

Study of the Demographic Profile of Women With Hysterectomy

Amarawatin Kurre^{1*}, Sushila Khuteta², Kalpana Bariha¹

1. Assistant Professor (M.S. OBG) Late Lakhiram Agrawal Memorial Medical college, Associated Kirodimal Govt. hospital, Raigarh, C.G. India

2. Professor and Unit Head Department of Obstetrics and Gynaecology S.M.S. Medical College Jaipur, (Rajasthan)

*Correspondence Address: Dr. Amarawatin Kurre
Q. No. A1, Type IV A, Staff Quarter Medical College Campus,
Dist Raigarh, Chhattisgarh Pin Code - 496001

Abstract

Background: Hysterectomy remains the most common major gynaecological surgery. The uterus has been regarded as the regulator and controller of important physiological functions, a sexual organ, a source of energy and vitality and a maintainer of youth and attractiveness. The main aim was to assess sexuality after hysterectomy using the Female Sexual Function Index (FSFI) and determine related risk factors for altered sexual functioning.

Methods : This study was hospital based descriptive type of observational study. 150 cases were recruited in the study and informed written consent was taken from all patients. After detailed history taking, complete general physical examination, systemic examination and gynecological examination was done. They were given a self-administered questionnaire- "The Female Sexual Function Index (FSFI), a 19-item questionnaire". Mean FSFI score was calculated and its relation with various parameters of hysterectomy was determined and correlated.

Results : The percentage and likelihood of undergoing hysterectomy are relatively high among women from age groups (45-49), those who reside in rural areas, those with lower socioeconomic status, those having high parity. Most common indication of hysterectomy is leiomyoma.

Conclusion : The results of this study showed that sexuality after total abdominal hysterectomy (TAH) was worse. The policy implication of multiple findings is that the reproductive health program managers should ensure regular screening and timely treatment of the problems resulting in hysterectomy.

Keywords: - Total abdominal hysterectomy, Female sexual function index(FSFI), Sexual Dysfunction.

Date of Submission: 15-01-2021

Date of Acceptance: 30-01-2021

INTRODUCTION

Hysterectomy is one of the commonest gynaecological procedures undertaken in the UK and in the USA. (Gupta & Manyonda, 2011). It is estimated that in USA about 600,000 hysterectomies are performed annually. Rate of hysterectomy was 5.6 per 1000 women in 1997 in U.S. In India no national statistics for hysterectomy is available. In 2015 a study conducted in a northern state of India (Haryana) states that incidence of hysterectomy was 7% among married women above 15 years of age¹. Another study from a western state (Gujarat) in 2011 pointed out that 7-8% of rural women and 5% of urban women had already undergone hysterectomy at an average age of 37 years².

Although it is known that benign gynaecological diseases may adversely affect sexual function, it is unclear how sexual function is valued or prioritized in relation to pain, menstrual dysfunction, and other aspects of health among women who are candidates for treatment with simple hysterectomy. There are different indications of hysterectomy. The most common indication of hysterectomy in different parts of the world is symptomatic uterine myoma ranging from 22.2% to 61.8%. Other indications which varies from one region to another includes genital organ prolapse, adenomyosis, abnormal vaginal bleeding, endometriosis, endometrial hyperplasia, dysfunctional uterine bleeding, endometrial malignancy, ovarian malignancy, chronic pelvic pain and precancerous lesions³. Bilateral salpingo-oophorectomy is often carried out concurrently and this may be followed by postoperative commencement of hormone replacement therapy (HRT). This reduces the risk of

ovarian cancer to almost zero; however, the resultant estrogen deficit may have more detrimental effect on women's health³⁻⁴.

Based on the National Health and Social Life Survey scores of 1,749 women, aged between 18 and 59 years, the prevalence of Female Sexual Dysfunction (FSD) was reported to be 43% in the United States (Berman JR 2004). Sexual dysfunction is more prevalent for women (43%) than men (31%) in US (Laumann et al. 1994).³⁻⁴

Female sexual life, when considered in all aspects, is a highly complex phenomenon. Perception of sexuality among middle-aged women is influenced by ethnicity, education, social status, psychological wellbeing, partner characteristics and the presence and severity of common menopausal complaints (Dennerstein and Leher 2004; Green and Santoro 2009).⁴

Women are concerned that hysterectomy may affect their sexual wellbeing or their sexual attractiveness. Hysterectomy has been reported as having adverse as well as beneficial effects on sexual wellbeing. Because hysterectomy disrupts the local nerve supply and anatomical relations of the pelvic organs, it has been thought that the function of these organs may be adversely affected. The idea that sexual wellbeing may differ according to type of hysterectomy is based on the hypothesis that the techniques damage the innervation and supportive structures of the pelvic floor differently.

