

Original Article

DEMOGRAPHIC EVALUATION OF STERILIZATION OPERATION AT NAIHATI STATE GENERAL HOSPITAL

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ABSTRACT

Objective: Sterilization operation, being one of the popular methods of population control is increasingly performed in Naihati State General Hospital. The purpose of this study is to highlight the demographic evaluation of sterilization cases at this institution

Methods: This study was undertaken at Naihati State General Hospital, Nadia, W.B. from January 2010 to December 2018. A total of 1625 cases were reported to have undergone sterilization operation. Interval sterilization in the form of laparoscopy (48%) and mini-laparotomy (23%) were found to be more acceptable than postpartum (9.6%) sterilization cases.

Most of the women 67.0% were in the age group of 25-34 years with parity of 2 to 3 constituting 74.5% and 84.2% of cases. About 48.6% patients belonged to lower income group and 35.6% middle income group respectively.

86.8 % were from Hindu community and 13.2 % were from Muslim community. Educational status showed that 44.2% patients were illiterate, 30.2% educated up to class VI, 21% up to Class VIII and high school level 4.6% respectively.

It appeared from this study that acceptability of sterilization operation at Naihati State General Hospital were found to be better in spite of low socio-economic status. It goes without saying that better understanding and acceptance of family planning programme by the rural population of Naihati. However socio-economic status of the families of rural population have to be improved further to reach higher target of sterilization operation cases and acceptance of other forms of spacing contraceptives.

Keywords: sterilization, population, demography

INTRODUCTION

Permanent sterilization is a preferred method of contraception worldwide. In spite of

popularization of temporary methods, it is used by 2/3rd of married women using any contraception. It has a low incidence of complications and failure rate and is cost-

effective. Various socio-demographic factors play a role in acceptability of this method. It has an important role in controlling the total fertility rate.

It is being increasingly performed in health centre. The purpose of this study to highlight the demographic evaluation of sterilization operation cases at Naihati State General Hospital.

MATERIALS NEED METHODS

This study was undertaken at Naihati hospital of Nadia district of West Bengal from the year January 2010 to December 2018.

The entire patient who will undergo sterilization operation were critically evaluated and screened to find out age, number of living children, community, education level, family income and any menstrual irregularity in addition to other clinical findings.

RESULTS

It appeared from the table -I that total population of Naihati block according to 2011 census was Two lakh and twenty-five thousand.

TABLE-I DEMOGRAPHIC DISTRIBUTION

A. TOTAL POPULATION OF NAIHATI (2011 census)		2, 25,000
B. FAMILY PLANNING PROGRAMME (2010-18)	Vasectomy	46
	Tubectomy	6378
	I.U.C.D	2060
	Oral Tablets	7000
C. STERILIZATION OPERATION (2017-18)	---	1625

During 2010 to 2018 (8 YEARS), 6378 cases of tubectomy and 7000 cases of oral contraceptives were reported and were found to be higher acceptance as compared to 2060 cases of I.U.C.D. and 46 cases of vasectomy. That is because of better understanding and acceptance of the former methods. A total of 1625 cases of sterilization operation in the form of tubectomy were reported during January 2017 to December 2018.

TABLE - II TYPES OF STERILIZATION OPERATION

PROCEDURE	NUMBER	PERCENTAGE
1. INTERVAL STERILIZATION		
a) LAPAROSCOPY	780	48%
b) MINI LAPAROTOMY	375	23%
2. POST PARTUM STERILIZATION		
3. ALONG WITH HYSTEROTOMY	156	9.6%
	314	19.4%

Out of total 1625 operation cases- (Table - II) laparoscopic sterilization (48%) were found to be higher response as compared to mini laparotomy (23%) because of easy procedure, short stay and minimal complications. On the other hand, most of the women who preferred to undergo hysterotomy and ligation (19.4%) than that of Post-partum sterilization (9.6%) because of socio-economic problem.

TABLE - III AGE GROUP

YEARS	NUMBER	PERCENTAGE
20-24	392	24.1%
25-29	678	41.7%
30-34	423	26.1%
35-39	132	8.1%

It appeared from Table III that most of the women (67.8%) who come from sterilization operation were in the age group of 25-34 yrs. Although 24.1 percent cases had undergone operation at the group of 20-24 years as compared to 8.1 percent of cases were of 35-39 age group; Indicating the acceptance of this procedure.

TABLE IV-NUMBER OF LIVING CHILDREN

LIVING CHILDREN	NUMBER	PERCENTAGE
2	425	26.1%
3	787	48.4%
4	312	19.2%
5 & above	101	6.3%

It is interesting to observe that (Table IV) 48.4 percent of cases of sterilization operation were having 3 living children as compared to 2 (26.1%) and 4 (19.2%) living children respectively. Only 6.3 percent of cases had more than 5 and living children signified that most of women, who came

to this center were of lower parity which may be due to poverty and other socio-economic factors.

