

**Two Years Retrospective Review Of Elective Hysterectomy At Jimma
University Specialized Hospital, Ethiopia**

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A research proposal to be submitted to anesthesia department, for partial fulfillment of the requirements for the degree of bachelor of science (BSc) in anesthesiology in Jimma University.

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JIMMA UNIVERSITY

**COLLEGE OF PUBLIC HEALTH AND MEDICAL SCIENCES,
DEPARTMENT OF ANSTHESIA**

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A research proposal to be submitted to department of anesthesia, for partial fulfillment of the requirements for the degree of bachelor of science (BSC) In a anesthesiology in Jimma university

PROPOSAL SUMMARY

Background:- Hysterectomy is one of the commonest major gynecological surgeries performed all over the world. A hysterectomy is an operation to remove a woman's uterus. The uterus is the place where a baby grows when a woman is pregnant. Sometimes, the ovaries and fallopian tubes also are taken out. Hysterectomies are very common-one in three women in the united states has had one by age 60.

Objectives:- To determine the socio-demographic characteristics, the indications, the intraoperative and postoperative complications of patients who undergone elective hysterectomy with an aim to improve management at our unit.

Methods:- This is a retrospective cross sectional study in Jimma university specialized Hospital, an urban community in south eastern Ethiopia. The study is a descriptive analysis of all cases of hysterectomy for over a 2 year period September1, 2004-August30, 2005 E.C). Information on socio-demographic characteristics, presenting symptoms, indication for surgery, type of hysterectomy, operative findings, blood transfusion, per-morbid condition, duration of hospital stay and post-operative morbidity were retrieved and analyzed.

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ACRONYMS AND ABBREVIATIONS

DVT- Deep vein Thrombosis

JUSH-Jimma university specialized Hospital

LAVH-Laparoscopically Assisted vaginal Hysterectomy

PID- Pelvic inflammatory Disease

SRP-Student research program

SRPO-Student research proposal office

TAH- Total vaginal Hysterectomy

UVP- Uterovaginal prolepse

CHAPTER ONE

1. Introduction

1.1. Statement of the problem

Hysterectomy, which is the surgical extirpation of the uterus, is a traditional surgery in gynecological practice and has been associated with many medical, surgical, emotional, and sexual issues. It is a common gynecological surgery in developed countries and in the United Kingdom up to 20% of women would have undergone hysterectomy by the age of 55 years. However, in developing countries, most women may not accept hysterectomy for the fear of surgery, loss of reproductive potential, and the need to maintain femininity and retain menstrual function.

In Ilorin, Nigeria, hysterectomy accounted for only 8.5% of all major gynecological surgeries, while it was responsible for 10.2% of gynecological surgeries in Ibadan, Nigeria. Hysterectomy can be approached either through the abdominal route, the vaginal route, or as a laparoscopic procedure. The route of choice is usually dependent on the surgeon's preference based on skill and competence. However, current evidence indicates that vaginal hysterectomy offers advantages in regard to operative time, complication rates, requirement for blood transfusion, and early return to normal activities. Despite this fact, studies show a preference for the abdominal route by most gynecologists in our environment, even when a vaginal route would have sufficed.

Although abdominal hysterectomy is safe, the surgery can be complicated by urological injuries, hemorrhage, postoperative sepsis, and febrile morbidity. In Nnewi, Nigeria, Hysterectomy accounted for all cases of urological injuries associated with gynecological surgeries.

In Tikur Ambessa Teaching Hospital, Addis Ababa, elective hysterectomy accounts 78.3% of gynecologic surgery and vaginal hysterectomy is the commonest 53% followed by 47% TAH and Myomectomy. This study will review of hysterectomies done in our centre over in past 2 years period.

1.2. Significance of the study

Elective hysterectomy is one of the major gynecological surgeries performed in JUSH and can be associated with significant morbidity, mortality and psychological problems. This study will help to see the common indication and to reduce the risk and complication related to this study will help to see the common indication and to reduce the risk and complication related to this surgery. In addition to this the result of the study will be used as a base line information for further study.

CHAPTER TWO

LITRETURE REVIEW

A hysterectomy is a procedure where the uterus is surgically removed. It is relatively common procedure and estimated that 20 % women will have a hysterectomy by the time they are 55 years of age.

Study done in Sweden between July 2001 and January 2004 shows 3267 women undergone elective hysterectomy for non malignant pathology. According to this study the most common indications were dysfunctional uterine bleeding and fibromas. Among the 3267 patients 341 (10%) were considered to have developed a post operative infection. In cases where antibiotics prophylaxis had not been given, TAH and vaginal hysterectomy were associated with the highest frequency for post operative infection.

A study in Pakistan at Ayub teaching Hospital Abbottabad shows that there were 316 hysterectomies performed in a two year period with major indication of dysfunctional uterine bleeding (38%) and fibroid uterus, (27%) followed by prolapsed (22%). Complications developed in 14% out of these. The frequency of complications was related with indication for hysterectomy, age, parity and history of associated serious illness. It was found that frequency of complications in fibroid uterus was higher (1.2%) than that for Dysfunctional uterine bleeding (DUB) (1.0%). There was no operative death, while 5(1.5%) patients died within 2 weeks of surgery.

