

A Comparative Study of Post Hysterectomy Health Status among Low and High Socio-Economic Group Women

G. Prameela Devi¹, P. Phani Teja², P. A. Chandrasekharan³

¹Associate Professor, Department of OBG, S.V. Medical College, Tirupati, India

²Assistant Professor, Department of Surgery, Bhaskara Medical College, Hyderabad, India

³Professor, Department of OBG, S.V. Medical College, Tirupati, India³

Abstract: *Background:* In India, community-based studies and media reports showing a rising trend of women undergoing hysterectomy in the recent years. Many of them were medically treatable. This has led to the suspicion on misuse of procedure, liberalisation of indications and its potential ill health-effects on women. *Study Objectives:* To estimate the incidence of hysterectomy in study urban slum and urban areas, comparative study of complications in two socioeconomic groups. *Type of study:* cross sectional community-based study. *Study population:* About 1000 women between 2015-2020. *Results:* The overall rate for hysterectomy was 40/1000 women aged 25-50 years. *Conclusion:* There was a positive correlation between income, education, socioeconomic status and hysterectomy rates. Higher number of hysterectomies were performed to treat Leucorrhoea, chronic cervicitis, dysfunctional uterine bleeding and pelvic inflammatory diseases in low socioeconomic women and abnormal uterine bleeding in high socioeconomic women.

Keywords: Post Hysterectomy, Socio-economic status, Post operative complications

1. Introduction

Hysterectomy is defined as removal of the uterus with or without removal of adnexa. Hysterectomy is the second most common surgical procedure carried out worldwide. ^[1, 2] (Wu et al., 2005) when compared to higher frequency of hysterectomy (10-20 %) in other countries than lower rate (4-6 %) in India. ^[3]

In India hysterectomy, even if indicated and advised is postponed till children are old enough and women have a sense of having completed their family responsibilities. High tolerance threshold for complications in Indian women and low level of seeking medical advice have been proposed as the reasons for this lower rate ^[3]. In India, Uterus is identified as the childbearing organ with regular monthly menstrual bleeding as an essence of womanhood. Similar feelings have been reported by menopausal women in our earlier studies.^[4] Irrespective of type and route of hysterectomy, it is associated with certain complications like hot flushes, night sweats, backache, palpitations. ^[5] Long-term complications like urinary incontinence and anal incontinence, vaginal dryness. ^[6,7] Psychological effects like depression, anxiety, fatigue ^[8]. Along with that, concomitant oophorectomy increases women's risk to osteoporosis and coronary heart disease and thus possess excess mortality risk ^[8]. Because of these health impacts of hysterectomy many health professionals argue for alternative treatments, and that hysterectomy should be resorted to only in the case of life-threatening diseases. ^[9] Women must be empowered to make an informed decision on whether to have a hysterectomy or not for benign gynaecological disorders in view of above complications. Information on immediate outcomes of surgery, as well as the risk of developing disorders later in life should be made available to facilitate such a decision making. Hence present study is undertaken to gather relevant

information to educate the patients in Indian scenario.

2. Methods

The study will be conducted in two urban slum areas and two urban areas near Tirupati. Hysterectomy cases will be identified and listed through door-to-door survey by a female multipurpose health worker and the investigator. These women will be interviewed by a principal investigator through a schedule, about the treatment they underwent, symptom profile and complications after operation. Informed consent was obtained before the interview and explained the purpose of the study. A pre structured schedule is used to assess the study subject's socio-demographic profile, reproductive health profile, cause for hysterectomy, treatment pattern, expenditure, relief of symptoms and the level of complications after hysterectomy. All the collected data recorded in the pre-existing schedule. Socio economic conditions will be determined as per the guidelines of AP government. Data entry and analysis was done by using MS excel epi info 7, data was described in percentage, mean, standard deviation.

3. Results

About 400 women out of total 1000 reported, underwent hysterectomy. Among all, the lowest prevalence rates of hysterectomies which were reported in the urban areas – nearly 150/1000(15%) women. On the other hand, the urban slum area had the highest prevalence rate of hysterectomies 248 /1000 (24.8%) women. The median age of the women underwent hysterectomy were 43 years in all the areas covered in our survey. It is important to note that many women were reported undergoing the surgeries at younger age. Almost fifty percent (50% -400) of all the women who got their hysterectomy done before reaching 44 years of age.

