



## Post-operative nursing care for patients receiving abdominal hysterectomy at the Obstetrics and Gynecology Department of Bach Mai Hospital in 2023

Nguyen Thu Dung<sup>1</sup>, Pham Viet Ha<sup>1</sup>, Vuong Thi Hoa<sup>2</sup>, Pham Van Thanh<sup>3</sup>,  
Nguyen Thi Thanh Hoa<sup>3</sup>, Ha Thi Thuan<sup>3</sup>, Pham Quoc Sy<sup>4</sup>  
<sup>1</sup>Bach Mai Hospital; <sup>2</sup>Thang Long University  
<sup>3</sup>Vinmec Times City International General Hospital; <sup>4</sup>Tam Anh General Hospital

### ABSTRACT

**Objective:** To describe post-operative nursing care for patients receiving abdominal hysterectomy at the Obstetrics and Gynecology Department of Bach Mai Hospital in 2023. **Method:** A Cross-sectional descriptive study was conducted using an instrument developed based on 12 professional tasks of patient care prescribed in Circular 31/2021/TT-BYT by the Ministry of Health. The study included 119 patients who had undergone abdominal hysterectomy to assess the care outcomes. **Results:** Among the participants, 69.7% had undergone their first surgery, while 30.3% had undergone surgery two or more times. Most patients (94.1%) had undergone a complete hysterectomy. Post-operative complications, including wound bleeding, urinary retention and drug allergies, were reported in 5% of the participants. The percentage of patients receiving good nursing care after abdominal hysterectomy was 74.8%. **Conclusion:** The study found that 5% of patients experienced post-operative complications following abdominal hysterectomy. Additionally, 74.8% of patients received good nursing care, while 25.2% received average care.

**Keywords:** Nursing care, abdominal hysterectomy, Bach Mai Hospital

### INTRODUCTION

Hysterectomy is a surgical procedure to remove the uterus through an incision in the lower abdomen, laparoscopy, or the vagina <sup>1</sup>. Hysterectomy directly affects the lives, health and psychological well-being of women. Uterine diseases such as uterine fibroids, endometriosis, genital prolapse... directly affect patients' health and quality of life. Around 600,000 women in the US and 100,000 women in the UK undergo

hysterectomy annually <sup>2</sup>. Over 70% of hysterectomies are performed for benign surgical indications, including menorrhagia, uterine fibroids, pelvic pain, and uterine prolapse <sup>3</sup>.

Each year, the Department of Obstetrics and Gynecology at Bach Mai Hospital handles about 200 cases of patients with indications for hysterectomy. However, there is a lack of comprehensive studies on nursing care for patients after abdominal

hysterectomy. Post-operative care for patients receiving hysterectomy plays an important role in facilitating a speedy recovery and minimizing complications.

In addition, nurses need to provide specialized care plans for patients post-abdominal hysterectomy to reduce risks and complications, enabling patients to resume normal activities promptly. Research related to patient healthcare post-abdominal hysterectomy serves as the foundation for nurses to develop a complete care plan, ultimately enhancing the quality of comprehensive care provided to patients after surgery. Therefore, the study aims to describe the post-operative nursing care for patients undergoing abdominal hysterectomy at the Obstetrics and Gynecology Department of Bach Mai Hospital.

## PARTICIPANTS AND METHODS

**Participants:** Patients who underwent abdominal hysterectomy and was treated at the Obstetrics and Gynecology Department of Bach Mai Hospital, Hanoi

*Inclusion criteria:* Patients who underwent abdominal hysterectomy, had standardized medical records as per hospital protocols and agreed to participate in the study

*Exclusion criteria:* Patients who did not meet the mental health requirements to participate in the research or were in an emergency condition.

**Research design:** A cross-sectional descriptive study was conducted.

**Research time and location:** The study was conducted at the Department of Obstetrics and Gynecology, Bach Mai Hospital, from April 2023 to August 2023.

