and perception of women regarding contraception (n=200).

Correlation	Mean	Standard deviation	r
Awareness	16.50	4.59	
Perception	70.9	9.81	1.00*

*At 0.05 level of significance.

The above Table 4 describes the correlation value was 1.00, indicating a positive link between level of awareness and perception. The mean level of awareness was 16.50 + 4.59 and the mean perception was 70.9 + 9.81.

Findings related to the association between level of awareness and demographic variable

The association between the level of awareness and demographic variable of women was more than the value of p i.e. (p>0.05) which indicates no association between the level of awareness of women with their demographic variable at 0.05 level of significance.

Hence, the null hypothesis is accepted and the research hypothesis was rejected.

Findings related to the association between the perception and demographic variable

The association between the perception and demographic variable of women was more than the value of p i.e. (p>0.05) which indicates there is no association between the perception of women with their demographic variable at 0.05 level of significance. Hence, the null hypothesis is accepted and the research hypothesis was rejected.

DISCUSSION

The present study assessed the awareness and perception regarding contraceptive use among women aged 18-28 years in a rural community of Gautam Budh Nagar district. The findings revealed that 70.5% of participants had an average level of awareness, 20.5% had adequate awareness, and only 9% had poor awareness about contraception. Furthermore, 74.5% of women exhibited a positive perception toward contraceptive use. The results also showed a strong positive correlation (r=1.00) between awareness and perception, indicating that as awareness increases, perception becomes more favourable.

These findings are consistent with the results of Rattan et al, who conducted a study on contraceptive awareness and practices among couples of reproductive ages in Punjabi urban slums. They reported that individuals with higher education levels had better contraceptive knowledge and were more likely to use contraception effectively. Similarly, in the present study, most women with secondary education demonstrated better awareness and more positive perceptions about contraception, suggesting that education plays a vital role in shaping reproductive health behaviour. However, unlike Rattan et al study, which found males to be more informed about contraception than females, the present study exclusively focused on women and revealed a satisfactory level of awareness and positive perception among them. This difference could be attributed to the gender-specific focus of the current research and the influence of community-based educational programs targeting women.[4]

Comparatively, the findings also align with those of Gasaba et al, who examined women's knowledge and attitudes regarding contraceptive use among clinic attendees. Their study highlighted that despite a generally positive attitude toward contraception, many women remained unaware of the potential health risks of not using contraceptive methods. Similarly, in the present study, although the majority of women demonstrated a favourable perception, only one-fifth possessed an adequate level of awareness, suggesting a persistent knowledge gap that could affect informed decision-making. This emphasizes the need for continued health education initiatives that not only promote the use of contraceptives but also address misconceptions and emphasize non-contraceptive health benefits.[5]

Comparable observations were reported in a study published in ScienceDirect, which noted that women's contraceptive practices were influenced not only by awareness but also by socio-cultural beliefs, accessibility of services, and partner support. The study emphasized that community-based educational initiatives and open spousal communication are critical to improving contraceptive uptake and sustained use. In agreement with these findings, the current study demonstrates that while awareness levels were moderate, perceptions were highly favourable suggesting that many women understand the value of contraception even if their detailed knowledge remains incomplete.[12]

In another related study by Gawde et al from MedPulse International Journal of Gynaecology, it was observed that although 82% of married women were aware of at least

one method of contraception, only 58% were actively using one. Lack of awareness about side effects, limited counselling, and cultural inhibitions were identified as major barriers. These insights resonate with the present findings, where women primarily relied on media for information rather than professional counselling, underscoring the importance of involving healthcare providers in contraceptive education programmes.[13]

Additionally, the present findings reveal no significant association between awareness or perception and socio-demographic variables such as age, income, or family type. This is in contrast to Rattan et al, who reported a significant association between education level and contraceptive use.[4]

The lack of association in the current study may be due to the homogeneity of the sample, as most participants belonged to similar socio-economic backgrounds and were housewives.

The results collectively suggest that while awareness and perception levels among young women are improving, gaps in comprehensive understanding persist. Strengthening communication strategies through mass media which was the major source of information for 45.5% of participants could further enhance knowledge dissemination.[7] Integrating community-based counselling and adolescent reproductive health programs can also improve awareness and promote responsible contraceptive use.

Limitation

The study sample was restricted to women aged 18-28 years, which may not represent the knowledge and attitudes of women in other age groups or of men who also play a role in family planning decisions. The study was conducted within a specific community, limiting the generalizability of the findings to other regions or cultural settings.

CONCLUSION

The study revealed that the majority of women had an average level of awareness and a favourable perception toward contraceptive use. This indicates that while most of the women know the importance of contraception, there remains a need to strengthen comprehensive knowledge about its health benefits and potential risks. The positive relationship between awareness and perception suggests that improving education and access to accurate information can significantly enhance women's attitudes and decision-making regarding contraceptive methods. To further promote reproductive health, community-based awareness programmes should be strengthened, especially targeting young and adolescent women. Encouraging, and utilising mass media can help increase knowledge, and empower women to make informed choices about their reproductive health and family planning.

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