During hysterectomy the pelvic plexus may be damaged in four ways: the main branches of the plexus passing beneath the uterine arteries may be damaged during the division of the cardinal ligaments; the major part of the vesical innervation, which enters the bladder base before spreading throughout the detrusor muscle⁷, may be damaged during blunt dissection of the bladder from the uterus and cervix; the extensive dissection of the paravaginal tissue may disrupt the pelvic neurons passing from the lateral aspect of the vagina⁸; or the removal of the cervix results in loss of a large segment of intimately related plexus⁸. Of all potential anatomical sites where damage to the pelvic plexus may occur, only damage to the cervix has been evaluated. Many believe that the cervix should be preserved for sexual wellbeing, as supported by quantitative evidence from one study. Another study, however, reported a beneficial effect of its removal.

This study aimed to determine the percentage of sexual dysfunction among hysterectomised women, and to explore the factors that may be related to sexual dysfunction among the hysterectomised women. The results of this study should help identify status of sexual dysfunction among hysterectomised women and enhance development of programs for prevention and treatment.

Objective – To study the demographic profile of women with hysterectomy.

MATERIALS AND METHODS

This descriptive study was conducted in the department of Obstetrics and Gynaecology, SMS Medical College & Attached Group of Hospitals, Jaipur.

STUDY POPULATION –

The study comprised of females with post hysterectomy at the time of their visit coming for routine follow up examination.

• INCLUSION CRITERIA –

1. Hysterectomy for benign cause within 3 months
2. Healthy sexually active women
3. Age Group 40-60 years
4. Healthy Partner

• EXCLUSION CRITERIA -

1. Hysterectomy for malignant condition.
2. Sexually Inactive women
3. Reduced capability of understanding the survey
4. Medical disorders

Sampling Process -After considering the inclusion and exclusion criteria 150 cases were recruited in the study. Informed written consent was taken from all patients. After detailed history taking, complete general physical examination, systemic examination and gynecological examination was done. They were given a self-administered questionnaire- "The Female Sexual Function Index (FSFI), a 19-item questionnaire". Mean FSFI score was calculated and its relation with various parameters of hysterectomy was determined and correlated.

RESULTS

Demographic characteristics of the study population are shown in table 1. Out of 150 cases , 69 (46%) females with hysterectomy were lying in the age group of 45-49yrs. Majority of the cases studied were Hindus 139(92.67%). Majority of the patients 123(82%) were belong to lower socioeconomic status , 79(52.67%) were illiterate and 50% had history of high parity. Out of 150 cases observed with hysterectomy in the present study, the most common indication for hysterectomy was found to be Leiomyoma 64(42.66%).

Table 1- Demographic characteristics of women with hysterectomy included in study (n=150)

Category	Subcategory	N (%)
Age (years)	(40-45)	59(39.33%)
	(45-49)	69(46%)
	(50-54)	13(8.67%)
	55+	9(6%)
Parity	P2	18(12%)
	P3	57(38%)
	P4+	75(50%)
Locality	Rural	126(84%)
	Urban	24(16%)
Education	Illiterate	79(52.67%)
	Primary and middle school	29(19.33%)
	High school	25(16.67%)
	Higher secondary school	12(8%)
	Graduate	5(3.33%)
Socio- Economic Status	Lower	123(82%)
	Middle	23(15.33%)
	Upper	4(2.67%)
Religion	Hindu	139(92.67%)
	Muslim	11(7.33%)
Indication of Hysterectomy	Chronic PID	34(22.66%)
	Leiomyoma	64(42.66%)
	DUB	48(32%)
	Adenomyosis	4(2.66%)
		Total 150(100%)

DISCUSSION

Female sexual dysfunction (FSD) is a highly prevalent and often underestimated problem in the general community.⁷ The present study reveals significant negative impact on sexual function after hysterectomy. Several studies to evaluate the effect of hysterectomy performed for benign conditions on female sexual function in different part of the world. Results of these studies are in conformity with the present study. Dr. Karthikeyan⁸ et al (2015), the most common indication for hysterectomy was leiomyoma (41%) followed by adenomyosis (15.5%) and the most common presentation was increased bleeding. The mean age of hysterectomy was 44.6 years and the average parity of the patients was 1.7.

Sujan Vaidya et al (2015), found that out of the 533 cases, fibroid was the most common indication for hysterectomy that was seen in 229 (42.94%) cases followed by uterovaginal prolapse in 101 (18.93%) cases. Leiomyoma was the most common pathology reported in 250 (46.90%) hysterectomy specimens⁹. Husnu Celika et al (2008), it was found that hysterectomies by abdominal or vaginal routes reduced FSFI scores significantly (p<0.05). The use of ERT were no effect on total score of FSFI in AH and BSO (p>0.05). ERT prevented deterioration of FSFI in women who underwent VH relative to preoperative values but AH. Hysterectomy causes unfavourable effects on sexual functions at least in the first 6 postoperative months and this negative effect cannot be repaired by estrogen replacement therapy in AH and BSO. Despite the fact that upon bivariate analysis FSFI scores (total and domain) were inversely correlated to age and the menopausal stage (lower and thus more impaired), logistic regression analysis determined that female age was a significant

risk factor for lower sexual function only in terms of desire and arousal. Contrary to this, perimenopausal status at time of surgery was a protective factor for bad lubrication, supporting the idea that young women may have better sexual functioning indexes. Decrease desire, inadequate lubrication, dyspareunia the pain during coitus, is generally related to lower sexual function after hysterectomy but dyspareunia was felt by majority of the respondents.

