


**FACTORS RELATED TO FUNCTIONAL RECOVERY IN
PATIENTS AFTER TOTAL HYSTERECTOMY**

PHAM THI THU THUY

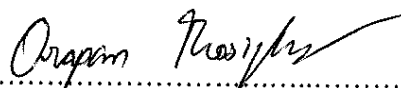
**A THESESES SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF NURSING SCIENCE
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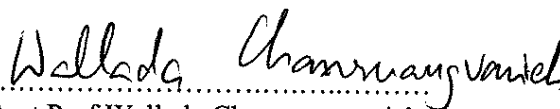
Thesis
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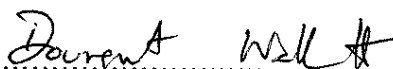
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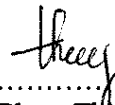
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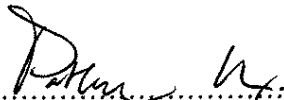
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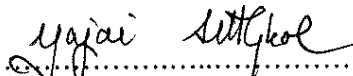
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FACTORS RELATED TO FUNCTIONAL RECOVERY IN PATIENTS AFTER TOTAL HYSTERECTOMY

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ABSTRACT

Hysterectomy is the most common major surgery among women in their middle to late adult age, aimed to cure disease and enhance the patients' ability to resume their previous life functions. Studies related to patients with hysterectomy in Vietnam still receive little attention. Knowledge gains from present study would assist the patients in their transition to their desired health outcomes. This research aimed to study functional recovery and factors related to functional recovery among patients after total hysterectomy. This was a descriptive correlation research conducted among 115 adult patients after a total hysterectomy at the Obstetrics & Gynecology Department of Bach Mai Hospital and the National hospital of Obstetrics & Gynecology, Hanoi, Viet Nam. Data were collected using the patient' record and interview with the patients. Spearman's rho was employed to test correlation among the studied variables. The result of the study revealed that most of the patients were aged between 41 and 50 (64.3%), with the mean age of 48.7 ± 7.6 years. About 40% of the patients had comorbid diseases. The mean score of function recovery was 124.57 ± 11.78 . The mean total social support score was 5.16 ± 1.02 while the mean social support score of family domain was 5.41 ± 0.82 and that of friends and other domains were 6.03 ± 0.82 and 5.03 ± 1.05 , respectively. Majority of the patients had mild pain (69.6%), and 30.4% had moderate pain with the mean score of 2.73 (S.D. ± 1.16). Pain score had negative correlation with the functional recovery score ($r = -0.70$, $p < 0.05$) while social support, co morbidity and age showed no correlation with functional recovery. It is therefore recommended that in order to promote the patients smooth transition to their optimum functional recovery, the patients' pain level after hysterectomy should be well controlled. Further multi sites research should be conducted with more numbers of patients to reveal a broader picture of recovery among women after hysterectomy in Vietnam. Pain management protocol should be developed and tested for their effectiveness through a quasi-experimental research.

**KEY WORDS: HYSTERECTOMY/ PAIN / SOCIAL SUPPORT /
FUNCTIONAL RECOVERY AND COMOBILITY**

75 pages

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LIST OF ABBREVIATION

MSPSS	Multidimensional Scale of Perceived Social Support
NRS	Numerical Rating Scale
QoR-15	The Quality of Recovery – 15 Questionnaire

CHAPTER I

INTRODUCTION

1.1 Background and significance of the study

Hysterectomy is the most frequent surgical procedure in gynecological surgery (Ghezzi, Serati, Casarin & Uccella, 2015). It aims to cure disease of uterine such as fibroids, prolapse, endometriosis or adenomyosis and chronic pelvic pain. Hysterectomy can be performed in both partial and total removal of the whole uterine. The approach can be through laparoscopy, vaginal or abdominal depending on the patients' pathology age and preference (Nieboer et al., 2009; Gupta & Manyonda, 2014).

In the United States, hysterectomy is the most common major surgery in women with the ages range from 40 to 44 years. Annually, more than 500,000 hysterectomies are performed (Laleh et al, 2013). Prevalence of Hysterectomies is estimated about 5.4 per 1000 women in USA from 2000-2004. The nonmalignant conditions or dysfunction of uterine that is 46 % in total hysterectomy case among average age patient with 45 years old. In low income countries, total hysterectomy is the treatment of choice because the patients usually get access to care in the late stage of disease (Altman, Granath, Cnattingius, Falconer, 2007).

Total hysterectomy including laparotomy, laparoscopy and vaginal surgery involve in the genitals of women, therefore, after surgery the woman should be assisted to restore function and psychological stability throughout the recovery process. Patient care after surgery is very important to ensure good surgical results. Depending on each patient's condition, post-surgery care vary but the general principle comprises early identify postoperative conditions, symptom management, pain control and providing continuing care. However, the best way reduces complications of operation that approach process with multidisciplinary (Yaasai, 2013; Gupta & Manyonda, 2014)

Early recovery from major surgery including gynecological surgery is expected outcomes not only from the patients' view point but also from the health care providers' perspective. The earlier the patients recover the lesser they have postoperative complications such as atelectasis and deep vein thrombosis. Moreover, their gastrointestinal function will recover leading to decreased abdominal discomfort and increased food appetite (Rahman, 2007). In the long-term outcome, patients who recover earlier will have a chance to return to their previous work sooner and feel more satisfy with their health conditions.

