

# Hysterectomy at the University of Ilorin Teaching Hospital, Ilorin, Nigeria: A ten year review

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## Summary

*Hysterectomy is a common and major gynaecological surgery with its attendant complications. Thus adequate training and retraining most especially on vaginal hysterectomy is required to avert these complications. The aim of this study is to review all cases of hysterectomy performed in University of Ilorin Teaching Hospital Ilorin, Nigeria over a 10-year period. A retrospective study of the case notes and theatre records of all patients that had hysterectomy between 1<sup>st</sup> January 1998 and December 31<sup>st</sup> 2007. Demographic and clinical information was collected from the patients case records. Hysterectomy accounted for 212 out of 2,170 major gynaecological surgeries (9.8%). Abdominal hysterectomy was responsible for 92% (195) while vaginal hysterectomy accounted for 8% (17) of all cases of hysterectomy. The most frequent age range was 45-49 years (25.9%). Ninety three (43.9%) of the patients were grandmultiparous while nulliparity accounted for 1.9% of cases. The commonest indication for hysterectomy was uterine fibroids (72.6). Majority of the patients (85.5%) were operated by consultants, 30(14.2%) by senior registrars. Postoperative complications encountered included, anaemia (32.1%), followed by fever (20.3%) and wound infection (2.5%). Most of the patients (60.8%) were discharged home between eight and ten days and there was no mortality. Hysterectomy constitutes about 10% of major gynaecological procedures. Total abdominal hysterectomy accounted for the majority of hysterectomies and was associated with significant morbidity. Adequate training and more use of vaginal route is recommended to reduce complications.*

**Key words:** Audit, hysterectomy, Ilorin, Nigeria.

## Introduction

Hysterectomy, which is the surgical removal of the uterus and cervix, and for some conditions the fallopian tubes and ovaries is a traditional surgery in gynaecological practice and has been associated with a lot of psychosocial issues.(1) It is a common non-pregnancy related major gynaecological surgery in developed world. However, in developing countries; most women will reject hysterectomy for the fear of surgery, loss of femininity and sexual rejection by their spouses.(1) Therefore, hysterectomy is reluctantly accepted only when there is an obvious life threatening pathology to the uterus or the adnexae.

The indications for this operation are

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usually the treatment of various common non-cancerous uterine conditions that lead to disabling pains, discomfort, uterine bleeding and emotional stress(3) and also an important component in the treatment of uterine malignancies. Although, this procedure highly successful in curing the disease of concern, it is nevertheless a surgery with accompanying risks, morbidity and mortality that any operative procedure carries.

In Cameroun, hysterectomy accounted for 9.33% of all major gynaecological surgeries,(4) while it was responsible for 10.2% of gynaecological surgeries in UCH, Ibadan, Nigeria.(5) Hysterectomy can be approached either through the abdominal route, the vaginal route or as laparoscopic procedure. The route of choice depends on a variety of factors, notably, uterine size, pelvic adhesions, uterine /cervical pathology, pelvic floor relaxation, the need to carry out concomitant operations with the procedure and the expertise of the surgeon.(1)

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The route chosen should be individualized considering the absolute and relative contra indication to it and the skill of the Gynaecologist.(6) Abdominal hysterectomy should, whenever possible, include the removal of the cervix because the cervix has limited useful purpose once the uterus is removed. On the other hand, it may be a source of irritating vaginal discharge, and bleeding, or it may undergo malignant changes.(7) However some authors believe that the cervix should not be removed unless there is specific reason. They suggest that removal of the cervix leads to a decrease in sexual pleasure, increase operative and post operative morbidity, vaginal shortening, vault prolapse, abnormal cuff granulations and potential for the oviduct to prolapse.(8,9)

The risk of one or more complications after abdominal hysterectomy was 1.7 times the risk after vaginal hysterectomy, like wise the risk for blood transfusion which was 1.9 times higher for abdominal hysterectomy.(10) Also, hospital stay and return to normal activities were shorter with vaginal hysterectomy compared with abdominal hysterectomy(11) Despite this fact, studies show a preference for abdominal route by most gynaecologist in our environment, even when vaginal route would have sufficed, (5) possibly due to better skills of carrying out abdominal hysterectomy than vaginal hysterectomy by many gynaecologist.