**Sample size and sample selection:** The formula was applied to calculate Sample size as follows:

$$n = Z_{1-\alpha/2}^2 \frac{p(1-p)}{d^2}$$

In which:

p was the proportion of patients receiving good care. In the study, p = 0.8 was chosen (referenced from research by Le Kim Yen <sup>4</sup>)

d was the absolute error; d = 0.05 was selected.

Substituting these values into the formula, the sample size was calculated as n = 110, with a margin of error of 8%.

Therefore, the final sample size included in the analysis was n = 119 patients.

## Measurement and data collection:

A questionnaire was developed based on the 12 professional tasks of patient care outlined in Circular 31/2021/TT-BYT <sup>5</sup>. The questionnaire was divided into four parts: General information, pathology information, clinical and paraclinical symptoms, and post-operative patient care activities.

**Data collection:** Information was gathered by assessing and categorizing the patients' condition upon admission to the surgical department, at 6 hours, 24 hours, and three days post-surgery, and at the time of discharge from the hospital. An initial assessment, along with data from medical records, was conducted upon the patient's admission to the department within the first 6 hours post-surgery. Interviews based on the questionnaire were conducted at 24 hours post-surgery, 3 days post-surgery, and upon discharge from the hospital to collect information.

**Evaluation standards:**

No	Work content	Satisfactory	Unsatisfactory
1	Measure vital signs	Fully implemented and when patients had abnormalities	Not fully tested
2	Establish a close and friendly relationship with patients	Comfortable, understand the illness well, not worried, satisfied with the care results	Patients are worried about their health, treatment methods during and after discharge from the hospital, and were not satisfied with the care results.
3	Pain relief (based on VAS scale)	Little or no pain	A lot of pain
4	Nutritional care	Eat all the ration with a good appetite	Loss of appetite, could not eat all the ration
5	Mobility care	Move gently around the bed	Lying in bed without moving or being sedentary
6	Sleep care	The patient got sufficient and deep sleep	Patients slept little, difficulty falling asleep or frequent awakenings during the night.
7	Monitor the condition of the incision	The incision site was dry and did not saturate fluid or blood after changing the bandage	The incision was saturated with fluid, swollen, and bleeding
8	Personal hygiene	Patients resolved personal issues independently without requiring support.	Patients were unable to resolve personal issues independently and still required support.
9	Performance of medication orders	Use medication as prescribed and had their medications made public	Using drugs without publicity or having reactions
10	Performance of a dressing change	Change the bandage on the right day, the bandage was dry	Delay on changing the bandage, seepage of fluid and blood into the bandage
11	Monitor complications	There were no postoperative complications.	There were one or more postoperative complications.
12	Health education	Patients understood the regulations and administrative procedures	Patients did not clearly understand regulations and administrative procedures

Each care criterion being satisfactory got 1 point. The following calculation formula was applied:

Percentage of care results (%) = (Total number of satisfactory care results)/ (Total number of care activities) x 100

Patient care results were considered good when the score was 80% or higher <sup>3</sup>. Patient care results were average when score was below 80%

**Data processing methods:** Data were entered by using Epidata 3.1 software; coded and analyzed using SPSS 25.0 software. Descriptive statistics was utilized to present and analyze the table of quantity distribution, percentage (for qualitative variables), mean value, and mean standard deviation of variables (for quantitative variables).

**Ethics in research:** The study was approved by the Ethics Committee of Thang Long University and got the permission of the Board of Management of the hospital.

