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# Assessment of Knowledge and Attitude Regarding Sterilization

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## Author's contribution

The sole author designed, analyzed, interpreted and prepared the manuscript.

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## ABSTRACT

The purpose of the present study was to investigate about the knowledge and attitude of women residing in the rural area regarding sterilization. This study deals with the analysis and interpretation of the data collected from 100 women attending selected rural antenatal clinic to assess knowledge and attitude towards sterilization. Majority of the rural pregnant women had good knowledge about sterilization. Common method chosen was female sterilization. None adopted male sterilization. Reasons for not using contraception were desire to have child, desire for boys, worried about side effect, opposition from family members, felt pregnancy was naturally spaced, no specific reasons, couldn't avail contraceptive facilities, inconvenient to use. Effort was made to identify reasons for wide gap between knowledge and attitude of contraception. All women knew at least one method of contraception but 48% were using some sort of contraception. Most known method was female sterilization, least known were injectables and male sterilization. Educational and motivational activities from doctors and health workers is needed to promote the use of contraception.

*Keywords: Knowledge; attitude; pregnant women; sterilization; tubectomy; vasectomy.*

## 1. INTRODUCTION

India is the second most populous country in the world, next to China, whereas 7<sup>th</sup> in land area. India's population has been steadily increasing

since 1921. India's population numbered 238 million in 1901 doubles in 60 years to 439 million in 1961. It has doubled again, after 30 years to reach 846 million by 1991. It crossed 1 billion on 11<sup>th</sup> may 2000 and is projected to reach 1.53

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billion at 2050. India's population is currently increasing at the rate of 16 million each year. India launched a nationwide family planning programme in 1952. During 3<sup>rd</sup> five year plan (1961-1966), During 1997, the new government rules out all forms of compulsions and renamed the Family Planning programme as Family Welfare Programme with the objective of improving the quality of life of the people by adopting small family norm by stabilizing the country's population to 150 crore by 2050 AD [1]. According to the major focus of NRHM in the year 2005 and RCH in the new millennium, nations are judged by the wellbeing of their people, by levels of health, nutrition, and education, by the civil and political liberties enjoyed by their citizens. Small family norm was promoted to achieve replacement level of Total Fertility Rate 2:1 [1]. Voluntary acceptance of small family norm is the objective of family planning in India. In China, one child family has been accepted as the compulsory norm, and as a result the growth shown by their demographic targets deserves a honourable mention [2]. Family planning programmes campaign is currently based on the terms of —two child family norms, with a view to reach the long-term demographic goal of NRR=1.

**Problem statement:** A study on knowledge and attitude towards sterilization among women attending selected rural antenatal clinic of 24-parganas (North) District, West Bengal.

**Objectives of the study:** 1. To identify the knowledge of sterilization among women attending rural antenatal clinic. 2. To measure attitude on sterilization of rural women on sterilization. 3. To find out the relationship between knowledge and attitude of rural women regarding sterilization.

## 2. REVIEW OF LITERATURE

*Section A:* Studies related to population explosion and its related problem Bernt L, Tadesse A and Bjarne B. (2007) conducted a study on Population growth, fertility, mortality and migration in drought prone areas in Ethiopia to assess the population dynamics of drought-prone communities. They investigated 605 households in the pastoralist Boran community of Dubluk and in the agricultural community of Elka, both located in southern Ethiopia. The age and sex composition of the population as well as records of births, deaths and patterns of migration were observed for 2 consecutive years. Repeated

surveys of the same households revealed much higher rates for deaths and births than did cross-sectional surveys with a one year recall period. Indirect mortality estimates showed that the under 5 years mortality rates (per 1000 births) were 135 in Dubluk and 219 in Elka [3].

*Section B:* Review of literature related to knowledge and attitude regarding sterilization Gity O, Mahbobeh A, Shadi G, Alireza A. B. (2005) conducted a study on Comparison of knowledge, attitude and other related factors to sterilization between sterilization method users and contraceptive methods users in Hamedan city. Among the couples, who selected sterilization, 52.3% had a poor knowledge and 78.5% had a positive attitude. Thirty percent of subjects were aware of the rate of reversibility of fertility and 17.5% were aware of the duration of contraception use after vasectomy. Among the eligible couples for sterilization who were using other contraceptive methods, 50.8% had a weak knowledge and 49.3% had neutral attitude [4].