Study done in Finland shows that approximately 9,000 hysterectomies is done annually. The annual incidence was 348/100,000 in women's between the age of 45 and 49 year of age. The most common indication was leiomyoma (50%) and endometriosis (11%). Genital prolapsed, menstrual disorder and cancers each accounted for 7-8% of all hysterectomies. The most common surgical approach was TAH (36%), hysterectomy with bilateral oophorectomy and partial hysterectomy each accounted for 20% of operation.

Over a five year period 197 hysterectomies were performed at king Khalid university Hospital. Indications for the procedures vary from menstrual disorder and symptomatic fibroids to ovarian

malignancy. The most common indication was found to be menorrhagia. There were 145 Abdominal and 52 vaginal hysterectomies and all were elective, majority of which were performed on women in their fourth fifth decades of life.

Between January 1995 and December 2003, 219 patients were treated by radical hysterectomy plus pelvic Lymphadenectomy in Peking Union Medical College Beijing China. A total of 49 patients (22.4%) developed post operative complication. The major complication included bladder dysfunction (10%), formation of lymphocysts (7.8%), wound infection (6.8%) hydronephrosis (1.4%) and formation of ureteral fistulas (0.5%).

According to this study the patients in the group treated with radical hysterectomy plus pelvic lymphadenectomy was likely to develop post operative complication compared with the patient in the group by modified radical hysterectomy plus pelvic lymphadenectomy (24% vs. 0%).

A study was done to determine whether preoperative autologous blood donation is justified for patients undergoing elective abdominal or vaginal hysterectomy, of 263 patients, 26 received a blood. Of 140 patients who donated autologous blood, 25 were transfused, whereas just 1 patient of 123 who did not donate autologous blood was transfused ($p < 0.001$). Patients who donated autologous blood had significantly lower mean admission hemoglobin level than patients who did not donate (119 g/L Vs 132 g/L $p < 0.05$); logistic regression showed that autologous donation was an independent risk factor for transfusion.

In Tikurambessa Teaching Hospital, Addis Ababa, Ethiopia elective hysterectomies accounted 78.3% of hysterectomies done at the unit. Abdominal approach in 77.3% and vaginal Hysterectomy in 22.7%. The three major indications for elective hysterectomy were leiomyoma (41.1%), UVP (23%) and ovarian Tumors (19.5%) of cases. In 30.2% of the operations, intraoperative adhesions requiring adhesiolysis were encountered. There was a significantly increased risk of urinary tract infection in vaginal hysterectomies and unexplained fever in abdominal hysterectomies.

CHAPTER THREE

3. OBJECTIVE

3.1. General objective

To assess the socio demographic characteristics, common hysterectomy surgeries, their indication and out come at JUSH

3.2. Specific objectives

- To assess the socio-demographic characteristics of mothers who undergone elective hysterectomy
- To determine the indications of elective hysterectomy
- To determine the common types of hysterectomy
- To determine the intra-operative and postoperative complications of elective hysterectomy

CHAPTER FOUR

4. METHODOLOGY

4.1. Study area and period

The study will be conducted in Jimma University specialized hospital (JUSH), Jimma town 350 km South west of Addis Ababa. This hospital is one of the teaching hospitals in Ethiopia which provide services in surgery, gynecology and obstetrics, Medicine, pediatrics, OPD major operation rooms and diagnostic facilities. It has a capacity of around 361 beds and has about **400?** health professionals of different categories.

The study will be conducted in Gibot 2006 E.C

4.2. Study design

Retrospective cross sectional study design will be employed

4.3. Population

4.3.1. Source population

All patients who were operated for hysterectomy in JUSH from September 2004 August 2005 E.C

4.5. Data Measurement and variables

4.5.2. Independent variables

- Age
- Address
- Types of Surgical Procedure
- Causes of surgery

4.5.2. Dependent Variables

- ✚ Indication of surgery
- ✚ Outcome of surgical intervention

4.6. Data collection method

After the questionnaire is prepared patients card will collected by using card number of the patients chart and card number will be selected from the log book in the operation room. Data will be collected from the selected cards by structured questionnaire.

4.7. Plan for data processing and analysis

Data will be collected and properly filled on the prepared format, and will be analyzed manually using calculator for determination of frequency and percentage. Finally results of the data analyzed will be presented using tables.

4.8. Ethical consideration

A formal letter will be written to the hospital administrator from the department of Anesthesia. Everything concerning patients matter will be kept confidential and patients names will not used. After the necessary information extracted from the card, the card will be returned back to card office.

4.9. Dissemination plan

The result of the study will be disseminated to the authority of JUSH by the principal investigator besides submitting to Jimma university student research proposal office (SPRO) and department of anesthesisa and it can be published on Journals and used as reference.

4.10. Operational definitions

Dysfunctional Uterine Bleeding:- it is excessive uterine bleeding after ruling out all possible causes of uterine bleeding.