Although abdominal hysterectomy is safe, the surgery can be complicated by urologic injuries, haemorrhage, postoperative sepsis and febrile morbidity. In Nnewi Nigeria, hysterectomy accounted for all cases of urological injuries associated with gynaecological surgeries. (12) In our center, the sole indication for vaginal hysterectomy, just like most centers in the country is uterovaginal prolapse. This current study is an audit of hysterectomies done in our centre over a 10-year period.

## Methods

This is a retrospective study of the case notes and theatre records of all patients who had hysterectomy between 1<sup>st</sup> January 1998 and 31<sup>st</sup> December, 2007 in University of Ilorin Teaching Hospital, Ilorin. Information obtained included age, parity, occupation, tribe and educational

status. Others include clinical features, indications for surgery, procedures performed, estimated blood loss, duration of surgery, cadre of surgeon, no of pint of blood transfused, complications encountered and the duration of hospital stay. Temperature of 38°C or more obtained after 24 hours of surgery was taken as post operative fever while pack cell volume of less than 30% was taken as anaemia. The data obtained was analyzed using SPSS 15 version. All cases of obstetric hysterectomies were excluded from the study.

## Results

During the period under review, there were 212 cases of hysterectomy out of 2,170 major gynaecological surgeries thus giving the incidence of 9.8%. Table I shows the age and parity distribution of patients who had hysterectomy. The modal age was 45-49(25.9%) followed by 40-44 and 50-55 age groups (19.3%). Ninety three (43.9%) of the patients were grandmultiparous while nulliparity accounted for 4 (1.9%) of cases. Most of the patients, 107 (50.5%) were traders and one (0.5%) was a student. Majority of the patients, 202 (95.2%) were Yoruba while 5 (2.4%) were Hausa and Ibo respectively. Ninety two (43.4%) attained tertiary level of education while seventy nine (37.3%) were illiterates. Eighteen (8.5%) and twenty three (10.8%) attained primary and secondary level of education respectively.

Table 2 illustrates the clinical features. Some of the patients presented with more than one symptom. One hundred and fourteen (53.8%) patients presented with menorrhagia, 41 (19.3%) abdominal swelling, 39 (18.4%) abnormal vaginal bleeding, 10 (4.7%) dysmenorrhea, 2 (0.9%) postcoital bleeding while 4 (1.9%) presented on account of vaginal discharge.

Table 3 shows the indications and types of . The main indications in this study were uterine fibroid in 154 (72.6%), uterovaginal prolapse in 17 (8.0%), cervical intraepithelial lesion (CIN III) 15 (7.1%), 14 (6.6%) uterine cancer and 12 (5.7%) ovarian cancer respectively. Ninety (42.5%) had TAH alone, 37 (17.5%) TAH and unilateral oophorectomy, 36 (17%) TAH and bilateral oophorectomy, 32 (15%) had subtotal hysterectomy while 17 (8%)

**Table 1: Age and parity distribution of the patients who had hysterectomy**

Age	Number of patients	Percentage
20-24	3	1.4
25-29	6	2.8
30-34	9	4.2
35-39	31	14.6
40-44	41	19.3
45-49	55	25.9
50-54	41	19.3
>55	26	12.3
<b>Parity</b>		
0	4	1.9
1	9	4.2
2	17	8.0
3	40	18.9
4	49	23.1
5	40	18.9
>5	53	25.0

**Table 2: Clinical features in patients who had hysterectomy**

Symptom	Frequency	%
Menorrhagia	114	53.8
Abdominal mass	41	19.3
Abnormal vaginal bleeding	39	18.4
Vaginal protrusion	17	8.0
Dysmenorrhea	10	4.7
Vaginal discharge	4	1.9
Acute urinary retention	2	0.9
Post coital bleeding	2	0.9

\* The total is more than 212 because some patients have more than 1 symptom

**Table 3: Indications for hysterectomy and type of procedure in Ilorin**

Indication	Frequency	%
Uterine fibroids	154	72.6
UV prolapse	17	8.0
CIN 3	15	7.1
Endometrial cancer	14	6.6
Ovarian cancer	12	5.7
Total	212	100

had vaginal hysterectomy.