## RESULTS

**Table 1. General information about participants (n = 119)**

Patients with hysterectomy		n	%
<b>Career</b>	Workers and Employees	39	32.8
	Farmer	27	22.7
	Others	53	44.5
<b>Living area</b>	Urban	42	35.3
	Rural	68	57.1
	Mountainous	9	7.6
<b>Education level</b>	Primary school	39	32.5
	Middle School & High School	49	40.8
	College - University - postgraduate	32	26.7
<b>Insurance</b>	Have	109	91.6
	Do not have	10	8.4
<b>BMI</b>	Underweight	10	8.4
	Normal	49	41.2
	Overweight, obese	60	50.4
<b>Age group</b>	≥ 45 years old	90	75.6
	< 45 years old	29	24.4

Table 1 presented that 32.8% of the participants were civil servants, 22.7% of them were farmers, and 44.5% were in other occupations (housewives, freelancers, unemployed). Most

of the patients lived in rural areas (57.1%). Regarding education level, the proportion of the participants with secondary school and high school degrees were the highest (40.8%), followed by the proportion of patients with primary school degree (32.5%), and the lowest proportion had college-undergraduate-postgraduate degrees (26.7%). Most patients had health insurance (91.6%). More than half of the patients were overweight and obese (50.4%). The majority of the patients were 45 years old or older (75.6%), with an average age of  $49 \pm 8.77$  years old.

**Table 2. Classification of the patients according to times of births and surgical characteristics (n = 119)**

Content		n	%
<b>Number of children</b>	$\leq 2$ Children	88	73.9
	3 Children	31	26.1
<b>Times of surgery</b>	$< 2$	83	69.7
	$\geq 2$	36	30.3
<b>Surgical method</b>	Complete hysterectomy	112	94.1
	Partial hysterectomy	7	5.9

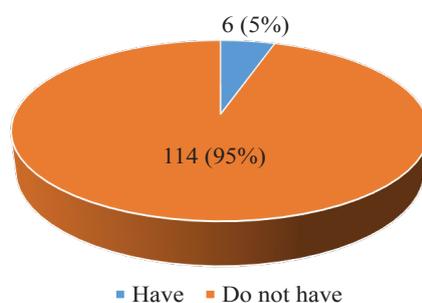
The results indicated that the majority of the participants had no more than two children (accounting for 73.9%), while the participants had 3 children accounted for 26.1%. Regarding the times of surgeries, the percentage of the patients who had surgery at the first time was higher than the percentage of the patients who had surgery 2 times or more (69.7% versus 30.3%). Most of the participants were prescribed complete hysterectomy (94.1%).

**Table 3. Condition of the incision and the patient's urination, defecation and fart status at the time of follow-up (n = 119)**

Index	Follow-up time							
	First 6 hours		24 hours		3 days		Discharge	
	n	%	n	%	n	%	n	%
<b>Abdominal incision</b>								
Dry	101	84.9	118	99.2	119	100	119	100
Swelling, fluid seepage/Bleeding	18	15.1	1	0.8	0	0	0	0
<b>Drainage incision</b>								
Do not have	114	6	114	96	114	96	119	100
Dry	3	2.5	5	4.2	5	4.2	0	0
Swelling, fluid seepage/bleeding	2	1.7	3	2.5	1	0.8	0	0

Index	Follow-up time							
	First 6 hours		24 hours		3 days		Discharge	
	n	%	n	%	n	%	n	%
<b>Urinary catheter status</b>								
After removal of urinary catheter	1	0.8	20	16.8	114	95.8	118	99.2
Before removal of urinary catheter	118	99.2	99	83.2	5	4.2	1	0.8
<b>Fart status</b>								
Farted	1	0.8	30	25.2	93	78.2	119	100
Not farted yet	118	99.2	89	74.8	26	21.8	0	0
<b>Defecation status</b>								
Defecated	0	0	0	0	24	20.2	119	100
Not defecated yet	119	100	119	100	95	79.8	0	0

The results presented that the patient's condition improved gradually post-surgery. There were 15.1% of the patients whose incisions were saturated with fluid after 6 hours of surgery, which decreased to 0.8% after 24 hours. By discharge, all incisions were completely dry and waterproof (100%). There were 5 patients who had to have drainage placed after surgery. The condition of the drained tube being seeped with fluid accounted for 1.7% and 0.8% of the participants. Three days after surgery, the drained tube was still seeped with fluid. There was 1 patient who had to keep a urinary catheter upon discharge due to a surgical condition. The percentage of patients unable to pass gas within 6 hours post-surgery was 99.2%, dropping to 74.8% after 24 hours and further decreasing to 21.8% by the third day, and all patients were able to pass gas before leaving the hospital (100%). The percentage of patients unable to defecate within the first 24 hours after surgery was 100%, decreasing to 79.8% by the third day.