But there is a difference between urban slum 24.8% and urban 15 %.

It is important to note that this paper utilized the information on, at what age women underwent hysterectomy. The implication of this is, that the proportion of young women undergoing hysterectomy will likely be higher with liberalisation of indications of hysterectomies. Age was a significant predictor of hysterectomy among women: the risk of hysterectomy increased with the increasing age.

Table 1: Population distribution according to Age

Age in years	Total Female Population	No underwent Hysterectomy	Percentage
25-35	200	3	1.5%
36-45	400	200	50%
46-55	400	195	48.5%

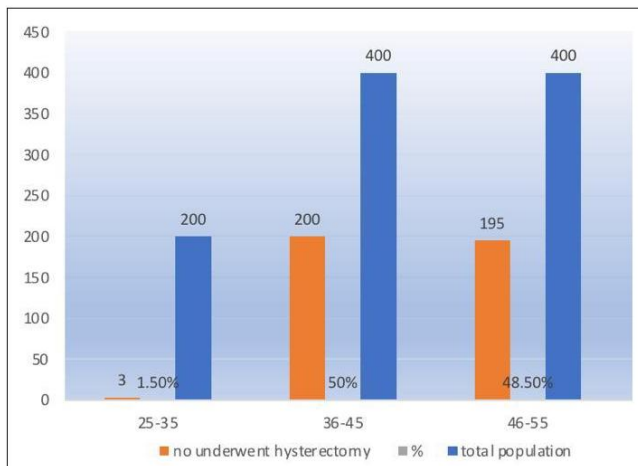


Table 2: Socio-Economic Group -Income Per Month

5000-10,000	125	31.25%
11,000-20,000	160	40%
>30,000	115	28.75%

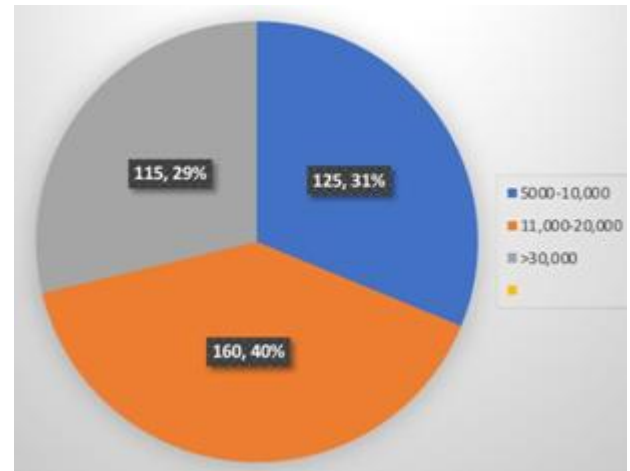


Table 3: Education

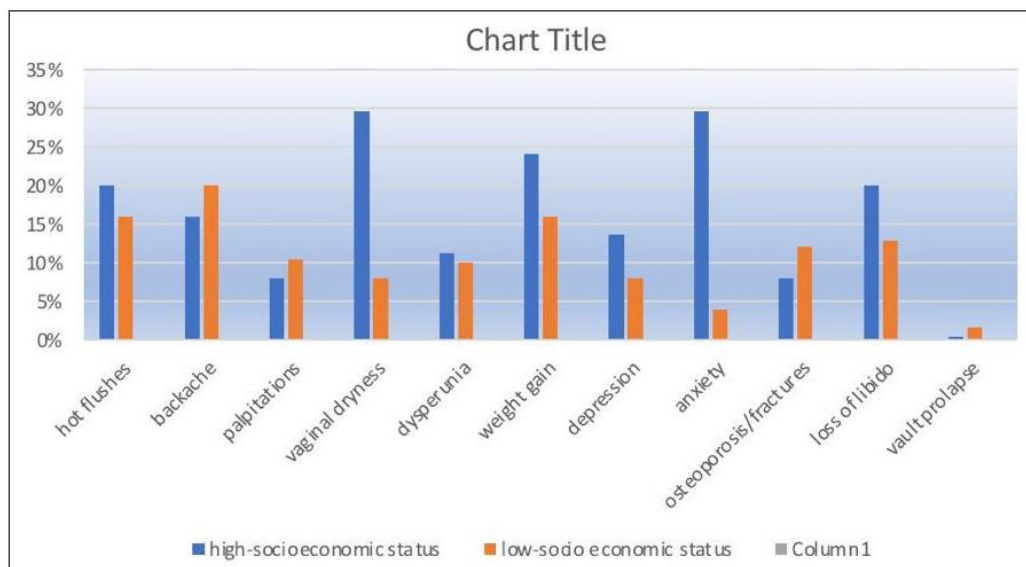
Education	Total	Percentage
Un-educated	120	30%
10-12 class	180	45%
Degree/PG	100	25%