### 2.1 Operational Definitions

- Knowledge: In this study it referred to the correct responses of the women on sterilization as measured by Structured Interview Schedule.
- Attitude: In this study it referred to the expression of feeling of women on sterilization as measured by an Attitude Assessment scale.
- Rural antenatal clinic: In this study Naihati State General Hospital (PP Unit) was taken as in state general hospital not only urban mother has come, many referred mother from various BPHC and rural antenatal mother has come.
- Women: In this study it referred to the rural pregnant women.

## 3. METHODOLOGY

Methodology directs us the most possible way to get appropriate answer to research question. The research methodology includes the strategies to be used to collect and analyze the data to accomplish the research objectives.

In this study, methodology includes research approach, research design, study setting, population, sampling technique, the development of tools, the data collection procedure and the plan of data analysis and interpretation.

**Research approach:** In the present non-experimental survey approach was selected to accomplish the objects as it was considered most appropriate approach to assess the knowledge and attitude without any intervention.

**Research Design:** For the present study descriptive survey design was adopted on the bases of study objectives. Research approach and design of the present study had been presented schematically in Fig. 2.

### 3.1 Variables under Study

**Research variable:** Knowledge and attitude of rural women on sterilization.

**Demographic variables:** Age, religion, education of women and husband, number of living children, use of FP method, income of the family, occupation of husband and wife, source of information.

**Setting of the study:** The setting for the present study was the PP unit of Naihati state general hospital, 24parganas north district.

### 3.2 Rational for Selecting the Setting were

- Availability of the subjects as many referred mothers had come from various BPHC like Nanna, Sabdalpur, Amdanga, Bandipur, Habra-11, Reckjoani, Maslandapur, Habra-1, Bauganchi BPHC etc.
- Feasibility of conducting the study.
- Administrative approval.
- Staff supports.

**Study population:** In the present study, the population was pregnant women attending rural antenatal clinic.

**Study sample:** In this study the women attending rural antenatal clinics, i.e. PP unit of Naihati state general hospital north 24parganas district from 29th December 2014 to 17th January 2015.

**Sample size:** Sample size for pilot study was 10 pregnant women, and the sample size for final study was 100.

### 3.3 Inclusion Criteria

- Rural women attending antenatal clinics.

- Rural women willing to participate in the study.
- Rural women who can understand Bengali.

### 3.4 Exclusion Criteria

- Rural women, who was not willing to participate in the study.
- Rural women who can't understand Bengali.

### 3.4 Sampling Technique

In the present study, nonprobability convenience sampling technique had been used.

**Research Design:** For the present study descriptive survey design was adopted on the basis of study objectives. Tools have been used

- 1) Knowledge of women regarding sterilization.
- 2) Attitude of women towards sterilization.

- **Variables under study:** Knowledge and attitude of rural women on sterilization.

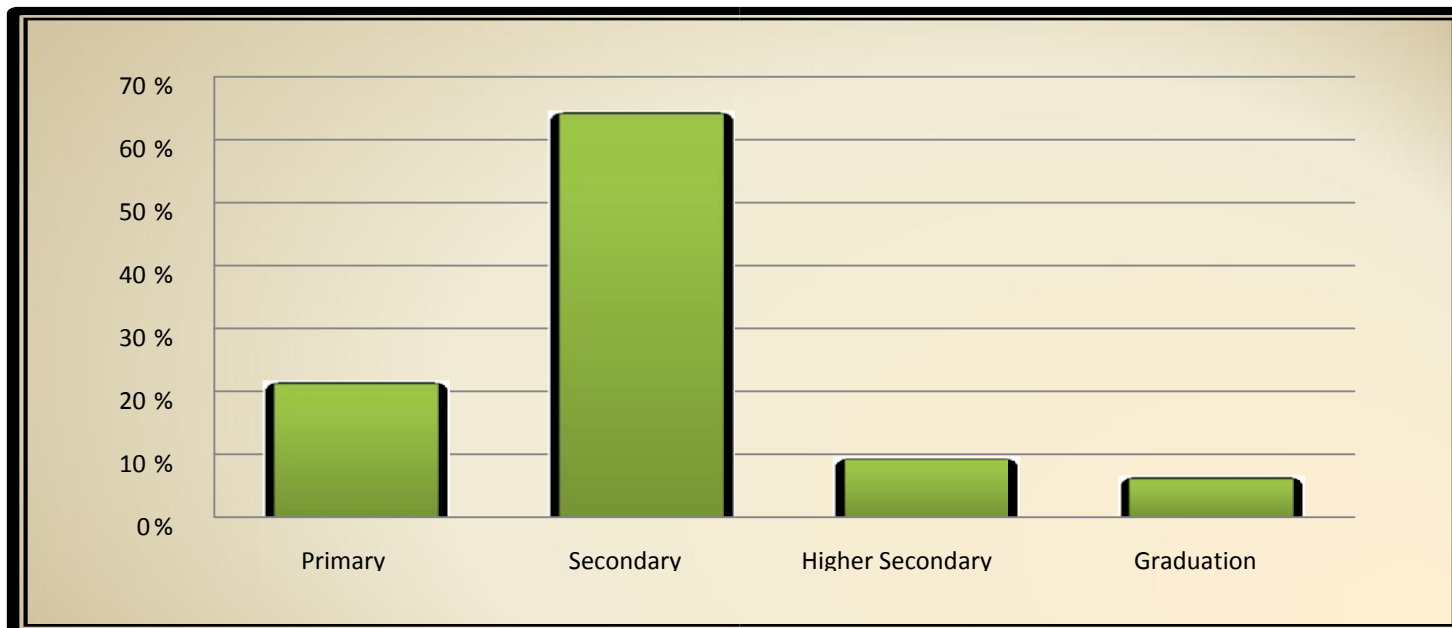
- **Demographic variables:** Age, religion, education of women and husband, number of living children, use of FP method, income of the family, occupation of husband and wife, source of information. Study population: In the present study, the population was pregnant women attending rural antenatal clinic.