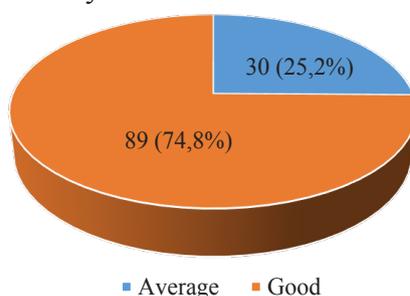
**Figure 1. Percentage of patients with complications after surgery(n=119)**

Figure 1 indicated that among 119 patients with abdominal hysterectomy, 6 patients (accounting for 5%) had post-operative complications such as surgical wound bleeding, drug allergy, urinary retention and incision infection.

**Table 4. Post – operative nursing care activities for the patients (n = 119)**

Activites		Nursing consultation	
		n	%
Visit and answer questions	Satisfactory	114	95.8
	Unsatisfactory	5	4.2
Disclosure of medicine	Satisfactory	118	99.2
	Unsatisfactory	1	0.8
Incision care	Satisfactory	118	99.2
	Unsatisfactory	1	0.8
Pain relief	Satisfactory	117	98.3
	Unsatisfactory	2	1.7
Measure vital signs	Satisfactory	118	99.2
	Unsatisfactory	1	0.8
Get advice on movement	Satisfactory	107	89.9
	Unsatisfactory	12	10.1
Get advice on nutrition	Satisfactory	111	93.3
	Unsatisfactory	8	6.7
Get advice on sleep	Satisfactory	105	88.2
	Unsatisfactory	14	11.8
Get advice on complications	Satisfactory	93	78.2
	Unsatisfactory	26	21.8
Receive care for other needs according to comorbidities	Satisfactory	96	80.7
	Unsatisfactory	23	19.3
<b>Total</b>		<b>119</b>	<b>100</b>

The results in table 4 demonstrated that the activities of disclosing medicine, caring for incisions and measuring vital signs were the highest percentage (99.2%), while activities of consulting on complications and taking care of other needs according to comorbidities only were 78.2% and 80.7%, respectively.



**Figure 2. Results of care for patients with abdominal hysterectomy (n = 119)**

The results in figure 2 presented that the proportion of good care results was higher than average care results (74.8% compared to 25.2%).

## DISCUSSION

### Patient care activities after abdominal hysterectomy

The study indicated that the percentage of complications after surgery was not high, with no reported cases of complications. Specifically, within the first 24 hours after surgery, one patient experienced incisional bleeding, which was bandaged and dried completely without requiring further intervention. By the time of discharge from the hospital, no additional cases of bleeding from the incision were reported. This result was similar to the research by Yimaz<sup>2</sup> which documented two cases of post-operative bleeding.

Complications of the Urinary Tract Infections were noted in three patients, with instances of urinary retention post-surgery, and one case with painful urination 3 days after treatment. This result was higher than that of Le Kim Yen<sup>4</sup> with 0.1% of urinary tract infections. One limitation was that the patient must have a urinary catheter placed within 24 hours after surgery, which increased the risk of urinary tract infection as well as complications after catheter placement<sup>6, 7</sup>. In case the patient had a urinary catheter placed, urinary catheter care activities, included instruction to family members on how to clean the patient's genitals, and instructions on how to hang the urine bag to avoid urine reflux, causing upstream infection, it was quite important to have urine lines clamped hourly in order to prevent syndrome of loss of urination reflex for patients after removing the urinary catheter.

