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A DESCRIPTIVE STUDY ON DETERMINANT FACTORS OF FEMALES WHO ACCEPTED STERILIZATION IIN RURAL VADODARA

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ABSTRACT

Background: National Population Policy 2000 focuses on population stabilization for which wider use of permanent method of contraception is essential. The present study was conducted with objectives of understanding the determinant factors for female sterilization and assessing the knowledge of permanent method of contraception of the females undergoing female sterilization.**Methods:** Interview based descriptive study among females visiting hospital for sterilization was conducted in rural Vadodara. The questionnaire included subject's socio-economical data and determinant factors, knowledge and practice about various aspects of female sterilization and their usage of temporary methods of contraception in past. All women visiting during study period of three months were included in the study.**Results:** Among 81.92% of women gender of the last child was male. 59.0% women were having one male child and 39.8% women were having more than one male child. 45.8% women had three or more live children. Only 37.35% of women accepted sterilization within first year of last delivery. Past history of use of temporary method of contraception was present in 48.20% women of which 37.35% were using condoms. Knowledge about failure rate of tubal ligation, its complications and about non scalpel vasectomy was present in 8.5%, 18.1% and 48.20% respectively.**Conclusions and Recommendations:** Among women who accepted sterilization 45.8% of women were having three or more children. For population stabilization it is essential that females with two or less children accept sterilization. Attempts should be made to change preferences for at least singular male child.**Key words -** Sterilization, Rural, Contraception, Family planning, Knowledge

INTRODUCTION

Today women have far greater power of decision making than in past in country like India. But still there are some key social events where they can not take decision but they need to take opinion of family members. One of such judgment is the female sterilization. The female sterilization is one of the most popular terminal methods of the family planning. The second National family Health Survey (NHFS-2) reported that the

75% of total contraceptive use was of the sterilization and 34% of total current married women are sterilized.¹

India's National Population Policy (NPP) 2000 focuses on the population stabilization a key strategic objective to be attained with providing universal access to information/counseling, fertility regulation and contraceptive services.²

Thus the focus of the policy is on the information, counseling and voluntary adoption of the

fertility regulation. To achieve the population stability goal of NPP 2000 it is prime important to understand the contraceptive acceptance behavior of the women. The present study was initiated with the objectives of understanding the determinant factors for female sterilization and assessing the knowledge of permanent method of contraception among females who are undergoing female sterilization.

METHODOLOGY

The study was conducted in three hospitals of Vadodara Taluka where the female sterilization is carried out; they are government and corporation hospitals. The beneficiaries of these hospitals are mixed population from urban as well as rural. But in present study only those female were selected who are living in rural Vadodara. It was a hospital based descriptive study. The women in reproductive age group and who accepted the sterilization were the study participants. It was decided to include all participants for study period of three months. Data collection was done by interneer doctors. Two female interneer doctors were trained for the data collection. The predesigned and pretested structured questionnaire was used. The questionnaire included subject's socio-economical data (name, age, address, education, occupation etc.) and questions related to determinant factors like number of existing children and number of male children, knowledge and practice about various aspects of female sterilization like failure rate complications etc. and their usage of temporary methods of contraception in past.

Females in the reproductive age group were interviewed during June, July and August 2010. The female were interviewed just before the sterilization operation in the waiting room of the procedure. The interview was initiated with consent. The women who did not give consent and women who were from urban area were not included in the study.

The collected data was cleaned, validated and analyzed using Microsoft excel. The study was conducted after taking approval from institutional ethics committee (IEC).

OBSERVATIONS

A total of 83 females were interviewed. The median age was 27.85years.

Table 1: Attributes among females (n=83) accepting sterilization

Variables	Participants (%)
Age	
20-29 years	60 (72.3)
30-39 years	20 (24.1)
above 39 years	3 (3.6)
Education	
Illiterate	23 (27.71)
Primary	36 (43.37)
Secondary	15 (18.07)
Higher secondary and above	9 (10.84)
Occupation	
Housewife	66 (79.25)
working women	17 (20.75)
Gender of last child	
Male	68 (81.92)
Female	15 (18.07)
Existing children	
One	5 (6)
Two	40 (48.2)
Three or more	38 (45.8)
Existing Male Children	
Nil	1 (1.2)
One	49 (59)
Two or more	33 (39.8)
Period since last delivery	
Less than one year	31 (37.35)
1-3 years	30 (36.14)
3-5 years	8 (9.64)
5-10 years	8 (9.64)
10 years	6 (7.23)

Percentage of women who accepted sterilization within first year of last delivery was 37.35% and 36.14% of women accepted it within one to three years. Almost 22(26.51%) women took more than three years for acceptance of sterilization after delivery. Most common reason (49%) given by these women for delay was mental unpreparedness. The other reasons were desire for male child and fear of operation.

Percentage of women having past history of contraception was 48.20% (40 women) and out of these 31(37.35%) women's husband used condom, 6(7.23%) women used O C pill and 3(3.61%) women used other contraceptive methods.

