



A descriptive study to assess the knowledge and attitude of birth control implant among eligible couple at rural areas Bangalore, Karnataka

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ARTICLE INFO ABSTRACT

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India is still among the overpopulated countries of the world. Uncontrolled population growth is the main hurdle to the positive development of the country. A descriptive study was conducted to assess the knowledge and attitude regarding birth control implants among eligible couples in specific rural areas of Bangalore. Birth control implants are an effective method of family planning, but their use is low in rural areas due to lack of awareness. A quantitative approach was used to conduct this study. A non-experimental descriptive research design was adopted. A non-probability convenience sampling technique has been used to choose eligible couples. A self-structured knowledge and attitude questionnaire was used to gather data, and differential inferential statistics were used for analysis. The results indicated that most eligible couples have a reasonable level of understanding about birth control implants, with 18 (45%) and 36 (90%) having a positive attitude. The study emphasizes the necessity of health education to raise eligible couples' knowledge about birth control implants in remote locations.

INTRODUCTION

India was the first country in the world to formulate the national family planning programme in the year 1952 with the objective of "reducing the birth rate to the extent necessary to stabilize the population at a level consistent with requirement of national economy."^[2] Though there are many methods of contraception available, many women are still not willing to adopt them due to social factors. A lot of effort has been made by National family welfare programme but still a lot more needs to be done as far as the awareness is concerned.^[1] Family planning is a voluntary and conscious effort made by the married couple to limit or space the number of children they have through the use of contraceptive methods. Family planning not only deals with small family norms but also promotes and protect the reproductive health of the mother by avoiding undesired pregnancies and abortions, preventing sexually transmitted diseases, and improving the quality of life of mother, foetus, and family.^[3]

NEED OF THE STUDY

In India, family planning has been adopted as our national policy and abundant money is being spent on it. Yet achieving a target is big challenge. India's population is increasing fast in comparison to its dwindling and depleting resources. This rapid population growth has resulted in a very high pressure on resources of food, environment, housing, clothing, education, and poverty alleviation.^[5] According to the NFHS-5(National Family Health Survey) report for the year 2019-21, the current use of any family planning method by married women in India aged 15-49 years was 66.7%, while the current use of any family planning in Rajasthan was found to be 72.3% with an increase of 12.6% from the reported data of 59.7% in NFHS-4. The birth interval is less than 24 months in 27% of non-first-order births (NFHS-4). Female sterilisation accounts for 37.9% of family planning (FP) technique adoption in NFHS-5. With diverse variability and urban-rural divide in Rajasthan, the unmet need of contraception varies from 4.2% to 11.2% in different regions of Rajasthan, so it needs to be studied

and addressed through appropriate policy and intervention.^[6]

Young adults exhibit varying levels of knowledge and attitudes toward contraceptive devices. While many have a positive attitude, misconceptions and barriers persist. Educational programs and awareness campaigns are essential to improve knowledge and promote positive attitudes toward contraceptive use. Due to all of the foregoing, the researcher acquired a genuine interest in the subject and was persuaded that a study was needed to assess the knowledge and attitude regarding contraceptive devices among young adults.^[7]

OBJECTIVES

- 1 To assess the level of knowledge regarding birth control implants among eligible couples in selected rural areas of Bangalore.
- 2 To assess the attitude of eligible couples towards birth control implants in selected rural areas of Bangalore.
- 3 To find the association between the level of knowledge regarding birth implants among eligible couples with their selected socio demographic variables.
- 4 To find the association between the attitude regarding birth implants among eligible couples with their selected socio demographic variables.

ASSUMPTIONS

- The eligible couples in rural Bangalore hesitate to use birth implants because they believe the device will break, move, or cause pain during heavy physical work.

- Many couples prefer "visible" or "permanent" methods (like the copper-T or tubectomy) because they feel that's proven more over time.

HYPOTHESIS

- H1 – There will be significance association between the level of knowledge of the eligible couple with their social demographic variables.

MATERIALS AND METHODS

The data was collected among eligible couples at selected rural area, Bangalore.

Research approach: A Quantitative Approach was adopted for the study to assess the knowledge and attitude regarding birth control implants among eligible couples in selected rural area, Bangalore.

Research Design: Non-Experimental Descriptive Design was chosen for the study.

Research Setting: The study was conducted at selected rural area Bangalore.

Target population: The target population comprised of eligible couples among selected rural population, Bangalore.

Sampling technique: on-Probability convenience sampling technique was used for the selection of samples

Sample size: The sample size is 40 which consisted of females.

Selection and development of tool:

- 1 Section A: Demographic Data
- 2 Section B: Questionnaire to assess the knowledge
- 3 Section C: Questionnaire to assess the attitude.

Plan for data analysis:

*The data was analysed using differential inferential statistics.

SECTION 1: Distribution of the eligible couples according to their socio – demographic variables

Table 1: Frequency and percentage distribution of the eligible couples according to their socio-demographic variables (N = 40)

Sl No.	Variables	Frequency	Percent (%)
1	Age		
	21-30	15	37.50%
	31-40	19	47.5%
	41-50	6	15%
2	Educational Qualification		
	Educated	33	82.5%
	Uneducated	7	17.5%
3	Occupation		
	Private	10	25%
	Self-Employment	8	20%
	Home Maker	22	55%
4	No. Of Children		
	No Children	5	12.5%
	One	6	15%
	Two	25	60%

	Three	4	10%
	Five	1	2.5%
5	Previous exposure to knowledge About Birth Implants		
	Yes	11	27.5%
	No	29	72.5%

The above table summarizes the socio-demographic characteristics of the study participants (n = 40). Most participants were educated (82.5%) with over half of the respondents were home makers (55%),. Regarding parity, 60% had two children, whereas smaller proportions had no children (15%), 72.5% of sample had no previous exposure on information regarding Birth Implant.

