

# Psychosomatic Sequelae After Sterilization In Indian Women

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## Abstract

**Objectives:** The aim of the study was to find menstrual and psychosomatic causes of regret of female sterilization

**Materials and methods:** A questionnaire study was carried on 236 women who had undergone sterilization attending the family planning clinic. These women were asked about menstrual and psychosomatic symptoms in addition to sexual satisfaction after the procedure.

**Results:** Irregularity of menses was present in 20.3% of women while 17.4% women had increased dysmenorrhoea post sterilization. Up to 35.8% women had various complaints of which irritability, depression and pelvic pain were commonest. However 88% of the subjects enjoyed a more satisfying sex life after sterilization.

## INTRODUCTION

Tubal sterilization is the world's most popular contraceptive method. The number of Indian women sterilized in the year 2000-2001 was 4.74 million (1) and is increasing every year. In the recent years, although sterilization has become a popular method of contraception through out the world, there are some anxieties about the long-term physical and psychological sequelae including regret after the procedure. Because tubal sterilization is generally an irreversible procedure, such regret could result in long lasting personal distress. With the growing tendency of more and more women undergoing tubectomy at a younger age, the problem of post-sterilization regret has potential to increase substantially. Even a small population of women developing post sterilization regret would translate into a large number of sufferers. This study was conducted with the aim to investigate the menstrual, psychosexual, psychological and somatic sequelae after sterilization among Indian women and if these were the potential cause of regret.

## MATERIAL & METHODS

A questionnaire-based study was conducted on 236 women attending family planning clinic at our institute over a period of one year (October 2003 to September 2004). Fifty-seven percent women followed up after sterilization performed at

the same hospital, while the remaining 43% had the procedure performed at other family planning clinics or camps. The time interval between tubal ligation and the interview ranged from 6 months to 16 years (mean  $8.6 \pm 5.5$  years). Women who suffered loss of a child after sterilization, sterilization failure and breakup in marital union were excluded from the study.

The women were interviewed by the same investigators (NM & PKG) and the confidentiality of all women was maintained. Each interview begun with the question "Have you had the desire to have another child?" or "Do you regret the decision of sterilization?". Those who answered yes to these questions were considered to regret their decision. These women were further questioned "Would you wish reversal of sterilization?". Women were further questioned about menstrual cycle disturbances, psychosexual functioning, somatic morbidity and sexual satisfaction besides satisfaction with the sterilization procedure in the survey. Menstrual cycle disturbances were inquired through questions - "Has your bleeding increased since tubal ligation?" or "Has there been any intermenstrual bleeding post sterilization?" or "Has there been any irregularity in cycles?" These women were also asked if "Has there been an increase in pain during periods after sterilization?"

Psychosexual functioning after sterilization was interrogated as an increase or decrease in sexual desire and sexual pleasure since sterilization. Psychological and somatic morbidity after sterilization procedure included questioning on irritability, nervousness, depression, pelvic pain, backache, headaches and increased tiredness and lethargy. Data was examined on univariate basis to determine crude odds ratio for each variable of interest. Statistical significance was established by means of chi-squared test Yales correlation, or Fischer's exact test for small expected frequencies. The confidence limits of the odds ratio were calculated by means of the method of Cornfield.

## RESULTS

The demographic profile of the women is depicted in Table 1.

**Figure 1**

Table 1:Demographic profile of women

Parameters	Number of patients
Age at sterilization	
≤24	48
25-29	90
30-34	56
≤35	42
Religion	
Hindu	214
Muslim	6
Christians	38
SES	
Low	104
Middle	93
High	39
Education	
Illiterate	80
Primary	46
Secondary	60
Graduate & above	50

**Figure 2**

Table 2: Frequency of complaints in women

Symptoms	Number of patients regretting	Percentage % of patients regretting
Menstrual complaints	47	20.3%
Dysmenorrhoea	41	17.4%
Sexual satisfaction	207	88%
Psychosomatic	84	35.6%
Irritability	23	9.7%
Depression	17	7.2%
Lethargy	11	4.7%
Guilt	19	8.0%
Vague abdominal pain	22	9.3%
Pelvic pain	22	9.3%
Low back pain	26	11.0%

**Figure 3**

Table 3: Depicting odds ratio of various parameters

Variable	Odd ratio	P value
Menstrual problem		
No	1	
Yes	1.67	0.27
Dysmenorrhoea		
No	1	0.09
Yes	1.15	
Sexual satisfaction		
No	1	0.006
Yes	0.029	
Psychosomatic		
No	1	0.01
Yes	1.64	

Of the 236 of women, 60% patients belonged to the lower socioeconomic status and the remaining 40% to the middle socioeconomic group. Majority of the women were housewives. As regards to educational status, 30% were illiterates. The age distribution at the time of sterilization in the study showed that 30% were less than 25 years old, 52.5% were 25 to 30 years old, 14% were between 31-35 years old and 5.5% were more than 35years old. A total of 9.3% women regretted decision of sterilization.

In the study population 20.3% (48/236) of women had changes in menstrual flow .Of these 30 women regretted the decision of sterilization. Out of the 17.4%(41) women who experienced dysmenorrhoea after tubal ligation, only 15 had dysmenorrhoea severe enough to warrant regret. Eighty-eight percent (207) of our patients reported having a better sexual life after sterilization while only 29 women had either no change in sexual life or a change for the worse. This difference was statistically significant ( $p=0.006$ ).

Psychological and somatic symptoms were reported in 35.6% (84) of our patients. Some of these women even had multiple complaints. Irritability was reported in 23 women, depression in 17, lethargy in 11 and guilt in 19 patients. Some women also suffered from vague abdominal pain (22), pelvic pain (22) and low back pain (26).

## DISCUSSION

The existence of post-tubal ligation syndrome of menstrual abnormalities has been debated for decades. Earlier studies reported menstrual disturbances and gynecological disorders after sterilization.<sup>(2,3,4)</sup> Disturbed ovarian blood flow and/or luteal dysfunction has been postulated as the possible etiology However, Wilcox et al <sup>(5)</sup> and lately Peterson et al <sup>(6)</sup> found no such disturbance. In our study 20.8%(47) women had menstrual irregularities, 17.4%(41) women complaint of dysmenorrhoea post sterilization. There was a higher incidence of menstrual irregularities and dysmenorrhoea in those women who had regrets after the procedure (odds ratio 1.67). These problems perhaps could be an attributing factor for regret post-sterilization .

Like previous studies women in our study felt sex to be more satisfying, in terms of increased libido and frequency of coitus.<sup>(4,6)</sup> . This was mostly due to the fact that they no longer had to worry of unwanted pregnancies. Further those with improved psychosexual status had lesser regrets ( $p=0.01$ ). There was a higher incidence of somatic complaints among those regretting ligation. The commonest being irritability and depression. The psychological reactions to sterilization depend upon the socio-cultural environment, the status of women and importance of childbearing in the society. In the current Indian social melieu where childbearing is related to improved status of women, feeling of depression is bound to develop in some after ligation. Does it develop in the immediate or later years need further exploration. Pre-sterilization counseling, in addition to alternative contraceptive methods, risks, reversibility and failure of procedure should also elicit information about the couples' psychosocial and marital dynamics, the woman's

menstrual history, sexual history and psychological and somatic symptoms.

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