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Original Research Article

Hysterectomy: still a treatment of choice for pelvic pathologies in rural India

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ABSTRACT

Background: Hysterectomy has always been a subject of controversy in India and increasing rate of unnecessary hysterectomies in young, premenopausal women is cause for concern regarding women's health and rights. The aim of this study is to review and analyse cases of hysterectomy in a rural population and to correlate with underlying factors behind seeking hysterectomy as a treatment of choice for pelvic pathologies.

Methods: This was an ambidirectional observational descriptive study in which 352 women were included who underwent hysterectomy between January 2016 to July 2017 in the Department of Obstetrics and Gynecology, Government Medical College Rajnandgaon and a tertiary care referral hospital of central Chhattisgarh, India.

Results: Majority were between 31-50 years of age group, grandmultipara, uneducated, insured by National health insurance scheme. 76.1% patients had attended medical college hospital to avail free services. 60.5% took prior treatment from unqualified/ unregistered/registered general practitioners. Erratic use /use of suboptimal dosage of hormones to stop abnormal uterine bleeding, nonspecific antibiotics to treat infection, incomplete treatment and poor compliance were possible reasons behind failure of previous treatments. Abnormal menstruation was the commonest presenting complaint observed in 75.2%. 72.4% patients refused to come for follow up and reasons were unavailability of transport facility, fear of losing job, loss of daily wages and financial constraints. Commonest indication for hysterectomy was symptomatic fibroid in 32.0%. Total abdominal hysterectomy with bilateral salpingo-oophorectomy was the most common procedure done in 59.0%. The rate of hysterectomy came out to be 57.6% which is quite higher than that reported in other studies. Fever was the most common complication encountered in 0.80%.

Conclusions: Despite the remarkable improvement in conservative management and media coverage, hysterectomy still remains the most preferred modality of treatment with excellent satisfaction for pelvic pathologies in rural India.

Keywords: Hysterectomy, Pelvic pathologies, Rural India

INTRODUCTION

The rate of hysterectomy in rural India seems to be on the rise. Uteruses are of no use once they have had children: a common belief amongst poor women living in villages. Untreated gynecological morbidity, barriers to treatment and lack of options available at a primary level may contribute further to unnecessary procedures in younger women. A study conducted in a western state of India

(Gujarat) pointed out that 7-8% of rural women and 5% of urban women had already undergone hysterectomy at an average age of 37 years, while newer study from a same state (Gujarat) states, that the only estimate of incidence in India is 20.7 per 1000 woman-years (95%) at a relatively low mean age of 36 years, which is at least four times higher than the highest global rates such as the United States (5.1 per 1000), Germany (3.6 per 1000) and Australia (3.1 per 1000) [rates in woman-years].^{1,2}

However newer and lesser invasive treatment options, are leading to fall in the trends for total abdominal hysterectomy (TAH) with or without salpingo-oophorectomy in developed world.³ The condition is exactly opposite in developing countries, especially in rural population where due to lack of knowledge or social stigma, poor transport and health services, women usually present very late and desire a permanent cure for their problems with requirement of minimal follow up and free treatment in the hospital.^{4,5} The aim of this study is to review and analyse cases of hysterectomy in a rural population and to correlate with underlying factors behind seeking hysterectomy as a treatment of choice for pelvic pathologies.

METHODS

This ambidirectional observational descriptive study was conducted in the Department of Obstetrics and Gynecology, at Government Medical College Rajnandgaon and a tertiary care referral hospital, which included 352 women out of total 600, who attended OPD for gynecological problems between January 2016 to July 2017.

Inclusion criteria

- All women, irrespective of their age and parity, who underwent hysterectomy for pelvic pathology
- Any route of hysterectomy

Exclusion criteria

- Emergency and obstetric hysterectomy
- Malignant condition as an indication

Prior approval from institutional ethical committee was obtained. Base line data were collected from in-patient file. Particulars of previous treatment i.e. treating personnel’s, number of visits, details of previous medications taken were obtained by studying referral

tickets/prescription letter/OPD slip as brought by the patient. Questionnaires regarding previous treatment, reasons behind attending college hospital for surgery, reasons behind seeking hysterectomy over conservative treatment were asked in detail through face-to-face interviews before surgery. Other determinants like complaints, indications, types of hysterectomy performed, complications and outcome were also recorded and studied. Finally, all parameters were separately analyzed and discussed.