One main factor that delays postoperative recovery is postoperative pain. Patients with moderate to severe postoperative pain usually stay in the hospital longer than ones without postoperative pain and hence adding to hospital cost. The study of Xiromerit is and the others revealed that patients who received multimodal analgesia had lower pain scores as measured by Numerical rating scale (NRS). They earlier returned of bowel peristalsis and showed shorter stay in the hospital (Xiromeritis et al, 2011). The most predictable acute pain condition is postsurgical pain (Kehlet et al, 2003). Pain will be an obstacle to perform early ambulation to make them recover from the illness soon otherwise they might develop several complications such as pneumonia, decreased bowel movement, abdominal discomfort or paralytic ileus. Depending on postoperative pain was managed well in order to improving postoperative recovery, resulting in earlier hospital discharge. Moreover, inappropriate acute pain control in patients underwent major surgery affected long term health outcome. Many patients whose pain level was not well controlled during the acute phase, their pain eventually became chronic pain and disturbing their lives (Theunissen, et al, 2016).

However, the patients not only having pain, but they also have many comorbidities that affect functional recovery. The presence of comorbidities is one of the important predictors of survival from malignancies (Nicholas, Hu, Ying, Soisson, Dodson & Gaffney, 2014). According to the report of my department every month are common comorbidities in Vietnam patients are heart failure, renal failure, hypertension and diabetes. And these disturb to promote early ambulation of the patients, wound healing, reduce length stays hospital so, the patients need support to help them improve the function.

Social support has been considered as an important antecedent of patients after surgery. Surgery is the stressful event in terms of all physical, psychological and social aspects; and support from others can tremendously affect patients' recovery by cushioning the effect of that event (Mitchinson et al, 2008). Mitchinson and colleagues (2008) demonstrated that those with greater social network size reported lower postoperative pain, milder unpleasantness and lower anxiety in the first five days after surgery ($p < 0.001$). Nevertheless, this researcher did not find to prove the associations between social support and postoperative functional recovery.

Patients undergoing total hysterectomy can be viewed as having transit in their health and illness continuum. Accordingly, this process can be explained very well by using Meleis' transition theory. Patients have to believe in their own capability to improve their function and ambulation so transition theory can utilize to explain this phenomenon. According to transition theory (Meleis et al, 2000), physical function is an outcome which is equal to the pattern of response which is the outcome of transition. Patients after hysterectomy will be able to transit and achieve the ultimate outcomes or having full functional recovery if they have facilitating factors such as receiving adequate social support which refers to transition conditions. Moreover, they can recover or obtain the desired goal sooner if they do not have inhibiting factors such as postoperative pain or comorbidity or underlying chronic diseases.

In Bach Mai Hospital, the biggest tertiary care hospital in the northern region of Vietnam, there are about 200 women receiving total hysterectomy per year. Moreover, the National Hospital of Obstetric and Gynecology which is residing in Hanoi is the largest obstetric and gynecology hospital in the northern of Vietnam with 1,000 beds. In the latter hospital, there are more than 1,000 women receiving hysterectomy per year. However, there is no scientific study in this group of patients. To discover the phenomena of recovery after total hysterectomy is vital because it can help nurses and other health care professions understand the recovery process and help patients to transit in this transition period very well. So that the researcher who is a head nurse of the gynecological ward would like to conduct the study to identify the factors associated with the functional recovery of patients undergoing total hysterectomy. According to the literature review, those associated factors include, patients' comorbidity, pain level and social support.

1.2 Research questions

Are postoperative pain, co-morbidity, social support related to functional recovery in patients after total hysterectomy?

1.3 Purpose of the study

To identify factors related to functional recovery in patients after total hysterectomy.

1.4 Hypothesis

1.4.1 Postoperative pain is negatively related to functional recovery in patients after total hysterectomy.

1.4.2 Comorbidity is negatively related to functional recovery in patients after total hysterectomy.

1.4.3 Social support is positively related to functional recovery in patients after total hysterectomy.

1.5 Conceptual framework

Transition theory (Meleis, 1986) is utilized as framework. Transition is a natural process that can be used to illustrate the process of health and daily living. When patients receiving total hysterectomy can be viewed as having transit in their health and illness continuum. Accordingly, this process can be explained very well by using Meleis' transition theory. Patients have strong beliefs in their own capability to improve their function and ambulation so transition theory can be used to explain this phenomena. According to transition theory (Meleis et al, 2000), physical function is an outcome which equal to the pattern of response which is the outcome of transition. The patients will be able to transit and achieve the ultimate outcome or having full functional recovery if they have facilitating factors such as receiving adequate social support which refers to transition conditions. Moreover, they can recover or obtain the

desired goal sooner if they do not have inhibiting factors such as postoperative pain or comorbidity or underlining chronic diseases.

The relationship among independent variables and dependent variable is illustrated in the following conceptual framework.

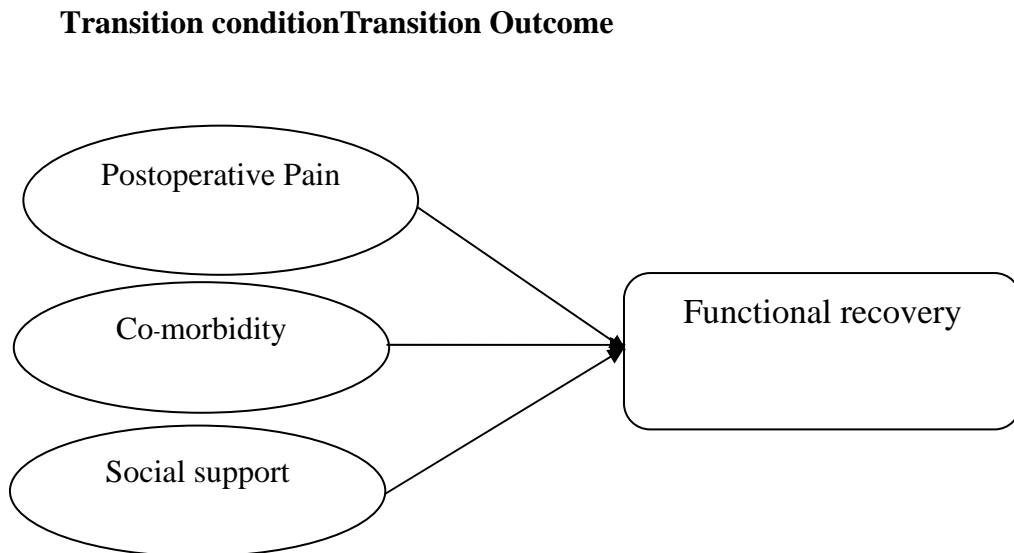


Figure 1.1 The relationship between postoperative pain, comorbidity, social support and functional recovery in patients after total hysterectomy.