**Analysis and Interpretation of Data:** Demographic variables like husband education has been shown in bar diagram

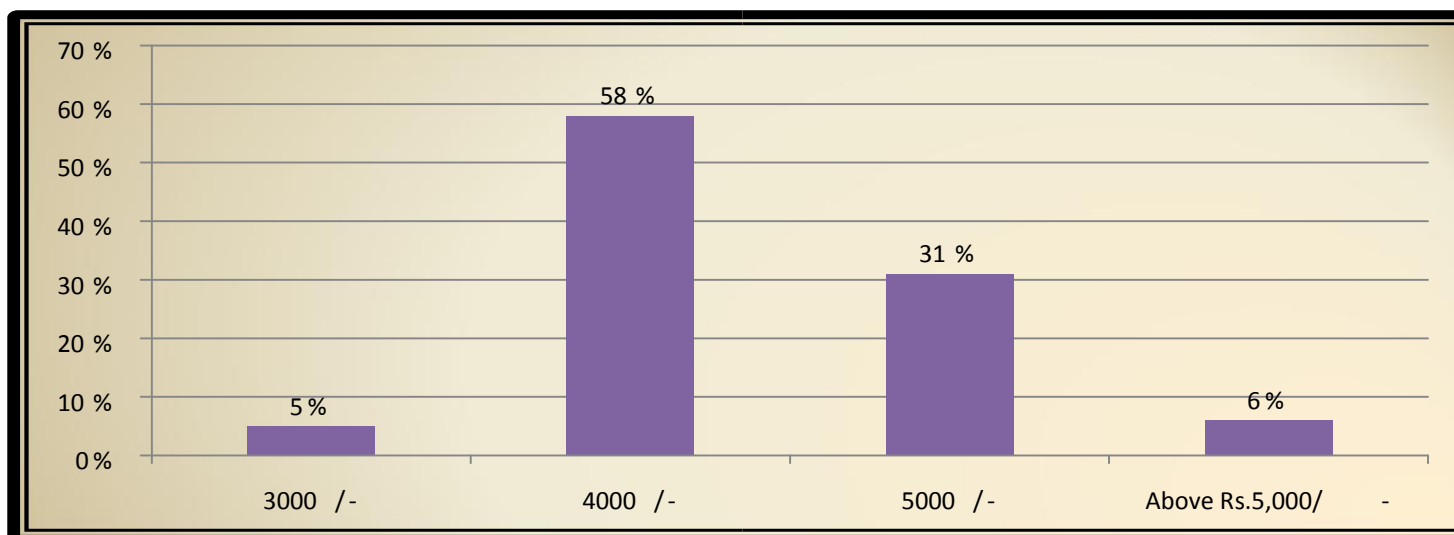
Data presented in Fig. 2 indicated that monthly family income of more than half (58%) of the women was 4000 and it was 5000 among 31% of the women.

