

# Laparoscopic Sterilisation - An Epidemiological Overview in an "A" Type P.P. Centre.

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## Summary

This study was undertaken in the Post Partum Centre of S.C.B. Medical College and Hospital, Cuttack, to identify the problems of adopting a permanent sterilization procedure hampering the 2 child norm in the society. Majority came for sterilisation with a pregnancy termination request and out of them most had 8 to 10 weeks of pregnancy. The social status, education, locality, age and parity have got no role to play as regards termination of pregnancy and simultaneous sterilisation. MTP has now become the single major determinant to take a decision for sterilisation. Having a son is still the motivational pivot. The failure rate and complications for laparoscopic sterilisation is 0.6% and 8% respectively. The minilap rate is just 1/3<sup>rd</sup> of that for laparoscopic sterilisation and vasectomy is just 1/45<sup>th</sup> that for laparoscopic sterilisation. Drive to improve their acceptance is a must.

## Introduction

The population of our country is growing at an alarming rate. At present, we have crossed 94 crore mark and if it continues unabated we shall cross the 100 crore mark by the turn of the century. We are all aware of the disaster it will bring to our country and mother earth.

Permanent sterilisation procedure will go a long way to curb this unhealthy growth. This study was undertaken to find the scope for improving performance and to identify the group where we have to put our intensive effort.

This study was undertaken in Post Partum Programme, S.C.B. Medical College, Cuttack during the period from March 1992 to June 1996. This is an 'A' type Post Partum Centre and only Centre in Orissa to impart Laparoscopic training to the periphery doctors. This department caters to the need of people 100 km in and around the city which is thickly populated. The average delivery rate is about 5000-6000 per year. The majority of the patients belong to rural population. Many interesting and thought provoking findings came out of the study. The statistical analysis was done by Chi square test. Our observations are as follows.

## Observation

Total no. of deliveries during the period was

19,581 out of them 10,769 were having more than 2 children, out of which minilap and tubectomy during LSCS was done only in 1239 cases (12%). Here there is a scope to improve upon the sterilisation rate. All the staff starting from the unit head to the ward attendant should try to motivate the patients to adopt the '2 child norm' and as they are in the post partum period they are amenable to suggestion.

The performance of vasectomy is very poor. During this period only 93 men have been vasectomised. This is a grey area where intensive drive for motivation of the male population has to be adopted.

Total no. of Laparoscopic sterilisations done during the period was 3969. The majority who had come for MTP were highly motivated and opted for sterilisation. The benefits of sterilisation should be highlighted more in the media. Our field staff should work more to motivate the eligible couples before they land with an unwanted pregnancy.

All round the year trainees are there and they do most of the cases and the complication rate is not very high. It is only 8%. The complications are in the form of surgical emphysema, uterine perforation, broad ligament haematoma, injury to the tubes etc. Laparotomy was resorted to only in 0.5% of cases.

The failure rate is 0.6%. It is a little higher in comparison to other states. But mostly as the trainees perform the fallope ring application, this rate is acceptable. (Table No. 1)

Table No. I  
Study Profile

**Total No. of Lap Sterilisation cases – 3959**

Minilap	-	1239
SE with Lap	-	2621 (66%)
Plain Lap	-	1338 (34%)
Complications (Minor)	-	317 (8%)
Failure Rate	-	23 (0.6%)

The majority of patients belong to 26-30 years age group. As the girls get married in an early age, by the age of 26 years most of them had completed their families. There is no statistical difference between the age groups who seek sterilisation with MTP and without MTP. (Table No. II)

Table No. II  
Age & Sterilisation

Age	SE with Lap		Plain Lap		Total	
	n	%	n	%	n	%
20-25	475	61	305	39	780	20
26-30	1371	67	684	33	2055	52
31-35	652	69	295	31	947	24
36-40	123	68	55	32	178	4
Total :	2621	66	1338	34	3959	

P > 0.05

Table No. III shows the duration of pregnancy & SE & Lap. Most of the MTP seekers are of 8-10 weeks duration. It is heartening to note that above 10 weeks, termination cases are becoming less (12%) where the hazard is more.