1.6 Scope of the study

To identify factors related to functional recovery in patients after total hysterectomy at Obstetrics &Gynecology department, Bach Mai hospital, Viet Nam and National Hospital of Obstetrics and Gynecology, Viet Nam.

1.7 Expected outcomes and benefits

1.7.1 Nurses can use this knowledge to improve functional recovery in patients after total hysterectomy.

1.7.2 Nurses as well as other health care teams can evaluate and develop effective clinical nursing practice guidelines for the management of the postoperative pain in gynecology patients before hospital discharge.

1.7.3 This knowledge can be used for the researchers in other areas of gynecology studies.

1.8 Definition of terms

1.8.1 Postoperative Pain refers to patients' perception of pain after receiving hysterectomy. It is the level of pain at the site of tissue injury in the surgery (Bouman et al., 2014). In this study, postoperative pain was measured by NRS (Bijur et al., 2003) and is widely used in various populations of women after total hysterectomy.

1.8.2 Comorbidity refers to other illnesses that the patients had before receiving hysterectomy. In this study comorbidity was measured by using the questionnaires developed by the researcher. This form comprises items of common chronic diseases found among adult patients including hypertension, heart disease, renal disease and other chronic diseases the patients have before this study. Patients will be asked if they have had these chronic illness prior to the study. Also, the comorbidity can be collected from the patients' profiles. Each disease will be assigned for the score of 1.

1.8.3 Social support refers to information, advice, or tangible aid provided through contact with one's social network that has beneficial effects on the recipient (Bloom, 2002; Maunsell et al., 1995). In this study, social support was measured by Multidimensional Scale of Perceived Social Support (MSPSS) developed by Zimet, Dahlem, Zimet & Farley in 1988. Total scores of social support from 12 to 84 and high scores indicate better social support.

1.8.4 Functional recovery refers to a process of returning to the previous health status or resuming previous functions of patients who undergo hysterectomy. This is defined as the patients return to the normal health state after receiving hysterectomy and regain of physical, physiologic and social functions. In this study recovery was measured by Quality of recovery- 15 items (The QoR- 15). The possible score ranged from 0 to 150, while 0 is poor recovery and a maximum score of 150 is excellent recovery (Sá et al., 2015; Stark et al., 2013).

CHAPTER II

LITERATURE REVIEW

This chapter provides a literature review of factors related to functional recovery in patients after total hysterectomy. The contents enhance the understanding of phenomena of functional recovery in patients after total hysterectomy based on transition theory as following 4 issues including the conclusion part:

2.1 Problems in patients after total hysterectomy

- 2.1.1 Incidence of hysterectomy
- 2.1.2 Pathophysiology of after total hysterectomy
- 2.1.3 Impact of after total hysterectomy

2.2 Functional recovery in patients after total hysterectomy

- 2.2.1 The concept of functional recovery
- 2.2.2 Functional recovery in patients after total hysterectomy
- 2.2.3 Measurement

2.3 Transition theory as a conceptual framework to explain functional recovery in patients after total hysterectomy

- 2.3.1 Transition theory.
- 2.3.2 Transition theory and the patients after total hysterectomy.

2.4 Factors associated with functional recovery in patients after total hysterectomy.

2.4.1 Postoperative Pain and its correlation with functional recovery in patients after total hysterectomy.

2.4.2 Comorbidity and its correlation with functional recovery in patients after total hysterectomy.

2.4.3 Social support and its correlation with functional recovery in patients after total hysterectomy.

2.5 Conclusion

2.5.1 Problems in patients after total hysterectomy

2.5.1.1 Incidence of total hysterectomy

A hysterectomy is the surgical removal of the uterus. It aims to cure the disease related to uterus both malignancy and non-malignancy. Hysterectomy may be total usually called "complete" or partial also called "supra cervical". It is the most common major surgery in women in the United States. Each year, there are more than 500,000 hysterectomies performed in the United States (Azari et al, 2013). In Canada, between 2008 and 2009, there was almost 47,000 hysterectomies. The national rate for the same pervious was 338 per 100,000 population, decreased from 484 per 100,000 in 1997. The reasons for hysterectomies varies depending on the location of the women living (an urban or rural location). Urban women opted for hysterectomies because of uterine fibroids and rural women underwent hysterectomies due to menstrual disorders.

According to the National Center for Health Statistics in 2004, 73% of the 617,000 hysterectomies performed also involved the surgical removal of the ovaries. In the United States, 1 in 3 women can be expected to have a hysterectomy by the age of 60(National Women's Health Information Center. 2006, July 1). 22 million women in the United States currently estimated to have undergone this procedure.