Statistical analysis

Qualitative data were presented as frequencies and percentages by using SPSS, version 21.

RESULTS

Table 1: Demographic details (N=352).

Variable	No. of women	Percentage
<30	08	02.2
31-40	133	38.0
41-50	116	33.0
51-60	72	20.0
61-70	20	06.0
>70	03	0.8
Parity		
1-3	128	36.4
4-6	212	60.2
>6	12	03.4
Socioeconomic status		
Lower middle	42	12.0
Low	310	88.0
Educational status		
Educated up to primary	82	23.0
Uneducated	270	77.0
Insurance status		
Uninsured	151	43.0
Insured	201	57.0

Table 2: Particulars of previous treatment (N= 352).

Percentage	Treating Personnel’s	>One visit	Received symptomatic /hormonal treatment	Possible reasons for failure treatment	Reasons for attending college hospital
48	Unqualified /Unregistered medical practitioners	Yes	Yes	Erratic use of hemostatics drugs, progesterone to stop bleeding. Nonspecific/incomplete course of antibiotics to treat infections	Can’t pay for Hysterectomy in private hospitals
13	Registered general practitioners	Yes	Yes	do	Referred to medical college
11	Gynecologist	Yes	Yes	Patients left treatment incomplete/poor compliance	Wanted another opinion
28	None	No	No		Directly came to OPD to avail free services

Out of the total 352, 249 (71.0%) women were between 31-50 years of age group. Majority were grandmultipara, uneducated, from low socioeconomic status, insured by National health insurance scheme (Table 1).

In the present study, 213 (60.5%) patients had prior treatment from unqualified/unregistered/registered general practitioners. Majority of the patients consulted their treating personnel's more than one time. Erratic use or use of suboptimal dosage of hormones to stop bleeding, nonspecific antibiotics to treat infection and poor compliance/incomplete treatment were the possible reasons behind failure of the previous treatment in these patients. 268 (76.1%) patients had attended college hospital to avail free services as they were unable to pay for treatment in private hospital (Table 2).

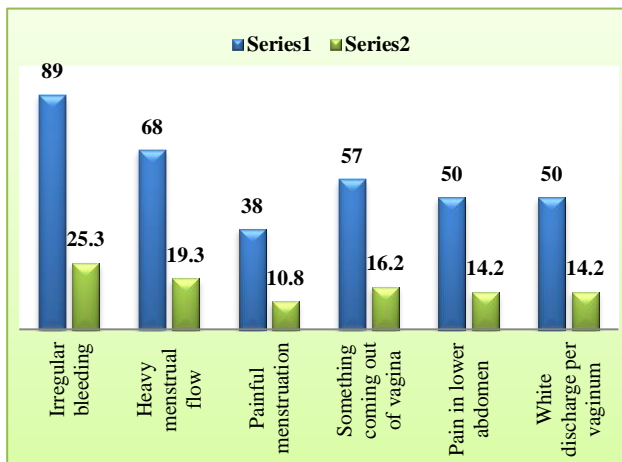


Figure 1: Presenting complaints (N=352).

The most common presenting complaint in this study was abnormal menstruation in 195 (55.3%), followed by something coming out of vagina in 57 (16.1%) (Figure 1).

Table 3: Reasons behind seeking hysterectomy (N=352).

Variable	No.	%
Don't want to come for follow-ups	255	72.4
Poor/no transport facility available	50	14.2
Fear of losing job/loss of daily wages	105	30.0
Coming again and again is quite expensive and distressing	100	28.4
Want immediate relief from menstrual problems	215	61.0
Think that uterus is of no use once they have had children	180	51.1
Tired of taking medication	152	43.1
Think that swollen uterus should be removed	99	28.1
Fear of cancer	92	26.1

*More than one variable was present in each group.

When conservative management offered, 255 (72.4%) patients refused to come for follow up and reasons were

unavailability of transport facility, fear of losing Job, loss of daily wages, unable to afford treatment expense. (Table 3).