Table 4: Place of operation

Hospital sector	Total number	Percentage
Government	112	28%
Private	288	72%

Table 5: Post operative complications

Complications	High Socio-Economic Class		Low Socio-Economic Class	
	No	%	No	%
Hot flushes	50	20	40	16
Backache	40	16	50	20
Palpitations	20	8	26	10.4
Vaginal dryness	30	29.6	20	8
Dyspareunia	28	11.2	25	10
Weight gain	60	24	40	16
Depression	34	13.6	20	8
Anxiety	30	29.6	10	4
Osteoporosis/Fractures	20	8	30	12
Loss of libido	50	20	32	12.8
Vault prolapse	1	0.4	4	1.6



Consideration

Before collection of data all the subjects were briefed, the purpose of the study and permission about publication was informed and written consent was obtained. Institutional Ethical committee approval has been taken.

4. Discussion

Nowadays unnecessary and non-indicated hysterectomies, particularly involving young, pre-menopausal women from the poor socio-economic background is becoming common in India. The existing research shows, poor illiterate slum area women are prone to hysterectomy even for routine gynaecological complaints, such as abdominal pain, white discharge, and dysmenorrhoea^[9]. The health care facilities are following their personal wish without offering alternatives for economic benefit. Majority of these hysterectomies are done at private sector.^[10]

In US, for instance, there are potential alternative treatment options available for nearly 90% of the total 6,00,000 annual hysterectomy surgeries^[11]. Research by Desai et al. (2017) on hysterectomy among poor Gujarati women working in informal sector showed that, While many women viewed uterus solely for the reproductive function it served and thus sought hysterectomy when faced benign gynaecological issues that affected their day-to-day lives.^[12]

As noted earlier, more than half (50%) of the women who underwent hysterectomy were less than 43 years of age in our study but US, mean age of hysterectomy is 50.76 years^[13]. Studies show that women who experience premature menopause (before age 40 years) or early menopause (between ages 40 and 45 years) have increased risk of increased mortality and morbidity, cardiovascular, neurological, and psychiatric diseases, osteoporosis, and other sequelae.^[14]

Women who had hysterectomy with bilateral oophorectomy were more likely to have low sexual desire, less likely to be sexually active, and more likely to be dissatisfied with their sexual life and partner relationships^[15]. In addition, we found that sterilized women (tubal ligation) were more likely to undergo hysterectomy than women who were not sterilized. Other studies have also shown similar association between sterilization and hysterectomy, as tubal ligation has been associated with higher risk of menstrual disorders and gynaecological ailments^[16].

Our study shows women who had higher education were less likely to go for hysterectomy than women who had no education or attended school only up to primary level. On the other hand, women from economically better-off households were more likely to choose this surgical procedure than those from poor households. This indicates that women with good resources but less education are perhaps more prone to hysterectomy and there is need for better education among them on alternatives.

5. Conclusion

This study has attempted to analyse hysterectomy prevalence and its socio-economic determinants using the

data covering urban and urban slum of Tirupati in Andhra Pradesh, India. Our findings revealed that age, female literacy, prior sterilization, socio economic status influence the rate of hysterectomy. In India, the research on hysterectomies for benign reproductive health ailments has to focus on health providers' (mal)practices. Barring one notable exception of a study by Desai et al. (2017), a holistic understanding of health and socio-cultural contexts that guide patients' and providers' preferences for hysterectomy against alternative options is sorely lacking^[9]. More research is needed therefore to prevent the complex dynamics of hysterectomy in India which could be used to help women make more informed choices and in turn advance their reproductive health and choice.