Abdelmonem AM¹⁰ reported that the postoperative dyspareunia is more common after vaginal hysterectomy compared to abdominal hysterectomy. JYOT¹¹ *et al* (2002), found TAH patients experienced worse postoperative sexual function than SCH patients with respect to intercourse frequency and overall sexual satisfaction. Irrespective of type of hysterectomy, patients who underwent bilateral salpingo-oophorectomy experienced worse overall sexual satisfaction. Risa Lonnée-Hoffmann¹² *et al* (2014), for about 20 % of women, deteriorated sexual function has been reported and current research is attempting to identify mechanisms and predictive factors explaining these postoperative changes. Concomitant oophorectomy had negative effects on sexual function and long-term health, particularly in premenopausal women. This may not be reversed by estrogen replacement. Hysterectomy performed for malignancy had a detrimental effect on sexual function. Individualized risk assessment and information should be aimed at during preoperative decision making. Goktas¹³ SB *et al* (2015), found while hysterectomy and bilateral salpingo-oophorectomy performed for benign reasons brought about short-term improvement in urinary problems after the operation for sexually active and healthy women, they resulted in sexual dysfunction and increase in depression. The age, educational status, working condition and family structure is also important.

CONCLUSION

Hence on concluding the present study, Female sexual dysfunction is a multifactorial and complex problem of the community. The results of this study showed that sexuality after total abdominal hysterectomy (TAH) was worse. The policy implication of multiple findings is that the reproductive health program managers should ensure regular screening and timely treatment of the problems resulting in hysterectomy. A larger sample size with a metacentric study may further strengthen the results obtained in the study.

Conflict of interest- Authors are declare that no conflict of interest.

REFERENCES

- [1]. Polivy J. Psychological reactions to hysterectomy: a critical review. *Am J Obstet Gynecol* 1974;18:417-26
- [2]. Smith PH, Ballautyne B. The neuro anatomical basis of denervation of die urinary bladder following major pelvic surgery. *Br J Sstrg* 1968;55:929-33.
- [3]. Goldstein I, Alexander JL. Practical aspects in the management of vaginal atrophy and sexual dysfunction in perimenopausal and postmenopausal women. *J Sex Med.* 2005;2:154-165.
- [4]. Laumann EO, Paik A, Rosen RC: Sexual dysfunction in the United States: Prevalence and predictors. *JAMA* 1999;281:537-544. recommendations. *Journal of Sex and Marital Therapy* 31:153– 166.
- [5]. Dennerstein L, Leher P. 2004. Modeling mid-aged women’s sexual functioning: a prospective, population based study. *Journal of Sex and Marital Therapy* 30:173– 183.
- [6]. Peter Chedraui, Faustino R. Pérez-López Edward Mezones-Holguin Glenda San Miguel Carlos Avila, Collaborative Group for Research of the Climacteric in Latin America (REDLINC), *Maturitas journal* 68 (2011) 387–390.
- [7]. Dr. Karthikeyan T M, Dr. Veenaa N N, Dr. Ajeeth Kumar C R, Dr. Eliz Thomas. Clinicopathological Study of Hysterectomy among Rural Patients in a Tertiary Care Center Volume 14, Issue 5 Ver. IV (May. 2015), *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)* e-ISSN: 2279-0853, p-ISSN: 2279-0861.
- [8]. Sujan Vaidya, Sapana Amatya Vaidya. Patterns of Lesions in Hysterectomy Specimens in a Tertiary Care Hospital *J Nepal Med Assoc* 2015;53(197):18-23.
- [9]. Abdelmonem AM, Vaginal length and incidence of dyspareunia after total abdominal versus vaginal hysterectomy 2010 Aug;151(2):190-2.
- [10]. Meston CM. The effects of hysterectomy on sexual arousal in women with a history of benign uterine fibroids. Department of Psychology, University of Texas at Austin, 108 E. Dean Keeton, Austin, Texas 78712, USA. meston@psy.utexas.edu 2004 Feb;33(1):31-42.
- [11]. Jyot Saini, Edward Kuczynski, Herbert F Gretz, III, and E Scott Sills⁴ Supracervical hysterectomy versus total abdominal hysterectomy: perceived effects on sexual function *BMC Womens Health.* 2002; 2: 1. 2002 Jan 17. doi: 10.1186/1472-6874-2-1.
- [12]. Risa Lonnée-Hoffmann and Ingrid Pinas Effects of Hysterectomy on Sexual Function *Curr Sex Health Rep.* 2014; 6(4): 244–251.
- [13]. Sonay Baltaci Goktas, Ismet Gun, Tulin Yildiz, Mehmet Nafi Sakar, and Sabiha Caglayan. The effect of total hysterectomy on sexual function and depression, *Pak J Med Sci.* 2015 May-Jun; 31(3): 700–705. PMID: PMC4485298.

Dr. Amarawatin Kurre, et. al. “Study of the Demographic Profile of Women With Hysterectomy.” *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*, 20(01), 2021, pp. 21-24.