The cases of hysterectomies in Germany has been stable for many years. In 2006, there were 149,456 hysterectomies performed. Of these, 126,743 (84.8%) were successful and benefitted the patient without incident. 50 percent of hysterectomies happened in women between the ages of 40 and 49 and 20 percent of those saw in the women between the ages of 50 and 59. The number of hysterectomies declined to 138,164 in 2007 (Müller et al, 2010). In recent years, hysterectomies have been performed by the technique of laparoscopy (Mettler et al, 2005&Jäger et al, 2007)

In Denmark, the number of hysterectomies decreased by 38 % from the 80s to the 90s. In 1988, there were 173 surgeries performed per 100,000 women, and by 1998 this figure had been declined to 107. The percentage of abdominal supra cervical hysterectomies in the same period increased from 7.5 to 41 %. A total of 67,096 women were performed hysterectomy during these years (Gimbel et al, 2001).

In Taiwan, the average age in a random sample of 658 women's medical records was 47,9 years. Of these 658 women, 82,5% had not reached menopause, and 46,2% (the largest proportion) had undergone the surgery because of uterine fibroids, followed by 22,2% for cancer or premalignant conditions (Yu Chao et al. 2005)⁴

In Bach Mai Hospital, the biggest tertiary care hospital in Vietnam, there are about 200 women receiving total hysterectomy per year (report Bach Mai hospital. 2014). Moreover, the National Hospital of Obstetric and Gynecology which is residing in Hanoi is the largest obstetric and gynecology hospital in the northern of Vietnam with 1,000 beds. In the later hospital, there are more than 1,000 women receiving hysterectomy per year.

2.5.1.2 Pathophysiology of after total hysterectomy

Hysterectomy including laparotomy, laparoscopy and vaginal surgery involve in the genitals of women, therefore, after surgery the woman should be assisted to restore function after surgery and psychological stability. Patient care after surgery is very important to ensure good surgical results. Depending on each case, post-surgery care vary but the general principle of note: tracking complications

occur soon after surgery, monitor vital signs, detection of symptoms and complications later late.

The pathophysiological changes after abdominal surgery are presented as following:

2.5.1.3 Postoperative pain response

All surgical procedures are followed by pain, which may increase endocrine metabolic responses, autonomic reflexes, nausea, ileus and muscle spasm, and thereby delay recovery of function (Theunissen, et al, 2016). If pain control is failed, pain may result in activation of the sympathetic nervous system, which can lead to a variety of detrimental physiologic responses and may be associated with the extent of morbidity and mortality (Sivrikaya, 2012). Thereby, pain relief may be a powerful technique to change surgical stress responses (Sivrikaya, 2012).

2.5.1.4 Immunosuppression and physiological inflammatory response

Abdominal surgery causes to decrease immune system with reducing hypersensitivity response to recall antigen stimulation, T-cell dependent antibody response, IL-2 production and HLA-DR antigen expression, IFN- production and T-cell blastogenesis. In contrast, neutrophil and macrophage functions are activated with increased release of oxygen radicals and TNF, and chemotaxis. Thereby, extent of trauma by minimally surgery is limited which cause to reduce immunosuppression and risk of infection (Reddi & Curran, 2014).

Tissue damage caused by surgery leading to a physiological inflammatory response (Layzel, 2014). Inflammatory mediators including cytokines, histamine, leukotriene, bradykinin and prostaglandins are released from damaged tissue, inflammatory cells (Reddi & Curran, 2014), platelets and plasma components which cause vasodilation and increased vascular permeability (Layzel, 2014). This inflammatory response created to signs of redness, heat, swelling and pain (Layzel, 2014).

2.5.1.5 Postoperative hypoxemia, edema and wound healing

Gynecological surgery requires abdominal incision so that the wound at the abdominal wall will inhibit patients from deep breathing. Their breathing

is shallow leading to decreased gas exchange in the lungs. Pulmonary function will be decreased according to the injury of the diaphragm during surgery or from the effect of the anesthetic drugs. Hypoxemia will eventually occur especially in ones who have longer incisional wounds. If proper treatment is not performed it will lead to cardiac, cerebral and wound complications (Ghezzi, et al,2015).

In addition, surgical stress is a physiological response with the aim to reduce in intravascular pressure so the fluid is moved from the extravascular to the intravascular space which occurs due to hypovolemia leading to fluid movements from tissue to blood. Surgical stress is characterized by increased secretion of pituitary hormones and inflammatory origin (Desborough, 2000). Thus, some hormones such as antidiuretic hormones (ADH), aldosterone and the renin–angiotensin II involved in this response may be associated with the distribution of body fluids lead to conservation of sodium and water and to excretion of potassium (Holte et al., 2002).As a results, patients might suffer from edema, which is characterized by subcutaneous fluid accumulation which leads to impaired tissue oxygen due to increased endothelial cellular distance (Holte et al., 2002). Therefore, wound healing can be inhibited by tissue hypoxemia and the response to surgical.

So that, postoperative pulmonary complications such as atelectasis and pneumonia may be related to impairment in pulmonary function. In addition, factors during in the perioperative including local of anesthesia supine position, pain , cytokines, endothelial adhesion factors and immune suppression may have unexpected effects in the postoperative period.

2.5.1.6 Thromboembolic, impair renal and gastro-intestinal function

Postoperative thromboembolic complications may occur, due to the consequence of decreasing extremity blood flow, hypercoagulability and increasing thrombocyte aggregation, impairing fibrinolysis and loss of vessel wall integrity (Kehlet, 1997).

Especially, patients undergoing lower abdominal surgery, often have many discomfort by pain and difficulty in urinating. Water and sodium excretion are reduced by the hormonal responses after surgery due to the enhanced secretion of ADH, aldosterone and rennin (Holte, Sharrock, & Kehlet, 2002). The spinal and

epidural local anesthetic techniques, as well as postoperative opioid analgesia can create inhibitor effect on bladder muscle function cause to urinary retention after surgery (Holte, Sharrock, & Kehlet, 2002). General anesthesia may effect on renal hemodynamics and function which is explored in the depression of the glomerular filtration rate (GFR), urinary volume and sodium excretion (Holte et al, 2002). The water reabsorption in the kidney cause by the increasing of ADH secretion that lead to diuresis and a decrease in plasma concentrations of sodium (Holte et al, 2002).