About two third of the patients (59.4%) lost between 500-1000ml of blood, 39 (18.4%) less than 500ml while 15 (7.1%) greater than 2000ml. The duration of the surgery was between 2-3 hours in 129 (60.8%), 37 (17.5%) under two hours while in 2 patients (0.9%) the

duration of the surgery lasted longer than five hours. Also, majority of the patients (85.8%) were operated by consultants, 30 (14.2%) senior registrars. One hundred and one (47.6%) patients were not transfused with blood, 19 (9%) had a unit of blood, 31 (14.6%) two units of blood while 14 (6.6%) had more than five units



**Table 4: Complications associated with hysterectomy in Ilorin.****\*The total is more than 212 as some patients have multiple symptoms**

Complications	Frequency	%
None	92	43.4
Anaemia	74	34.9
Post -op fever >24hrs	48	22.6
Wound infection	6	2.8
Chest infection	6	2.8
Burst abdomen	5	2.4
Urinary tract infection	4	1.9
Deep vein thrombosis	1	0.5
Bladder injury	1	0.5

of blood transfused.

Table 4 shows the complications associated with the procedure. Seventy four (31.2%) had anaemia, 48 (20.3%) fever, six (2.5%) wound infection, 6 (2.5%) chest infections. Only a patient each had injury to the bladder and deep venous thrombosis while 92 (38.8%) did not suffer any forms of complications. Most patients (60.8%) were discharged home 8-10 days after surgery, 5 (2.4%) spent less than 8 days while 50 (23.6%) were discharged more than ten days after surgery. There was no mortality.

## Discussion

The rate of hysterectomy as a proportion of all the major gynaecological surgeries was low in this study (9.8%). This is in consonance with 9.33%, 10.2% and 8.5% obtained in Cameroun, Ibadan and Ilorin respectively.(4,5,12) Differing culture and attitude to hysterectomy among women in various parts of the world may be responsible for disparities in the rates of hysterectomy. For example, in the United Kingdom about 20% of women there would have undergone hysterectomy by the age of 55 years.(2) Unlike in the developed parts of the world, women in many developing countries will reject hysterectomy for the fear of surgery, loss of femininity, loss of menstrual flow and sexual rejection by their spouses.(1)

Abdominal hysterectomy accounted for the majority (92%) of all the hysterectomies done within the review period. This is similar to the reports obtained from other centers in the country.(5, 13, 14) This could imply that most

patients are subjected to abdominal hysterectomy with its associated morbidity, even when vaginal hysterectomy would have sufficed. This may be due lack of skill and misconceptions regarding the safety and suitability of vaginal hysterectomy. Thus training and re-training in vaginal hysterectomy is advocated to reduce significantly the morbidities and mortality associated with abdominal hysterectomy.

Uterine fibroid is the leading indication for abdominal hysterectomy from our study. This is not different from reports from other centers in the country.(4,5,12-15) This is not the case in the United States of America where uterine fibroid accounted for over one third of hysterectomies.(16) This could be related to the traditional teaching that favors abdominal route for uterine size more than 12-14weeks.(17) However, several studies have reported safety of vaginal route, even when the uterine size was above 14weeks.(2,16) Thus emphasis should be based on skill acquisition for vaginal route.

In this study, the procedure was carried out by consultant in 182 (85.8%) women. This agrees with findings in the USA.(16) The reason being that hysterectomy is a major gynaecological procedure which is better handled by the most senior doctors in the unit. This is expected to minimize morbidities and mortality from the procedure because consultants are presumed to have acquired the skills and dexterity required for the procedure.

The complication rate in this study is significantly high and const mainly of anaemia, febrile morbidity and wound infection. This could be minimized by optimization of the

patients' condition prior to surgery and use of prophylactic antibiotics and developing and employing good surgical techniques by the gynaecologist.

Abdominal hysterectomy accounted for the majority of hysterectomies and was associated with significant morbidity. Adequate training and more use of vaginal hysterectomy is recommended to reduce these complications.

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