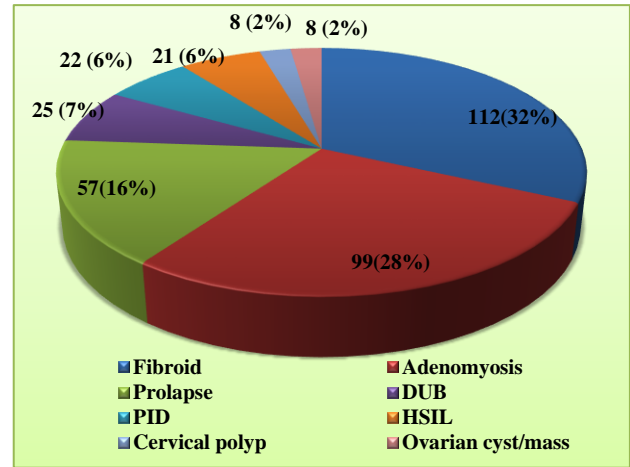


Figure 2: Indications for hysterectomy (N=352).

Symptomatic fibroid in 112 (32.0%) followed by Adenomyosis in 99 (28.1%) were the most common indications for hysterectomy (Figure 2).

Table 4: Types of hysterectomy performed (N=352).

Types	No. of women	(%)
Total abdominal hysterectomy (TAH)	65	18.4
Total abdominal hysterectomy with bilateral salpingo-oophorectomy (TAH+BSO)	207	59.0
Total abdominal hysterectomy with unilateral salpingo-oophorectomy (TAH+ Unilateral SO)	20	05.6
Vaginal hysterectomy (VH)	60	17.0

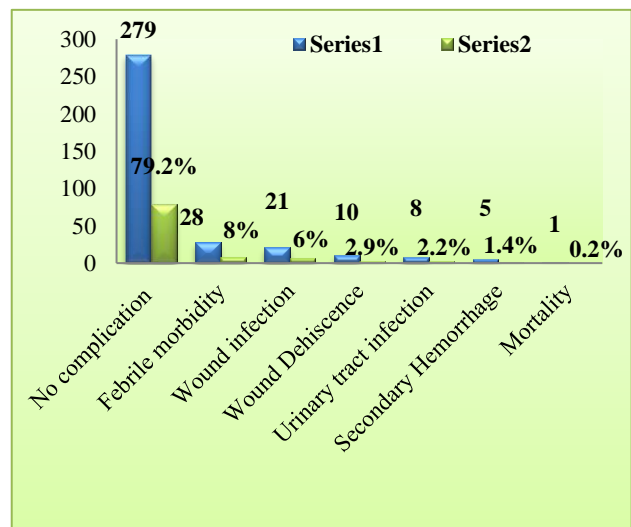


Figure 3: Complications (N=352).

Overall, total abdominal hysterectomy with bilateral salpingo-oophorectomy (TAH+BSO) was the most common procedure done in 207(59.0%) women (Table 4).

Complications observed in 73 (21.0%) patients, of which the most common complication was fever in 28 (08.0%). Unfortunately, one patient couldn't survive (Figure 3).

DISCUSSION

This study was conducted at Government Medical College Hospital Rajnandgaon, a newly formed medical college for undergraduates and one of the largest referral centers of central Chhattisgarh. It has highest population of tribal people in India; members of Scheduled Castes (SC) and Scheduled Tribes (ST) make up 50% of the state and majority of them reside in rural areas.

In the study period from January 2016 to July 2017, total 600 women had attended gynecology OPD for the gynaecological problems, of which 352 women underwent hysterectomies. The rate of hysterectomy came out to be 57.6% which is quite higher than that reported in a study by Singh A et al, done at govt. medical college Raipur, which is the largest and oldest medical college of our state, where rate was 14.9 to 9.61 per 1000 women per year. The reason may be attributed to lack of equipments for minimally invasive procedures in the department.⁶

Majority of women surveyed for study were from rural background, belong to low socioeconomic status and insured by National health insurance scheme which supports the fact that the incidence of hysterectomy is higher amongst women with relatively lower income group.²

The rate of hysterectomy is higher i.e. 37.0% in women of 31-40 years of age group, while it is 32.0% in 41-50 years of age group in our study, which indicates that hysterectomies are still being performed on younger women, it also indicates a high level of gynaecological morbidity and unnecessary use of hysterectomy for treating gynaecological ailments similar as other studies.^{1,6-8}

Majority of 60.2% women were from parity group of 4-6, which was followed by parity group of 1-3 in 36.3% similar as data from previous studies that support lower use of contraception in our country.⁹⁻¹¹

In this study, majority of 76.1% patients came to our hospital to avail free services as they were unable to pay for treatment in private hospitals. It has been noted that most of the private hospitals in rural areas only treat uncomplicated cases similar as the present study where 13.0% patients who referred to us were having associated medical problems. Furthermore, poor people too prefer private hospitals over government for the sake of getting

immediate care, good care and best facility because it is a common belief that getting anything free is not worthy likewise free health services. Moreover, public facilities lack the infrastructure necessary to perform tests and procedures so that women are forced to visit private hospitals or diagnostic centers to receive services.⁷

