



MULTIDISCIPLINARY *SCIENCE JOURNAL*

VOLUME - 3



WWW.ECOSCIENCEJOURNALS.COM



ISSN INTERNATIONAL
STANDARD
SERIAL
NUMBER
UNITED STATES
ISSN:3067-1221; CODEN: USA

A Study on post-operative medication management and drug usage patterns in patients undergoing hysterectomy in the gynaecology



Susan Lewis^{1*}

1. Wayne State University Eugene Applebaum college of pharmacy and health science, Department of Pharmaceutical Sciences, Detroit, Michigan, United states.

Article Info: Received: 18 Sep 2026, Accepted: 08 Oct 2026, Published: 13 Oct 2026

ABSTRACT:

This study examines the drug utilization pattern in post-operative medication management in hysterectomy patients and tests prescription rate of antibiotics, NSAIDs, antiemetics, and supportive supplements as per standard clinical practice ^[1]. A total of 100 patients participated in the study whose mean age was 45-54 years and underwent hysterectomy. The medication adherence measure proved to be moderate with minimal adverse. Ceftriaxone in combination with Metronidazole was most preferred Antibiotics, Most commonly used Analgesics Diclofenac and Metoclopramide as Antiemetics.

Keywords: Hysterectomy, postoperative medications, drug utilization pattern, medication adherence, WHO prescribing indicators, adverse drug reactions.

CORRESPONDENCE

Susan Lewis

Wayne State University Eugene Applebaum college of pharmacy and health science, Department of Pharmaceutical Sciences, Detroit, Michigan, United states.

Email: susanlewis199412@outlook.com.

Citation: Susan Lewis (2026). A Study on post-operative medication management and drug usage patterns in patients undergoing hysterectomy in the gynaecology

Eco Science Journal.2026 3 (11).



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INTRODUCTION:

Hysterectomy is one of the most surgical procedures performed. It can be performed by abdominal, vaginal or laparoscopic route. Laparoscopic Hysterectomy is reported to have low postoperative morbidity, less blood loss, shorter hospital stays and early return to normal activities^[2].

Hysterectomy is the surgical removal of the uterus. It is the most frequently performed major surgical intervention in gynaecology. A total hysterectomy involves the removal of both the uterine body and the cervix; a subtotal hysterectomy involves the removal of only the uterine body, leaving the cervix intact. Subtotal hysterectomy is also referred to as supracervical hysterectomy.

A hysterectomy is surgery to completely or partially remove the womb (uterus). This is done to relieve symptoms caused by medical conditions affecting the womb. It is a major surgical procedure that is associated with risks and side effects. So it is usually only considered if other treatments aren't effective enough. If a woman has uterine or ovarian cancer, though, a hysterectomy may be necessary in order to remove the tumor.

Hysterectomy is the clinical procedure of removing the uterus and its surrounding structure. The main reasons for undergoing hysterectomy include uterine cyst or fibroids, uterine prolapse, sliding of the uterus from its normal position into the vaginal canal, cancer of the uterus, fallopian tube, cervix, and ovaries, heavy menstrual bleeding, pain in pelvic region, and thickening of the uterus. Hysterectomy can be of various types, such as: (a) total hysterectomy removal of the whole uterus and cervix, (b) supracervical or subtotal hysterectomy: removal of the upper part of the uterus but does not harm the cervix, (c) radical hysterectomy: removal of the whole uterus, tissue on the sides of the uterus, the top part of the vagina, and the cervix and (d) laparoscopic/radical hysterectomy: done in case of malignancies^[3,4,5].