Table No. III

**Duration of Pregnancy: MTP with Lap TL**

Weeks	n	%
6-8 Weeks	495	19
8-10 weeks	1823	69
10 weeks	303	12
Total	2621	100

The majority of people who come for sterilisation are para 3 and above. Only 0.5% opted for sterilisation with one child. There is no difference between the different parity and SE Lap and plain lap. (p > 0.05) (Table IV)

Table No IV  
Parity & Sterilisation

Parity	SE with Lap		Plain lap		Total	
	n	%	n	%	n	%
P <sub>1</sub>	4	23	13	77	17	0.4
P <sub>2</sub>	1061	65	573	35	1634	41
P <sub>3</sub>	1023	68	471	32	1494	38
P <sub>4</sub>	533	65	281	35	814	20.5
Total :	2621	1338	3959			

About 95% of acceptors are Hindu. The very low percentage of Muslim ladies accepting the procedure speaks volumes. Religious bias, stigma, illiteracy, poverty and low profile of the women in this community is the cause of less acceptance of this (Table V)

Table No. V  
Religion & Sterilisation

Religion	n	%
Hindu	3758	95
Muslim	201	5
Total :	3959	

As we have stated earlier, the hospital is rural based. So the majority belong to rural area. MTP has made inroads both into rural and urban populations. So there is no statistical difference between plain Lap and SE with Lap among the two groups (Table No. VI).

Table No. VI  
Locality & Sterilisation

	SE with Lap		Plain Lap		Total	
	n	%	n	%	n	%
Urban	1096	64	623	36	1719	43
Rural	1525	68	715	32	2240	57
Total :	2621		1338		3959	

The middle income group constitutes the bulk of the Lap seekers. Only 13% and 28% respectively come from higher & low economic groups. Intensive drive is necessary to increase the acceptance rate in both the groups by different methods i.e. to the high society through media to low society through field workers.

Unless there is an unwanted pregnancy few couples are coming for sterilisation in any class (Table No. VII).

Table No. VII  
Economic Status & Sterilisation

	SE with Lap		Plain Lap		Total	
	n	%	n	%	n	%
High	287	59	200	41	487	13
Middle	1613	69	737	31	2350	59
Low	721	64	401	36	1122	28
Total :	2621		1338		3959	

Literate public form the bulk of the patients (64%) as compared to illiterates and the highly educated. It is interesting to note that an unwanted pregnancy is the main motivator to adopt this terminal family planning procedure irrespective of their literacy (Table No. VIII).

Table No. VIII  
Education & Sterilisation

	SE with Lap		Plain Lap		Total	
	n	%	n	%	n	%
Illiterate	735	69	331	31	1066	27
Below Matric	1651	65	878	35	2529	64
Above matric	235	65	129	35	364	9
Total :	2621		1338		3959	

Table No. IX shows the no. of children and option for sterilisation operation. This table shows very interesting findings. India has opted for NRR I by A.D. 2006. But in 1996, in a 'A' class PP Centre the majority Lap. sterilisation are done in patients having more than 2 children (60%) and the finding is statistically significant ( $P < 0.05$ ) only 0.5% of seekers, were having one child and that too a

son. The son predominance is again obvious as only 2% of population opted for sterilisation with 2 daughters which is very disheartening.

Table No. IX  
No. of Children

	SE with Lap		Plain Lap		Total	
	n	%	n	%	n	%
1S	4	23	13	77	17	.4
1S + 1D	648	69	293	31	941	23.6
2 S	351	57	263	43	614	15
2 D	53	77	17	23	70	2
3 +	1565	68	752	32	2317	59
Total :	2621		1338		3959	

Few disheartening facts have come out of this study.

1. Motivation in post-partum period is not sufficient. It should BE INTENSIFIED.
2. Vasectomy rate is very low. Only women were subjected to sterilisation operations.
3. A pregnancy has to be terminated to compel the couple to accept a permanent method, which could have been avoided much earlier.
4. The majority of women going for Lap. sterilisation have more than 3 children. One child norm, even '2 children norm' is a distant vision in India.
5. We are entering 21<sup>st</sup> Century, still the son bias is persisting. Even people are not satisfied with 2 sons as shown in the study & our earlier works.

To Conclude:

The '2 children norm' drive has to be intensified. The utilisation of the media & health personnel to their optimum capacity is mandatory.