Study on Female Sterilization in PHC of Dahod District during the Year 2013-14

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Abstract:

Introduction : India became the first country in the world to launch an official family planning program with the aim of reducing population growth. The current fertility norm in India is two children. **Objectives :** (1) To study distribution of Female Sterilization operation cases of PHC during the year 2013-14. (2) To study 2 child norms & gender preference among female sterilization cases. **Method :** Retrospective record based study of 207 Female sterilization cases from a tribal PHC for the year April 2013-March 2014 was carried out from the PHC records. **Results :** Agriculture was the primary occupation of all the cases. Higher numbers of cases were motivated by the ASHA Worker 42.5% followed by FHW 26.1%. Median age for female sterilization is 28 years. 63.28% female have done their Tubal Ligation (T.L.) operation in the age group of 25-29 years followed by 22.71% in age group of 30-34years. Against the current fertility norm of 2 children, 21.3% females have 2 children while38.2% females have 3 children & 28% females have 4 children with 3.29 as the mean number of live children at the time of operation. Majority of females (78.3%) and their husband (57.4%) were illiterate. Majority of cases were operated in winter season (88.4%) which reveals that winter is the most preferred season for any surgical operation by the community. Majority were operated in government setup (86.95%) followed by Private (13.05%). Being a tribal PHC of a tribal district 93.24% cases were from ST category. Majority (85.5%) were from BPL category. 75% females have their last child of age 1 year or less.

Key words : Female sterilization, Medical Records

Introduction :

In 1952, India became the first country in the world to launch an official family planning program with the aim of reducing population growth. [1] During the initial phase of the family planning program, the rhythm method was the only birth control method recommended by the government. Because of the high rates of failure for this method, in 1956 the government begin to offer condoms, diaphragms and spermicidal jelly [2]to couples free of charge through hospitals, health centers and birth control clinics, and this "clinic approach" continued until the 1960. [2] Male and female sterilization were introduced in 1966, and the government established method specific targets for health workers to achieve. [3] A new family planning agenda focusing on voluntary acceptance of family planning evolved in the 1980s following the political fallout over the coercive sterilization program of the Emergency. [4]During this era, method acceptance shifted from male sterilization to female sterilization. This shift is largely explained by the development of laparoscopic techniques for female sterilization; misconception and concerns about the side effects of vasectomy, such as loss of libido; and the development of women-centered program, such as the Reproductive and Child Health program. The current fertility norm in India is two children. [6]Women are encouraged to marry early and complete childbearing soon thereafter. Typically, women are sterilized once they achieved their desired family size. [7]Thus, sterilization tends to occur relatively early, and age at sterilization is declining significantly in some states. [8]

Objectives :

1) To study distribution of Female Sterilization operation cases of PHC during the year 2013-14.
2) To study 2 child norms & gender preference among female sterilization cases.

Method :

Dahod is a tribal district in the state of Gujarat. One of the tribal Primary Health Centre (PHC) from this district was selected for the purpose of the study. Retrospective record based study was carried out from the records of female sterilization operation carried out during the year April 2013 to March 2014 from the PHC. A total of 207 female sterilization registered cases during the year 2013-14 were included in the study. Data were analysed by appropriate statistical software.

Results :

All the 207 cases were analysed to find out the distribution pattern and factors affecting female sterilization operation. Primary family occupation of all the cases was agriculture.

Table 1 : Distribution of Female Sterilization (n=207)

According age of female	**Frequency**	**Percentage (%)**
<20	00	00
20-24	29	14.01
25-29	131	63.28
30-34	47	22.71
35+	00	00
Mean age (years)	27.29	
Median age (years)	28.00	
Caste		
ST	193	93.24
OBC	8	3.86
General	5	2.41
Muslim	1	0.49
Economic status		
BPL	177	85.5
APL	30	14.5

Table 1 shows distribution of 207 female sterilization cases registered during the year 2013-14 at a tribal PHC. Distribution according to age of women, Majority (63.28%) female have done there T.L operation in the age group of 25-29 years followed by 30-34 years (22.71%) and20-24 years (14.01%). Mean age for female sterilization is 27.29years. Median age is 28 years. Being a tribal PHC of a tribal district 93.24% cases were from ST category. Majority (85.5%) were from BPL category.