The results indicated that 4.2% of patients had not their questions specifically answered, and 0.8% of them had not had their drugs clearly disclosed. Nguyen Thi Thanh Mai

conducted a study in 2023 which reported that 48.7% of the patients were not clearly informed about the medicine and 0.8% did not receive incision care. Additionally, 1.7% of patients experienced significant pain without adequate pain management, 10.1% did not receive exercise advice, 6.7% did not receive nutrition advice, and 11.8% did not receive advice on sleep. This findings were lower than the result of Nguyen Thi Thanh Mai<sup>8</sup> in 2023, which reported that 12.6% of patients did not know about appropriate nutrition, 27.6% of the patients did not have the knowledge to take care of their sleep. This difference may be due to differences in characteristics of the participants.

Nurses' health education consultations were deemed effective based on patient feedback post-surgery. However, 21.8% of the patients did not clearly understand the possible complications after surgery, indicating a need for enhanced health education efforts to improve patient care and mitigate future risks.

There were 74.8% of the patients with good outcome, 25.2% with average outcome and no patient with poor outcome during treatment. This result was related to the type of surgery, which was abdominal hysterectomy. The recovery proportion was lower than other forms of surgery such as laparoscopy and transvaginal surgery, so the percentage of good care result was lower compared to limited invasive surgeries. Therefore, it is absolutely necessary to strengthen health education counseling so that patients can comply and follow the instructions of medical staff. This depends largely on the work of the nurse, and on how to raise the patient's awareness to improve the patient's recovery after surgery to produce the best care results.

## CONCLUSION

Among participants undergoing abdominal hysterectomy, 5% experienced post-operative complications. The study observed good nursing care outcomes in 74.8% of patients, with 25.2% achieving average care results.

## RECOMMENDATIONS

Strengthen health education consulting activities and update professional technical procedures to prevent post-operative complications and improve patient care results.

## REFERENCES

1. Shen Y, Lv F, Min S, et al. Impact of enhanced recovery after surgery protocol compliance on patients' outcome in benign hysterectomy and establishment of a predictive nomogram model. *BMC anesthesiology*. 2021;21(1):1-11. doi: 10.1186/s12871-021-01509-0.

2. Yilmaz G, Akça A, Aydin N. Enhanced recovery after surgery (ERAS) versus conventional surgical care in patients undergoing abdominal hysterectomies. *Ginekologia polska*. 2018;89(7):351-356. doi: 10.5603/GP.a2018.0060.

3. Shoukat R, Memon F. Outcome of Patients Abdominal Versus Hysterectomy for Benign Gynaecology Diseases at Liaquat University Hospital. *Journal of The Society of Obstetricians Gynecologists of Pakistan*. 2018;8(2):115-119.

4. Le Kim Yen. Results of caring for patients undergoing gynecological surgery and some related factors at Hau Giang Obstetrics and Pediatrics Hospital, Thang Long University; 2022.

5. Ministry of Health. Circular 31/2021/TT – BYT dated December 28,

2021 of the Ministry of Health regulating nursing activities in hospitals. Print:2021.

6. Phung Trong Thuy. Clinical and paraclinical characteristics and results of surgical treatment of uterine fibroids at Tuyen Quang Provincial General Hospital. *Vietnam Medical Journal*. 2021;505(1). DOI: <https://doi.org/10.51298/vmj.v505i1.1057>.

7. Nguyen Le Thanh Truc, Tran Thi Tuong Vy, Nguyen Thi Ngoan, Thach Thi Thanh Thuy. Nutritional status of patients before surgery and some early complications after gastrointestinal surgery at the Department of General Surgery, Tra Vinh General Hospital. 2023.

8. Nguyen Thi Thanh Mai. Current status of patient care of nurses and some related factors at surgical departments of K Hospital. *Vietnam Medical Journal*. 2023;522(2). DOI: <https://doi.org/10.51298/vmj.v522i2.4344>.