SECTION 2: Knowledge scores regarding birth control implants among eligible couples.

Category Score	Frequency	Percent
Adequate knowledge (7 -10)	6	15%
Moderate knowledge (4-7)	18	45%
Inadequate knowledge (1-3)	16	40%

The knowledge of score ranged from a minimum of 1 to maximum of 10

The findings of table 2 reveal that 45% of the participants had moderate knowledge regarding birth control implants, while 40% demonstrated inadequate knowledge.

SECTION 3 :Attitude scores regarding birth control implants among eligible couples .

Category Score	Frequency	Percent
Positive (21 To 30)	36	90%
Neutral(11 To 20)	4	10%
Negative(1 To 10)	0	0

The scores of attitude ranged from a minimum of 1 to maximum of 30.

Table 3 represents the distribution of scores according to the attitude of couple towards birth control implants. The majority of responses were classified as positive (36; 90%), followed by a small proportion of neutral responses (4; 10%). No negative responses were observed, indicating an overall favourable outcome.

SECTION 4: Association between the level of knowledge regarding birth control implants among eligible with their selected socio demographic variables (N=40)

Sl No.	Variables	Adequate	Moderate	Inadequate	Chi Square	DF	P Value	Significance
1	Age							
	21-30	3	8	4				
	31-40	3	6	10	4.267	4	0.371	NS
	41-50	0	4	2				
2	Education							
	Educated	6	16	11	3.228	2	0.1991	NS
	Uneducated	0	2	5				
3	Occupation							
	Private	0	10	0				
	Self Employment	1	2	5	18.735	4	0.00088	Significant
	Home Maker	5	6	11				
4	No.Of Children							
	No Children	3	4	0				
	One	0	4	1	11.087	6	0.0858	NS
	Two	3	8	13				
	Three	0	2	2				

The result in table no.5 revealed no significant association between knowledge and most of demographic variables (p> 0.05). Only the occupational status showed significant association with knowledge scores.

SECTION 5: Association of level of attitude regarding birth control implants among eligible with their selected socio demographic variables (N=40)

Sl No.	Variables	Positive	Neutral	Negative	Chi Square	Df	P Value	Significance
1	Age							
	21-30	14	1	0				
	31-40	16	3	0	0.592	4	0.964	NS
	41-50	5	1	0				
3	Education							
	Educated	29	4	0	0.0524	1	0.8189	NS
	Uneducated	6	1	0				
4	Occupation							
	Private	10	1	0				
	Self Employment	7	1	0	0.1397	1	0.7086	NS
	Home Maker	19	3	0				
5	No. of Children							
	No Children	5	0	0				
	One	4	2	0				
	Two	22	2	0	2.2286	4	0.6938	NS
	Three	3	1	0				
	Five	1	0	0				

The result in table 6 reveals no significant association between attitude scores and demographic variables.

DISCUSSION

The study demonstrates a large disparity in attitudes and real knowledge about birth control implants among eligible couples in rural Bangalore. While the vast majority of participants (90%) had a positive attitude toward these implants, their technical comprehension was mostly lacking. Only 15% of respondents had "adequate knowledge," with the other 85% falling into the moderate or inadequate categories. This gap implies that, while couples are open to long-acting reversible contraception, they lack the particular information needed to make informed decisions, most likely due to restricted access to health education in remote areas. Interestingly, the socio-demographic study showed that a majority of variables—such as age, marital status, and education—had no statistically significant relationship with knowledge levels. However, occupation was a significant exception, showing a significant association ($p = 0.00088$). This indicates that a person's professional environment or social circles associated with their work may play an important role in information transmission than formal schooling alone. Furthermore, despite 82.5% of participants being "educated," many lacked specific knowledge of birth control implants, demonstrating that general literacy does not always correlate to health literacy with modern family planning methods.

RECOMMENDATIONS

Based on the results of this descriptive study, the following recommendations are proposed to improve the uptake and understanding of birth control implants:

- The implementation of structured teaching initiatives in rural areas is critical. These should concentrate on the mechanism, benefits, and duration of birth control implants in order to advance couples from "moderate" to "adequate" knowledge levels.
- Given the significant association between occupation and knowledge levels, family planning awareness efforts should be integrated into multiple work sectors (private and self-employment) in order to reach a broader demographic.
- Nurses and community health workers should be further trained to serve as primary educators, as they are key in bridging the gap between clinical availability and community awareness.

CONCLUSION

The current descriptive analysis suggests that the study participants' knowledge and attitudes toward birth-control implants vary. Although some individuals were informed and favourable about birth-control implants, many demonstrated insufficient understanding and uncertainty due to misconceptions, fear of side effects, and a lack of correct information. The findings indicate the urgent need

for good health education and Counselling programs to improve knowledge and promote a positive attitude toward birth-control implants. Improving knowledge among healthcare professionals can assist to eliminate confusion and improve acceptance of this safe and efficient contraception approach. To summarize, implants are well-Implants. Education, occupation and various other factors affect the knowledge and attitude regarding contraception in rural areas

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accepted among people who are aware. However, awareness is quite low. As a result, people-clients' understanding about contraception, particularly implants, must be strengthened in order to improve their general attitude and practice of contraceptive

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