Table 2 : Distribution of Female Sterilization (n=207)

According to Motivator	**Frequency**	**Percentage (%)**
FHW	54	26.1
MPH	40	19.3
WASHA worker	88	42.5
AWW worker	20	9.7
Anganwadi Helper (Tedaghar)	05	2.4
According to level of worker		
Sub-center level	94	45.41
Village level	113	54.59
Season		
Summer	07	3.4
Monsoon	17	8.2
Winter	183	88.4
Place of operation		
Government hospital	180	86.95
Private hospital	27	13.05

Table 2 shows distribution of T.L. cases according to the motivator shows highest number of cases were motivated by the ASHA Worker (42.5%) followed by FHW (26.1%) &MPHW (19.3%).Table-1 also shows that maximum cases (88.4%) are operated in winter season. It also shows that maximum number of cases operated in government institute that is 86.95% where as 13.05% in private hospitals.

Table 3 : Distribution of Female Sterilization (n=207)

According to Motivator	Frequency	Percentage (%)
1	02	1.0
2	44	21.3
3	79	38.2
4	58	28.0
5 & more	24	11.0
Mean no. of live children	3.29	
Median & Mode of Live children	3.00	
Age of last child		
0-2 months	44	21.26
3-6 months	42	20.29
7-12 months	74	35.75
13-24 months	47	22.70
> 2 years	5	2.41

Table-3 also shows 38.2%females have 3 children, 28% females have 4 children, 21.3% females have 2 children, 1% female has 1 child, 0.5% female each have 6 & 7 children. Female having Mean number of live children is 3.29. Median number of live children is 3.75% females have their last child of age 1 year or less.

Table 4 : Distribution of Female Sterilization (n=207)

Education of female	Frequency	Percentage (%)
Illiterate	162	78.3
Primary	20	9.7
Secondary	18	8.7
Higher secondary & above	07	3.3
Education of Husband		
Illiterate	119	57.4
Primary	32	15.5
Secondary	32	15.5
Higher secondary & above	24	11.6

Table-4 shows education of wife & husband of the 207 cases. 78.3%females were illiterate, 9.7%had education up to primary, 8.7% up to secondary, 3.3%upto higher secondary education& above. Education level of husband shows 57.4% are Illiterate, 15.5% had education up to primary, 15.5% up to secondary and 11.6%upto higher secondary& above.

Table 5 : Distribution of Live child at the time of operation

No. of live child	Male	%	Female	%
0	1	0.49	43	20.77
1	45	21.74	78	37.68
2	137	66.18	58	28.02
3	19	9.18	21	10.14
4 & more	5	2.42	7	3.38

Table 5 shows that 43 couples (20.77%) do not have any live female child at the time of operation whereas only 1 couple (0.49%) do not have any live male child at the time of operation. Most couples 206 (99.51%) had at least one live male child at the time of operation, as compared to 164 (79.23%) had at least one live female child at the time of operation.

Discussion :

As per the National Family Health Survey (NFHS)-3 public medical sector contributed about 81.7% of coverage of female sterilization while private medicate sector and NGO contribute about 18.3% of female sterilization. [8] In the current study, similar results were also seen in the present study where coverage of female sterilization covered by public medical sector (CHC, District hospital) contributed about 86.95% of total female sterilization, while private medical sector contribute about 13.05%.

Study carried out by Burnolli Dutta in India on female sterilization shows similar results. Majority of the clients in this study (38.8%) were in the age group of 25-29 years, which also matches well with the results of the present study in which 63.28% sterilization was carried out in the age group of 25-

29 year. [8] Study by Burnolli Dutta also shows the females who had done their sterilization with secondary education (70%) and females with primary education (22%), only 7% women with higher education. This may be because of the fact that in rural areas women are mainly primary to secondary educated and highly educated women prefer more for spacing methods of contraception.[1] In this current study the rural population were mainly illiterate. About 78.26% of women were illiterate, while only 3.38% female had higher education. Comparing the education of females and their husbands, it shows that in this tribal area, husbands are more educated than wife. Since majority of cases are operated in winter and very few in other seasons, it reflects that winter is the most preferred season for any surgical operation by the community. It also shows more number of cases motivated by village level workers than sub-center level workers. This may be because local workers like ASHA (Accredited Social Health Activist)/AWW (Anganwadi Worker) are from the same locality & so are successful as motivator for cases.

The results also reflect that couples do not prefer to go for permanent method of sterilization when they do not have any live male child. On the other side, many couples without a female child selected to go for permanent sterilization procedure of females when they do not have any live female child. This reflects preference for "male child" prevalent in the community. At least one live male child is the "social norm" to be fulfilled before motivating them for a permanent method.

Conclusion :

Majority of cases are operated in winter season in government institute. Husbands are more educated than wives are. Majority of females are motivated by village level worker. Couples prefer to have at least one live male child before permanent sterilization. Less than 25% of couples follow 2child norm.

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