Table 2: Details about use of temporary method of contraceptive among interviewed females (n=83)

	Illiterate (%)	Literate (%)	Total (%)
Condom	5 (21.74)	26 (41.67)	31 (37.35)
O.C. pill	0 (0)	6 (10)	6 (7.23)
Cu-T	0 (0)	3 (5)	3 (3.61)
Not Used	18 (78.26)	25 (43.33)	43 (51.8)
Total	23 (100)	60 (100)	83 (100)

Total 43 (51.80) women not used any contraceptive methods in past. Out of these 38 didn't find any need of spacing in past. Proportion of no use of temporary method of contraceptive was higher among illiterate 18(78.26%) than among literate 25 (43.33%). ($Z=3.25$, $SE=10.72$, $p<0.01$) Condom was more common than other method among both literate and illiterate using temporary contraception.

Table 3: Attributes pertaining to knowledge about permanent methods of contraception among interviewed females (n=83)

	Participants (%)
Source of information about sterilization*	
Female Health Worker	49 (59.03)
Husband	8 (9.63)
Friends	17 (20.48)
Doctor	16 (19.28)
Others	1 (1.2)
Motivator*	
FHW	53 (63.85)
Husband	19 (22.89)
Friends	10 (12.04)
Doctor	11 (13.25)
Money	1 (1.2)
Others	1 (1.2)
Knowledge about failure rate of TL	
Yes	7 (8.44)
No	76 (91.56)
Knowledge about complications of TL	
Yes	15 (18.1)
No	68 (81.9)
Knowledge about NSV	
Yes	40 (48.2)
No	43 (51.8)

*Multiple Options possible

Female Health Worker (59.03%) was most common informant about tubal ligation followed by friends (20.48%) and doctors (19.28%). Female Health worker was also the most common motivator (63.85%). 76(91.5%) didn't knew about the failure rate and only 7(8.43%) knew about the failure rate. 68(81.92%) didn't knew about the complications of tubal ligation. 43(51.80%) females were not aware of Non Scalpel Vasectomy and 40(48.20%) knew it.

DISCUSSION

A considerable number of women opt for this terminal method at relatively young age. The median age of the women at the time of sterilization according to the present study was 27.85 years while that of 25.5 years (both urban and

rural combined) according to NFHS-3 and 27 years according to rural India study.^{3,4} This increase in age can be probably due to acceptance of small family norm and the achievement of desired number of children at early age.

Among women who accepted sterilization 45.8% of women were having three or more children. For population stabilization it is essential that females with two or less children accept sterilization. Currently programme officers are focusing only on number of women sterilized and not on how many children they are having which also needs to be monitored.

Desire for male child is hurdle in acceptance of female sterilization which was evident by number of male child women had. Almost 59% of women were having one male child and 39.8% women were having more than one male child in present study. A study in Bihar has also mentioned number of living sons as one of the significant determinant of choice between sterilization and other contraceptive methods.⁵ A study in Madhya-Pradesh has indicated that women's preferences go beyond a singular preference for male children.⁶ Attempts should be made to change preferences for at least singular male child. Gender of the last child was male among 81.92% women in present study and majority accepted sterilization more than one year after the last delivery. It should be ruled out whether it is due to fear about survival of last child?

The present study shows that use of temporary methods of contraceptive was low (48.20%) which was even lower among illiterate (21.74%). NFHS-3 data shows that 46.3%, 45.5%, 41.5% and 31.4% women did not use any method before sterilization in West Bengal, Assam, Manipur and Tripura respectively.³ Among users most commonly accepted method was condom. Only few women used oral contraceptive pills and intrauterine devices. Study conducted in north India has shown results that 36.4%, 7.4%, 5.5% of the couples use condoms, oral contraceptive pills and intrauterine devices respectively. Study also mentioned weakness, menstrual disturbances, and weight gain etc. side effects as hurdle in use of these methods.⁷ Keeping in mind higher failure rate of condom due to inconsistent use it is required that steps are taken to overcome these hurdles and make other methods popular which will also increase overall couple protection rate.

In present study the females accepting the procedure were mainly informed and motivated by F.H.W. and the decision was mainly taken by

both husband and wife. In some females of present study doctors, friends and neighbors also took part in motivating them. However limitation of present study is that the study was restricted to government set up and it is likely that female health workers remain common informant and motivator. The detailed discussion about the sterilization well before the operation, providing options for alternative reversible methods, and allowing adequate time for decision-making is essential steps to help the women to make appropriate decisions for their reproductive needs. Poor knowledge about failure rate of tubal ligation its complications and non scalpel vasectomy suggest that extra effort is required by female health workers in that area.

CONCLUSION

The study revealed that the still very firm desire for male child in community. Though the present study was conducted in small sample but observation revealed that the almost all had male child and preferred the sterilization operation after at least one male child. So our rural society still has very strong male dominant society. Also the age of sterilization is getting younger which also showing increasing awareness and getting permanent freedom from the stress of conception. But same time the study participant's poor knowledge about complication of permanent contraception is also warning signal for policy planner. So it is recommended to develop tool of

interview with all female who are undergoing for sterilization operation, which help the policy planner to develop appropriate action against unmet need of community.

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