Finally, abdominal surgery commonly causes a temporary inhibition of intestinal motility (Bree et al., 2012) by anesthesia and due to surgical manipulation and result as postoperative ileus (POI). Functional changes in bowel smooth muscle after surgery can be related to inflammatory changes and hormonal responses to the trauma of surgery (Carroll & Alavi, 2009). “The symptoms of POI include nausea, vomiting, abdominal distention, abdominal tenderness, and delayed passage of flatus and stool.” (Carroll & Alavi, 2009; Wallström & Frisman, 2013). Addition ,the edema of the intestinal may be the result of fluid overload which can lead to delay in gastrointestinal (GI) motility, increase translocation of endotoxin or bacteria, with potentially deleterious implication (Holte et al., 2002). Moreover, paralytic ileus may be prolonged lead to increase the risk of electrolyte disturbances such as hyponatremia and metabolic acidosis (Holte et al, 2002).

2.5.2 Impact of total hysterectomy

2.5.2.1 Impact on physiological health

After the treatment of hysterectomy, as stated by one study, the women at the age 50 or younger could have the high possibility of getting following cardiovascular disease. The relation with who over the age of 50 was unknown. Furthermore, the higher and noticeable risk will be seen if the ovaries are removed or retained respectively (Ingelsson et al, 2011). Some researchers have shown that the hysterectomies are connected to the osteoporosis and bone fractures. According to Kelsey, Voort and Watson, the authors stated that after menopause the effect of estrogen on calcium metabolism and the drop in serum estrogen levels may result in bone wasting because of calcium loss.

The rates of heart disease will be higher and the bones can be sabotaged with hysterectomies. Compared with people with intact ovaries, the testosterone levels will be decreased with those whose ovaries are cut both (Laughlin et al, 2000). As in if the testosterone levels are grown, the sense of sexual desire will be better. On the other hand, the height could be shortened since the bone density is lowered, which occur with the testosterone-reduced women. Before the age of 45, Oophorectomy can lead to the fivefold mortality from neurologic and mental disorders (Rivera et al, 2009).

After a long period since the surgery, typically 10–20 years, several popular adverse effects are Urinary incontinence and vaginal prolapse (Brown et al, 2000). As indicated in the related factors are not fully understood and how long after the surgery it will happen also is not precisely determined. Moreover, it's unclear that whether the surgical procedure affects it or not. Within 20 years after hysterectomy, the risk of urinary incontinence goes up twice (Altman et al, 2007&McPherson et al, 2005)

The factors like the number of vaginal deliveries, the difficulty of those deliveries, and the type of labor will influence the vaginal prolapse (Lukanovic et al, 2010). Generally, after the hysterectomy, the incidence is twofold (Altman et al, 2008). The rate of wound infection is about 3% in the case of abdominal hysterectomy. This rate is even higher with obesity, diabetes, immunodeficiency disorder, use of systemic corticosteroids, smoking, wound hematoma, and preexisting infection such as chorioamnionitis and pelvic inflammatory disease (Duff & Patrick, 2009). The risk of postoperative nausea and vomiting after gynecological surgery remains high, despite effective prophylactic medications. (Pierre et al., 2002)

2..5.2.2 Impact on psychological health

After a gynecologic surgery, patient generally suffer stresses associated with surgery. Patient may experience some mild, depression transient sadness after a hysterectomy. Especially with the the nulliparous woman who may be grieving because of the loss of ability of child bearing (Dresner & Kurzman, 2008).Surgeries that related to genital organs can trigger emotional reaction such as a posttraumatic syndrome or major depression (Roberta &Stellmaan, 2008).

Sexuality can be affected through a number of, physiological, psychological and anatomical mechanisms. After receiving total hysterectomy, women have to face with undesirable consequences such as impaired vaginal lubrication, changed intensity of orgasm, reduced vaginal sensitivity and elasticity, vaginal narrowing and shortening. These complications would affect the relationship with their partners and their own self-image (Aerts et al. 2009).

2.6 Functional recovery in patients after total hysterectomy

2.6.1 The concept of functional recovery

There are many definitions of functional recovery. According to Allvin, 2009, postoperative recovery is a process where patients regain both physical and emotional well-being through continuous information, support and encouragement from the health care staff. In the postoperative recovery process, both patients and health care staff cooperate to reach the goal of returning to the patients' preoperative 'normal' functions in everyday life. The definition of normality to include five dimensions of patients' recovery such as physical symptoms, physical functions, psychological and social functions, and activity.

Besides that, the amount of time needed to recover from surgery is different for each individual, and during this process, setbacks that the patient needs to overcome may occur. The recovery process includes patient's belief and his/her ability to care for him-/herself in order to ensure the postoperative care process is smooth for the patient (Easton, 1993 & Martinez, 2005).

In addition, Wolfer, 1973 defines that recovery is the process of restoration and/or attainment of normal physiological functions and is affected by the patient's illness, the extent and outcome of surgery, the past and current physical condition of the patients, and the type and quality of care. There are many factors that associated with the progress and duration of postoperative recovery, such as, urinary retention, wound healing, signs of infection, pulmonary and bowel complications, time to ambulation or mobility, pain and sleep problems, medication, and postoperative days in hospital. Therefore, health professionals need to understand the recovery

process for different types of surgical procedures, as different procedures may have unique patterns of postoperative recovery.