TABLE V - INCOME GROUP

INCOME GROUP	NUMBER	PERCENTAGE
LOWER	790	48.6
MIDDLE	580	35.6
UPPER	255	15.8

Economic status is very important reason for accepting the sterilization operation as because it is seen in the Table V that 48.6 percent of cases were from lower income group as compared to middle (35.6%) and upper (15.8%) income group respectively.

TABLE-VI-COMMUNITY

COMMUNITY	NUMBER	PERCENTAGE
HINDU	1411	86.8%
MUSLIM	214	13.2%

Since about 90 percent of total population in Naihati were dominated by Hindu. Therefore, it appeared from the Table VI that 86.8 percent cases were from Hindu Community. But there is still very good response from Muslim Community (13.2%) also indicating that region is nothing to do with the acceptance sterilization operation at this center.

TABLE VII - EDUCATION LEVEL

TYPES OF LITERACY	NUMBER	PERCENTAGE
Illiterate	718	44.2%
Up to class VI	491	30.2%
Up to class VIII	342	21%
High school or higher secondary Level		

It appeared from Table VII that 44.2 percent of cases were illiterate as compared to 30.2 percent up to class VI, 21 percent of cases up to class VIII and 4.6 percent cases up to higher secondary or high school level indicating that better understanding of Family Planning Programme by the couples even though their economic status is poor.

DISCUSSION

This study has shown that there is a good response for accepting sterilization operation at Naihati State General Hospital in spite of low socio-economic status. There are multiple factors contributing to the same.

Most of the women (48%) preferred to undergo laparoscopic sterilization because of easy procedure, shorter duration of hospital stay and minimal complication. Although interval sterilization in the form of mini laparotomy were seen in 23 percent cases. Overall interval sterilization in the form of laparoscopy and mini-laparotomy (71%) were found to be better acceptable than that for other procedures (29%). Female sterilization acceptance ranged between 71.6% to 91.6% and male sterilization between 8.4%-28.4% in a similar study by AFMC, Pune.¹

On the other hand, it appeared that 19.4 percent of cases had undergone hysterotomy & ligation as compared to post-partum sterilization (9.6%) cases indicating that low socio-economic factor or failed contraception might have some impact for accepting hysterotomy and ligation procedure. The implication of lesser number of vasectomy cases may be stigmas arising out of economic issues, cultural background, economic and educational status. Vasectomy acceptance is limited by the scarcity of skilled vasectomy providers and by the fact that men and women hold many misunderstandings about vasectomy, including a fear of decreased sexual performance as a result of the procedure.² NFHS-3 and NFHS-4 data also reveals a significant preponderance towards female sterilization operations with 97.4% and 99.17% female sterilization operations, respectively.^{3,4}

The study demonstrated that majority of tubectomy acceptors (41.7%) belonged to age group of 25-30 years which was similar to a study in Allahabad.⁶

In rural area there is still a great desire to marry early because of customs and taboos. Although most of the women were married early and were having 2 to 3 children (74.5%). Pandit NB and Patel TA reported that 45.8% of women had three or more children and 98.8% women had at least one male child before they accepted female sterilization.^{3,5} Even then these young married women showed good response to contraceptive

knowledge and were found to be eager to discuss various family planning programme with the field workers.

Economic factor although is found to be more impact on increasing fertility in rural area. But in this area low fertility rate was observed in spite of the socio-economic status. As it is seen that acceptability of sterilization operation was more in lower- and middle-income group (84.2%) than that of upper income group (15.8%) as they constituted the bulk of population being studied. As regards community basis it appeared that 86.8 percent cases of Hindus had accepted sterilization operation as compared to 13.2 percent cases from Muslim Community. But overall acceptability of sterilization operation by Muslim population is very significant in relation to total Muslim population which is about 10% total population of Naihati.

Literacy rate has a profound influence in reducing fertility, but it is interesting to observe from the present study that 44.2 percent female were illiterate, 30.2 percent cases were up to class VI, and 21 percent cases were up to class VIII, only 4.6 percent cases had attained high school level. In spite of low education level parity is not found to be higher as compared to another center. Even then education level of those women has to be improved as it is seen that better educated a woman is, the more likely she is to use contraceptives. Education is found to have positive role in increasing the acceptance of modern contraceptive method world over.^{7,8}

The utility of birth control not only lies in population control but also in reducing maternal and child deaths. It is estimated that 1, 00,000 maternal deaths and up to one third of total child deaths could be avoided each year if all women who said they want no more children were able to stop child bearing.⁹

CONCLUSION

It appeared from this study that acceptability of sterilization operation at were found to be better in spite of low socio-economic status because of good understanding and acceptance of family planning programme by the rural people of this area. More of the young population in India is opting for tubectomy. Still women with 3 children

are dominating the tubectomy group. Religion has a huge impact on contraceptive practices in India. Removal of the religious stigma is essential for widespread implementation of family planning programs. A significant proportion of rural people opted for tubectomy only when they became pregnant with the unwanted child, hence went for sterilization after medical termination of pregnancy. The Government should initiate some attractive incentives to motivate couples to have only one or two children followed by sterilization. This rapidly growing population is one of the important factors contributing to failure of Governmental programs, thereby increasing mortalities despite all possible efforts.

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