## 4. DISCUSSION

Findings related to the knowledge of women on sterilization Majority (56%) of the rural women had good knowledge and 44% had moderate knowledge on sterilization The women possessed highest knowledge in the area of concept of sterilization (mean percentage 75%)



**Fig. 1. Bar diagram showing percentage distribution of husbands according to their education**



**Fig. 2. Bar diagram showing percentage distribution of women according to their monthly family income**

**Table 1. Frequency and percentage distribution of the women according to their knowledge score**

Category	Range of knowledge score	Frequency	Percentage
Poor	0-4 (<44%)	Nil	--
Moderate	5-8 (44-55%)	44	44
Good	9-12 (>55%)	56	56

Data presented in table 1 showed that more than half (58%) of the women participated in the present study had good knowledge on sterilization and remaining 44% women possessed moderate knowledge on the subject

**Table 2. Mean, median and standard deviation of attitude score on sterilization**

Variable	Range of possible score		Range of obtained score		
	score	score	Mean	Median	SD
Attitude	9-36	9-27	23.26	23	0.83

Data presented in table 2 indicated that attitude scores of the women ranged between 9 and 27 with a mean of 23.26, median 23 and SD 0.83

**Table 3. Correlation coefficient and its significance between knowledge score and attitude score n=100**

Variable	Mean	Median	S.D.	'r' t
Knowledge	8.83	9	1.20	0.10 0.99
Attitude	23.26	23	0.83	

t(98) df=2, P>0.05 Data presented in table 3 depicted that the correlation coefficient computed between knowledge and attitude score of the women was not statistically significant as evident from its corresponding t-value. So, it could be concluded from the findings that the attitude of the women of the present study towards sterilization was not dependent on their knowledge level

followed by staying in hospital (66.33%) and components of sterilization (66.25%). The knowledge scores of the women ranged between 5 and 12, the mean being 8.83, median 9 with a SD of 1.20. Findings related to attitude of women on sterilization: Majority of rural women (89%) had good attitude and (11%) moderate attitude regarding sterilization. Attitude scores of the women ranged between 9 and 27 with a mean of 23.26, median 23 and SD 0.83. No statistically significant correlation was observed between knowledge and attitude of the women regarding sterilization [t(98)df=2, p>0.05] Discussion related to other studies On the basis of findings and objectives of the present study a brief discussion was made as the following: The findings of the present study briefly indicated that the majority (56%) pregnant women had good knowledge and (44%) had moderate knowledge regarding sterilization. The majority of rural pregnant women (89%) had good attitude and 11% had moderate attitude regarding sterilization. Maximum number of women was in between 19-28 years of age group. 75% of women had secondary education. 100% of the women got information regarding sterilization from health worker. A study carried out by Ehsanpour S, Ifard M, Shahidi S, and Nekouyi N. S. [5] showed that Mean score of

Attitude regarding different contraceptive methods in the group who were users of the same method was above the users of all the methods; however, total attitude score toward the contraceptive methods was approximately similar to each other in all the groups and there was no significant difference among the different groups. The highest frequency of the attitude scores about tubectomy (54.4%) was associated with the women with semi-desirable attitude, and mean scores of tubectomy method was higher than other methods (condom and withdrawal) and was lower in comparison with vasectomy and IUD. The highest frequency of the attitude scores of 'Vasectomy' (61.6%) was associated with the men with semi-desirable attitude and mean scores of vasectomy method was higher than other methods (pill, IUD and tubectomy). The findings of this study showed that attitude is an important factor in choosing the contraceptive methods; therefore, this issue should to be taken into account by the family planning planners and consultants.

## 5. CONCLUSION

Majority (56%) of the rural pregnant women had good knowledge about sterilization. Almost all rural pregnant women had 89% good attitude. It

was concluded that secondary educational qualification of women had good impact on both knowledge and attitude regarding sterilization. There was positive impact of attitude regarding sterilization. Vasectomy is also a permanent method of sterilization. Therefore, if male partner of the couple should come forward and adopt this method for the benefit of the family as it has more advantages than tubectomy.

Recommendation: A similar study can be replicated on a large sample thereby findings can be generalized for a large population. A study can be conducted regarding practice of that population about vasectomy also. An interventional study may be conducted to investigate the effect of educational programme on knowledge and attitude regarding sterilization. A study can be conducted on quality of life among acceptors of permanent Sterilization.

### **ETHICAL APPROVAL**

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

### **CONSENT**

As per international standard or university standard, patients' written consent has been collected and preserved by the author(s).

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### COMPETING INTERESTS

Author has declared that no competing interests exist.

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