From ambulatory surgery, the postoperative recovery is divided into three periods. The early phase begins with the discontinuation of anesthesia directly after surgery and continues until vital signs are established. The intermediate phase ranges from stabilization of vital signs until the patient is ready to be discharged, and the late phase begins with discharge and extends to the time when the patient regains his/her preoperative well-being (Allvin, 2009; Korttila, 1995). However, the time when a patient feels fully recovered is a subjective feeling for each individual patient.

2.6.2 Functional recovery in patients after total hysterectomy

Functional recovery is desirable expectation both from patients who receive total hysterectomy and health care personnel's perspectives. It refers to resuming the function of patients as the previous condition prior to the surgery. Functional recovery among patients with total hysterectomy includes physiological function, psychological function as well as role function. If the recovery delays, patients will be at risk on having postoperative complications such as pneumonia, deep vein thrombosis, abdominal distension and paralytic ileus (Rahman, 2007). Accordingly, nurses should monitor patients' functional recovery and try to identify any factors that could inhibit or promote functional recovery among patients with total hysterectomy (Nelson et al, 2016a; Nelson et al, 2016b).

2.6.3 Measuring functional recovery

Patients' functional recovery can be measured by utilizing many instruments. Now a day many theorists have developed and test the functional recovery scales and tested for their psychometric property. Functional recovery of patients undergoing gynecological surgery can be measured by the QoR-15. The score ranges from 0 to 150 and have high score indicates a good recovery. QoR-15 including part A and part B. Part A mansion about feeling of patient in the last 24 hours including 10 items, it range from 0 to 10 score(0: none of the time (poor), 10: all of the time{ excellent }). Part B mansion about signs in the last 24 hours including 5 items, it ranges from 10 to 0 score (10: none of the time (excellent), 0: all of the time

(poor). According to one study Cronbach's alpha and split-half reliability was 0,90 and 0,88 (Kleif, Edwards, Sort, Vilandt &Gogenur, 2015).

2.7 Transition theory as a conceptual framework to explain functional recovery in patients after total hysterectomy

2.7.1 The concept of transition theory

In 1986, Meleis and Chick performed the synthesis of research and academic articles related to "transition." This theory was developed by induction from research and academic document synthesis pattern of response and nursing therapeutic. Transition is result in change of lives, health, relationships and environments. Transition is an outcome or a process of change. It is a nature process that can be applied and used to describe the process of health, daily living, work, study, everyday life. There are four components in theory framework including such as: antecedent events, mediating factors, health outcome and nursing therapeutics. However, theory framework was revised by Meleis & Schumaker in 1994, by Meleis et al in 2000 and consists of four components: nature of transitions, transition conditions, pattern of response and nursing therapeutics.

In the discipline of nursing, humans are defined as active beings who have perceptions and meanings are influenced by and in turn influence the conditions under which a transition occurs. Thus, to understand the clients' experiences during transitions, it is very important to find out the personal and environmental conditions that facilitate or inhibit progress toward obtaining a healthy transition. There are three factors including personal, community, or societal that may facilitate or hinder the processes of healthy transitions and the outcomes of transitions.

Personal is a very important factor in transition theory such as meanings, culture beliefs and attitudes, preparation and knowledge, socioeconomic status as follow:

One of the personal factors is the meanings that refers to events (health/ illness) influencing on a transition process and to the transition outcomes that it could

facilitate or inhibit healthy transitions. Thus, the meaning also mentions to perception of patients toward the changing process and how the changes effects their life. In addition, transition is a nature that can be applied and used to describe in process of health.

The second factor of personal is cultural beliefs and attitudes. This factor influences on transition process.

Another inhibitor that related to healthy transition is the socioeconomic status such as income, education and occupation. From literature reviews, participants who have low socioeconomic status were associated with experience psychological symptoms.

The last factor of personal is preparation and knowledge that facilitates the transition experiences and when individual lacks of knowledge preparation is an inhibitor. Preparation is knowledge about what expectation during a transition and what strategies could be helpful in managing transition

In conclusion, transition theory is considered as conceptual framework in this study. There are many components in transition theory. However, one of the important factors that are related to functional recovery in patients after total hysterectomy is personal factor. The next part will be mentioned about transition theory and patients after total hysterectomy.

2.7.2 Transition theory and patients after total hysterectomy

Patients undergoing total hysterectomy can be viewed as having transit in their health and illness continuum. Accordingly, this process can be explained very well by using Meleis' transition theory. Patients have to belief in their own capability to improve their function and ambulation so transition theory can used to explain this phenomena. According to transition theory (Meleis et al, 2000), physical function is an outcome which equal to the pattern of response which is the outcome of transition. Patients will be able to transit and achieve the ultimate outcome or having full functional recovery if they have facilitating factors such as receiving adequate social support which refers to transition conditions. Moreover, they can recover or obtain the desired goal sooner if they do not have inhibiting factors such as postoperative pain or comorbidity or underlining chronic diseases.

2.8 Factors related to functional recovery in patients after total hysterectomy

2.8.1 Postoperative Pain level and its related to functional recovery in patients after total hysterectomy:

Postoperative pain is the most common problem experienced by patients undergoing surgery, but often it is not treated appropriately.

The purpose of postoperative pain management is to minimize patient's discomfort, facilitate early mobilization and functional recovery, and prevent from acute pain developing into chronic pain. Mental health can affect a patient's recovery and psychological vulnerability is predictive of severe postoperative pain. Education to patients before surgery reduces anxiety and improves patient's satisfaction (Corke, 2013).