References

- [1] Byles JE, Mishra G, Schofield M. Factors associated with hysterectomy among women in Australia. *Health and Place*. 2000; 6(4): 301-308. doi:10.1016/S1353-8292(00)00011-3 [PubMed] [Cross Ref] [Google Scholar]
- [2] Whiteman MK, Hillis SD, Jamieson DJ, Morrow B, Podgornik MN, Brett KM, Marchbanks PA. In patient hysterectomy surveillance in the United states. 2000-2004 AM J Obstet. Gynecol 2015; 213(1): 23-29. doi:10.1016/j.ajog.2015.02.019 [PubMed] [Cross Ref] [Google Scholar]
- [3] Singh A, Arora AK. Why hysterectomy rate are lower in India. *Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine*. 2008; 33(3): 196. doi: 10.4103/0970-0218.42065. [PMC free article] [PubMed] [CrossRef] [Google Scholar] [Google Scholar]
- [4] Kaur S. *Profile of women in early postmenopausal age in suburban Chandigarh, India. [PhD Thesis (unpublished)]* Chandigarh: PGIMER; 2001. [Google Scholar]
- [5] Carlson KJ. Outcomes of hysterectomy. *Clin Obstet Gynecol*. 1997; 40(4): 939-946. doi: 10.1097/00003081-199712000-00029. [PubMed] [CrossRef] [Google Scholar]
- [6] Kjerulff KH, Langenberg PW, Rhodes JC, Harvey LA, Guzinski GM, Stolley PD. Effectiveness of hysterectomy. *Obstet Gynecol*. 2000; 95(3): 319-326. [PubMed] [Google Scholar]
- [7] Brown JS, Sawaya G, Thom DH, Grady D. Hysterectomy and urinary incontinence: a systematic review. *Lancet*. 2000; 356(9229): 535-539. doi: 10.1016/S0140-6736(00)02577-0. [PubMed] [CrossRef] [Google Scholar]
- [8] Bachmann GA. Psychosexual aspects of hysterectomy. *Womens Health Issues*. 1990; 1(1): 41-49. doi: 10.1016/S1049-3867(05)80015-5. [PubMed] [CrossRef] [Google Scholar]
- [9] Desai S, Campbell OM, Sinha T, Mahal A, Cousens S. Incidence and determinants of hysterectomy in a low-income setting in Gujarat, India. *Health Policy Plan*. 2017; 32(1): 68-78. doi: 10.1093/heapol/czw099. [PMC free article] [PubMed] [CrossRef]

- [10] Dragisic KG, Milad MP. Sexual functioning and patient expectations of sexual functioning after hysterectomy. *Am J Obstet Gynecol.* 2004; **190**(5): 1416–1418. doi: 10.1016/j.ajog.2004.01.070. [PubMed] [CrossRef] [Google Scholar]
- [11] West S, Dranov P. *The hysterectomy hoax: the truth about why many hysterectomies are unnecessary and how to avoid them (3rd edition)* New Jersey: Next Decade; 1994.
- [12] Mamidi BB, Pulla V. Hysterectomies and violation of human rights: case study from India. *International journal of social work and human services. Practice.* 2013; **1**(1):64–75. [Google Scholar]]
- [13] Farquhar CM, Steiner CA. Hysterectomy rates in the United States: 1990–1997. *Obstetrics and Gynecology.* 2002; **99**:229–234. [PubMed] [Google Scholar]
- [14] Shuster LT, Rhodes DJ, Gostout BS, Grossardt BR, Rocca WA. Premature menopause or early menopause: long-term health consequences. *Maturitas.* 2010; **65**(2):161–166. doi: 10.1016/j.maturitas.2009.08.003. [PMC free article] [PubMed] [CrossRef] [Google Scholar]
- [15] Dennerstein L, Koochaki P, Barton I, Graziottin A. Hypoactive sexual desire disorder in menopausal women: a survey of Western European women. *J Sex Med.* 2006; **3**(2):212–22. doi: 10.1111/j.1743-6109.2006.00215.x. [PubMed] [CrossRef] [Google Scholar: 10.1016/j.maturitas.2009.08.003. [PMC free article] [PubMed] [CrossRef]
- [16] Hillis SD, Marchbanks PA, Tylor LR, Peterson HB. Higher hysterectomy risk for sterilized than nonsterilized women: findings from the US collaborative review of sterilization. *Obstet Gynecol.* 1998; **91**(2):241–246. doi: 10.1016/S0029-7844(97)00648-0. [PubMed] [