Elective Hysterectomy:- is a planed procedure where the uterus is surgically removed

Menorrhagia- is heavy or prolonged menstrual flow

Metrorrhagia (intermenstrual bleeding):- is bleeding that occurs at any time between menstrual periods

Uterine fibroids- are common benign tumors which arise from the muscle tissue of the uterus. They may be single or multiple.

CHAPTER – FIVE

5.1. PROJECT WORK PLAN

s.No	Activities	Responsible person	Jan	Feb	Mar	Apr	May	Jun
1	Topic selection	PI	→					
2	Proposal development	PI and advisors		→				
3	1 st draft submission	PI		→				
4	Final draft submission	PI			→			
5	Collect material and budget	PI				→		
6	Data collection	PI				→		
7	Data analysis	PI				→		
8	Report writing	PI and advisors					→	
9	1 st draft report submission	PI					→	
10	Final research submission	PI					→	

5.2. Budget Break Down

A personal Cost

S.No	Description	No of participant	No of days to be taken	Unit price		Total price	
				Birr for data collectors/day	Cent	Birr	cent
1	Data collector	4	4	20	00	320	00
2	Secretary	1	1	88	00	88	00

B. Stationery cost

S.No	List of items	Unit	no	Unit price		Total price		
				Birr	Cent	Birr	Cent	
1	Pen	Pieces	3	3	9	9	00	
2	Marker	“	3	5	00	15	00	
3	Pencil	“	2	0	60	2	40	
4	Duplicating paper							
5	CD	Pieces	1	25	00	25	00	
6	Binding of proposal and report	No	6	6	00	36	00	
7	Ruler		2	3	00	6	00	
	Total			81	60	318	40	

Total cost=Personal cost + Stationery cost

= 501.4?

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Annex I, DUMMY TABLES

Table 1. Socio-demographic distribution of patients who underwent elective hysterectomy at JUSH, Jimma Ethiopia september1, 2004 August, 30,2005 E.C.

Age	Frequency	Percent (%)
<20		
21-30		
31-40		
41-49		
50-59		
>60		
Total		
Address		
Jimma		
Out of jimma		
Total		

Table2. Common indications for elective hysterectomy surgery at JUSH, Jimma Ethiopia september1, 2004 August 30,2005 E.C

Indication	Frequency	Percent (%)
Uterine fibroid		
Dysfunctional uterine bleeding		
Utero-vaginal prolapsed		
Neoplasia		
Cervical ca		
Others		
Total		

Table 3. common types of hysterectomy at JUSH, Jimma Ethiopia september1, 2004 August 30, 2005 E.C

Type of hysterectomy	Frequency	Percent (%)
TAH		
Vaginal H		
Others		
Total		

Table4. Intra operative complication in patient underwent elective gynecologic operation at JUSH, jimma Ethiopia september1,2004 August 30,2005 E.C.

Intra operative complication	Frequency	percent
Hemorrhage		
Bladder injury		
Nerve injury		
Bowel injury		
Others		
Total		

Table5. Post operative complication among patients who underwent elective gynecologic operation at JUSH, Jimma Ethiopia september1, 2004 August 2005 E.C.

Post operative complication	Frequency	Percent (%)
Pneumonia		
Urinary tract infection		
Sepsis		
Wound infection		
DVT		
Others		
Total		

Table6. Distribution of requirements of blood transfusion by type of elective hysterectomy surgeries at JUSH, Jimma Ethiopia september1, 2004 August 30, 2005 E.C

Types of surgery	Frequency	%
TAH		
Vaginal hysterectomy		
Others		

Table7. Distribution of hospital stay of patients who undergone elective hysterectomy at JUSH Jimma Ethiopia september1,2004 August30,2005 E.C

Duration of hospital stay in days	Frequency	%
<4		
4-7		
>7		
Total		

ANNEXII, QUESTIONNAIRE

JIMMA UNIVERSITY COLLEGE OF PUBLIC HEALTH AND MEDICAL SCIENCES A format for retrospective review Elective hysterectomy done at JUSH

1. Identification
 - 1.1. Card No _____
 - 1.2. Age _____
 - 1.3. Address _____
 - A. Jimma _____
 - B. Out of Jimma _____
2. What type of elective hysterectomy is done
 - i. TAH
 - ii. Vaginal Hysterectomy
3. What was the indication for surgery
 - A. Uterine fibroid
 - B. Dysfunctional uterine bleeding
 - C. Utero-vaginal prolapsed
 - D. Neoplasia
 - E. Cervical ca
 - F. Other _____
4. Was there any complication? A. yes _____ B. No
5. If "Yes" to question number 4 What was the complication?
 - 5.1. Intra operative complications
 - i. Bleeding
 - ii. Ureteric Injury
 - iii. Bladder Injury
 - iv. Bowel injury
 - v. Others _____
 - 5.2. Post operative complications
 - i. Urinary tract infection
 - ii. Wound infection
 - iii. Pneumonia
 - iv. Dehiscence
 - v. Vault cellulites
 - vi. Pelvic thrombophlebitis
 - vii. Others _____
6. Was the patient transfused?
 - A. Yes _____
 - B. No _____
7. Hospital stay in days _____