Pain is a common postoperative symptom impairing the quality of postoperative recovery, delaying discharge from hospital, leading to post-discharge readmissions, and increasing overall morbidity and costs. Effective postoperative pain management reduces suffering, leads to earlier mobilization, shortens hospital stay, reduces hospital cost, and increases patient satisfaction (Azari et al 2013) Good pain control is important to prevent negative outcomes such as hypertension, myocardial ischaemia, arrhythmias, respiratory impairment, ileus and poor wound healing (Corke, 2013).

Some authors reported that if postoperative pain is not controlled it will lead to serious discomfort and delays healing and recovery from surgery. Pain can cause cardiovascular problems, including increased blood pressure and tachycardia because of stimulating the secretion of epinephrine and norepinephrine (Nendick, 2000). Besides that, pain can also lead limitation of activity by causing symptoms such as nausea, vomiting, sweating and general weakness. Inadequate ventilation and limited activity can also result in serious complications, consists of atelectasis from decreased breathing capacity, poor clearance of secretions.

2.8.2 Comorbidity and its related to functional recovery in patients after total hysterectomy.

Comorbidity is other illnesses that patients had before the study such as hypertension, diabetes (Nicholas, 2014). These diseases would affect the current health status of patient after total hysterectomy. In addition, a comorbidity is defined as a clinical condition that exists at the time of the onset of the event which is likely to influence the outcome under study (Powell, 2001). According to Nicholas and colleagues described that 47% of patients after gynecological surgery experienced hypertension (HTN), 26% with diabetes mellitus (DM). The presence of diabetes and hypertension resulted in decreased survival with [Hazard ratios (HR) 1.70; 95% confidence interval (CI), 1.18-2.46] and (HR 1.66; 95% CI, 1.17-2.36), respectively. (Nicholas, 2014).

In this study, comorbidity will be measured by the form developed by the researcher. This form comprises items of common chronic diseases found among adult patients including hypertension, heart disease, renal disease and other chronic diseases. Patients will be asked if they have had these chronic illness prior to the study. Also, the comorbidity can be collected from the patients' profiles.

2.8.3 Social Support and its related to functional recovery in patients after total hysterectomy.

Social support is defined generally as information, advice, or tangible aid provided through contact with one's social network that has beneficial effects on the recipient (Bloom, 2002 & Maunsell et al., 1995).

Social support is defined generally as information, advice, or tangible aid provided through contact with one's social network that has beneficial effects on the recipient (Bloom, 2002 & Maunsell et al., 1995). To further dissect the concept of social support, a synthesis of current literature renders the consensus that there are at least two different aspects of the social support system that are conceptually distinct: Structural and functional support (Thoits, 1995; Bloom et al., 2001). Structural support consists of a network of relationships that exist between people, such friends and relatives, co-workers, etc. that bind an individual to her community. Participating in a system of mutual obligations and reciprocal relationships with individuals who share

common interest and concerns is the essence of a social network (Bloom et al., 2001). Functional support includes but is not limited to information, tangible, and emotional support (Bloom, 2001; House et al., 1982; Wortman, 1984). Informational support refers to the provision of knowledge relevant to the individual's experience. Specific to cancer patients, helpful information may include getting a reference of an oncology specialist, low-cost medical care, or access to the tumor board (Bloom et al., 2001 & Wortman, 1984). Instrumental or tangible support is consisted of resources the individual may receive from her network.

According to this study of Chou and colleagues have identified an important aspect of a woman's social network that impacts survival. An increase in the amount of social contact, representing greater social support, may increase the likelihood of the women's survival by enhancing their coping skills, providing emotional support, and expanding opportunities for information-sharing (Chou et al, 2012).

Social support has been considered as the important antecedent of patients after surgery. Surgery is the stressful event in terms of all physical, psychological and social aspects; and support from others can tremendously affect patients' recovery by cushioning the effect of that event (Mitchinson et al, 2008). Mitchinson and colleagues (2008) demonstrated that those with greater social network size reported lower postoperative pain, milder unpleasantness and lower anxiety in the first five days after surgery ($p < 0.001$).

Social support can be measured by Multidimensional Scale of Perceived Social Support (MSPSS). To assess social support the researcher used Multidimensional Scale of Perceived Social Support developed by Zimet, Dahlem, Zimet & Farley (1988). That was translated into Vietnamese. It is composed of 12 items. The items tended to divide into factor groups relating to the source of the social support, namely family (items 3, 4, 8, 11), friends (items 6, 7, 9, 12) or significant other (1, 2, 5, 10). The range of each item is from 1 to 7 ((1) if you Very strongly disagree, (2) if you strongly disagree, (3) if you mildly disagree, (4) if you are neutral, (5) if you mildly agree, (6) if you strongly agree, (7) if you very strongly agree. Total scores of social support from 12 to 84 and high scores indicate better social support.

2.9 Conclusion

In conclusion, total hysterectomy is the popular event for women in reproductive-age or before the menopause. Taking care for patients after gynecology is very important to enhance functional recovery. There are many factors that correlated with functional recovery in those. However, in this study, the researcher will identify pain, comorbidity and social support that influence on functional recovery in patients after total hysterectomy. The process of recovery in patients after total hysterectomy can be well elaborated by transition theory. Transition is a nature process and there are three components such as personal, community and social in this theory. In order to improve functional recovery on patient after total hysterectomy, this functional recovery will be impact by personal, community and social. Personal is the most important one of the component that influences on transition of patients with postoperative gynecology. Applying this theory in patients with postoperative gynecology can be proposed that obtaining functional recovery is the desired goal while factors related to the goal are pain, comorbidity and social support. This study helps to identify factors associated with functional recovery and this will benefit for nurses to enhance functional recovery in patients after total hysterectomy as well as the quality of care. From that, nurses could provide nursing intervention programs in order to improve functional recovery effectively. In addition, this study is meaningful to nursing practice in Vietnam and it will depict a general picture after total hysterectomy in Vietnamese population.