Of the total, 60% patients took prior treatment (alternative/symptomatic/hormonal treatment) from unqualified /unregistered/registered practitioners. After going through the referral tickets/prescription letters/OPD slips brought by the patients, we found that the dosage of haemostatic drugs and progesterone advised to stop bleeding were suboptimum or erratic, same way, antibiotics prescribed to treat infections were nonspecific and inadequate in dosage. This could be the reason behind failure of treatment given previously. Quite similar pattern noted in previous studies, which says that in rural India, regarding women's reproductive health-seeking behaviour, most of the women prefer to tolerate their problems till it becomes intolerable and when they decide they prefer to approach local ASHA/LHV/unqualified /unregistered /rural medical practitioners. These practitioners they in turn with or without giving initial treatment, refer them mostly to a qualified private practitioner to get honorarium. In a majority of cases, the healthcare provider whom women had first contacted had a greater influence on the selection of the hospital. Such perceptions and beliefs constitute a "lay-health culture" which would intervene between the presence of morbidity condition and its necessary treatment.^{7, 12-14}

In the present study, 75% women presented with menstrual disturbances similar as previous studies.^{9,15,16} Although conservative medical as well as surgical treatments have been thoroughly explained and offered, despite that majority of women demanded hysterectomy and the main reason was unwillingness for follow up due to unavailability of transport facility, fear of losing Job, loss of daily wages and financial constraints.^{4,5,17} However, 51.1% said that uterus is of no use once they have had children, 28.1% wanted to remove their swollen uterus and 26.0% women worried about their risk of developing cancer, which indicates urgent need of health awareness regarding importance of uterus in women's health, amongst rural women and educational training programs for health personnel's to update their knowledge about conservative management.⁷

Symptomatic fibroid (32.0%) was the most common indication in this study. In review of literature also, fibroid uterus is reported as the most common indication for hysterectomy worldwide.^{16,18-21} However, there has been controversy regarding indications for hysterectomy for benign gynecological diseases in Indian sub-continent.²²

Of total, only 6% surgeries were done for premalignant cervical lesions in the study which conclude that rural

women with cervical malignancy usually present late due to lack of awareness, non availability of adequate screening tests and pathologists. Thus surgery for malignant disease is life-saving, whereas for that benign disease to improve the quality of life, hence hysterectomy is not only a cost-effective but also associated with excellent satisfaction as compared to conservative therapies.^{21,22}

Researchers have observed that, National Health Insurance Program (Rashtriya Swasthya Bima Yojana [RSBY]) for people living below poverty line in India gives free medical/surgical services for inpatient treatment, but not for outpatient conservative surgeries, they also opine that time is not a constraint for poor, unemployed rural population; who are willing to spend a week in hospital for hysterectomy rather than to spend hefty amounts of money on minimally invasive surgery (laparoscopy) and get back to home early.^{22,23}

Total abdominal hysterectomy with bilateral salpingo-oophorectomy was the most common procedure done in 59.0% as opposed to another study where rate is higher i.e. 87.3%.²⁴ Although importance of ovarian conservation had been explained thoroughly to the patients, despite the fact none of them body agreed due to fear of developing ovarian cyst/cancer in future.

Overall complication rate in present study was 21.0% which is higher than the studies done earlier indicates need of strengthening of existing system including monitoring facilities in the hospital. Unfortunately, we lost one patient due to acute respiratory distress syndrome preceded by septicaemia. Thus, hysterectomy is a surgery which has been used and misused, underused, and abused at different times in Gynecology by the provider and beneficiary.²⁵

CONCLUSION

In Chhattisgarh, there is a huge shortage of man power in the public health sector. People from remote areas are very innocent. They are unable to distinguish doctors amongst health workers and quacks thus easily get influenced and misguided. Patients often reach to gynecologist after undergoing unlimited trials and errors of treatment, financially drained out, mentally confused and frustrated, refuse to accept conservative treatment. Finally exasperated with the poor health facilities, hysterectomy appears as a cost-effective prophylaxis, a treatment of choice and permanent solution with excellent satisfaction. However, there is an urgent need for more detailed research on this subject so that it would help government to revise health policies and practices to change rural scenario.

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