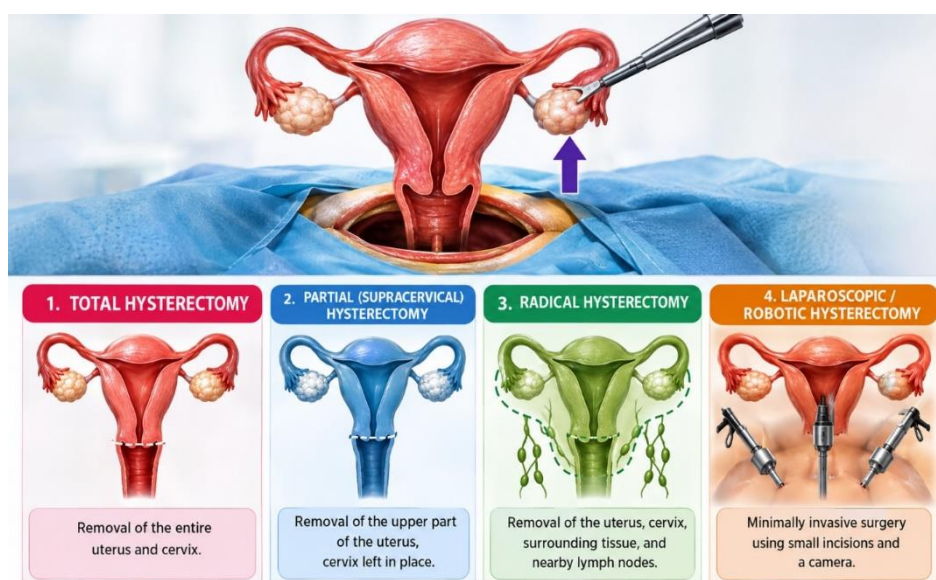


FIG-1. Diagrammatic representation of Hysterectomy and its types.

Drug utilization studies are essential tools for evaluating prescribing patterns, assessing the rational use of medicines, and promoting effective healthcare delivery. These studies help identify trends in drug prescribing, monitor medication use, and detect potential issues related to irrational prescribing practices, adverse drug reactions, and medication adherence.

AIM: The Aim of this study is to evaluate the drug utilization pattern and post-operation medication management in hysterectomy patient in the gynaecology ward.

METHODS: A prospective observational study was conducted over six months in the Department of Obstetrics and Gynaecology. A total of 100 patients undergoing hysterectomy were included after obtaining informed consent. Data regarding patient demographics, indications for surgery, type of hysterectomy, postoperative medications including antibiotics, analgesics, antiemetics, and supplements were collected from case records. Medication adherence was assessed using the Morisky Medication Adherence Scale (MMAS-8), and adverse drug reactions were monitored. Prescribing patterns were evaluated using WHO core prescribing indicators ^[6,7, 8].

RESULTS: Among 100 patients, the majority belonged to the 25–64 years age group. Abnormal uterine bleeding was the most common indication for hysterectomy. Total abdominal hysterectomy was the most frequently performed procedure. Ceftriaxone and metronidazole were the most commonly prescribed antibiotics; diclofenac was the most frequently used analgesic, and metoclopramide was the most commonly prescribed antiemetic. Most patients demonstrated moderate medication adherence with minimal adverse drug reactions. The average hospital stay ranged from 4–7 days, and most drugs were prescribed from the essential medicines list.

CONCLUSION: Postoperative management commonly involved cephalosporin antibiotics, NSAIDs, antiemetics, and supportive supplements. The prescribing pattern observed was consistent with standard clinical practice. However, promoting generic prescribing and continuous monitoring of adverse drug reactions can further improve rational drug utilization and patient outcomes.

Parameter	Category	Number of Patients (n)	Percentage (%)
Age Group	25–34 years	12	12.0
	35–44 years	28	28.0
	45–54 years	42	42.0
	55–64 years	18	18.0
Indication for Hysterectomy	Abnormal uterine bleeding	55	55.0
	Fibroids	20	20.0
	Uterine prolapse	15	15.0
	Endometriosis	10	10.0
Type of Hysterectomy	Total abdominal hysterectomy	60	60.0
	Vaginal hysterectomy	25	25.0
	Laparoscopic hysterectomy	15	15.0
Antibiotics Prescribed	Ceftriaxone + Metronidazole	65	65.0
	Ceftriaxone alone	20	20.0
	Metronidazole alone	10	10.0
	Others	5	5.0
Analgesics Prescribed	Diclofenac	70	70.0
	Paracetamol	20	20.0
	Tramadol	10	10.0
Antiemetics Prescribed	Metoclopramide	68	68.0
	Ondansetron	25	25.0
	Others	7	7.0
Medication Adherence	High	25	25.0
	Moderate	60	60.0
	Low	15	15.0
Adverse Drug Reactions	ADR observed	8	8.0
	No ADR observed	92	92.0
Length of Hospital Stay	≤3 days	15	15.0
	4–7 days	70	70.0
	>7 days	15	15.0
Drugs from Essential Medicines List	Prescribed from EML	88	88.0
	Not prescribed from EML	12	12.0

Table 1. Numerical Distribution of Demographic Characteristics, Surgical Indications, and Drug Utilization Pattern Among Hysterectomy Patients (N = 100).

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