CHAPTER III METHODOLOGY

3.1 Research design:

This descriptive research aimed to study postoperative pain, comorbidity, social support, functional recovery in patients after total hysterectomy.

3.2 Population and sample of the study

3.2.1 The population of this study

Population of the study included female patients with the age of 18 years old and who had total hysterectomy and admitted in Obstetrics & Gynecology Department, Bach Mai Hospital and National hospital of Obstetrics and Gynecology, Hanoi, Vietnam for total hysterectomy.

3.2.2 The sample of the study

The sample was selected from the population according to the inclusion criteria:

The inclusion criteria were as follow;

- 1) Age over 18 years old or above
- 2) Able to communicate with the researcher in Vietnamese language

The exclusion criteria were as follow;

- 1) Patients who were diagnosed as having of cancer.
- 2) Incomplete filled out questionnaire

Sample size:

The sample size in this study was calculated by using G*power 3.1.9.2 program to determine the minimum number of participants needed for co-relational design (Faul, Erdfelder, Buchner, & Lang, 2009). The researcher tested the

relationship between postoperative pain, comorbidity, social support and recovery inpatients after total hysterectomy. Three parameters required including 1) the level of significance $\alpha = 0.05$, 2) the power of the statistical test (Power $1 - \beta = 0.8$) and 3) the effect size. Because there was limited study about these variables, the researcher used medium effect size for this study (ES = 0.2). Based on G*power 3.1.9.2, sample selected size should be at least 115 patients.

3.3 Settings

The research was conducted at the Obstetrics & Gynecology Department at Bach Mai Hospital and National hospital of Obstetrics & Gynecology, Vietnam. Patients participated in the study were patients after total hysterectomy with the above criteria and were treated in Obstetrics & Gynecology Department at Bach Mai hospital and National hospital of Obstetrics & Gynecology, Vietnam.

Bach Mai hospital, the first special – category comprehensive general hospital of Vietnam was an intensive health facility at the highest technical level and was responsible for various important tasks in the health sector of the country. Bach Mai hospital was established in 1911, with nearly 2000 beds, 2 Institutes, 8 Centers, 21 Clinical departments, 6 Para-clinical departments, 9 Functional departments, 1 Nursing college school. Its modern system of equipment and facilities had also helped fulfill its responsibility in performing a number of important tasks of the country's health sector: It had provided care and treatment at the highest level, training, scientific research, guidance and direction to health facilities of lower levels, disease and epidemic prevention and control, international cooperation, health economic management. Obstetrics & Gynecology department which had 80 beds for about 120 inpatients, and it had an out-patient department that provided health check-ups and medical consultations. With approximately 42 medical physicians, 10 nurses and 22 midwives, the department provided treatment for most common tumor diseases such as uterine fibroids, ovarian cysts, ovarian cancer.

National Hospital of Obstetrics and Gynecology was established in 1955 with nearly 1000 beds, 7 Centers' 14 Clinical departments, 9 Para-clinical departments, 8 Functional departments. Now, National Hospital of Obstetrics and

Gynecology was not only an industry - leading base of specialized maternity, childbirth and neonatal plan but also the basis of higher education, postgraduate; scientific research, mentoring and technology transfer on specialized maternity, newborn in the country. The hospital had a team of professors, doctors who were trained in basic education in the country and improved skills in the advanced countries with obstetrics and gynecology and reproductive health care development, highly skilled, trained in fact, dedicated to their profession. The system equipment for examination and treatment of hospital was invested in a modern and in-depth direction. The Gynecology department was an examination department, treatment, surgery of benign gynecological diseases, surgery of medical emergency, abdominal total hysterectomy, through vaginal or laparoscopic. There were 37 staff in this department and the number of Nurses and Midwives were 22.

Healthcare services were provided by the physicians and nurses every day from 7:30 a.m. to 4:30 p.m. at the inpatients department. Their services included examination, drug prescription for patients and Nurses gave medicines for patients, following the doctor's prescription, performed the daily care plan for patients. So, the researcher plans had to collect data on every day, 9.00 AM – 5 PM. The interview was conducted in ward.

3.4 Instruments

The instruments used for data collection included 5 parts as follows:

Part 1: General information of the patients

The general information of patients included address, occupation, age, gender, weigh, height, date of admission, marry status, education level, payment method, income, health insurance, any children, where hospital to transfer.

Part 2: General information related to illness and treatment

The General information related to illness and treatment questionnaire included the date of hospital admission and discharge, drugs used before, diagnosis, history of family, comorbidity, knowledge about illness and wound status. Questionnaire of co-morbidity was conducted by researcher and each disease was assigned a score of 1.

Part 3: Numerical rating scale (NRS)

Pain level of subjects in this study was measured by Numerical rating scale (NRS). Numerical rating scale (NRS) is a common pain scale being used in clinical practice as well as in clinical research. This pain scale was developed by McCaffery in the year 1968 (Bijur, Latimer, Gallagher, 2003) and had been tested for its reliability in various groups of patients including patients with acute and chronic pain showing the alpha Chronbach's ranging from .8 to .91 (Koneti & Jones, 2016). NRS is a rating scale showing number reflecting severity of pain from 0 to 10 in a horizontal line. Subjects were asked to verbally rate their pain on this scale with "0" equal to no pain and "10" equal to worst possible pain.

The researcher had properly instructed the subject in how to rate their pain using the following statements:

1. I would like you to rate your pain on a scale from zero to ten.
2. 'Zero' means you have no pain at all.
3. 'Ten' means the worst possible pain you can image.
4. What number would you give to your pain?

The values on the pain scale correspond to pain levels as follows:

1 – 3 = mild pain

4 – 6 = moderate pain

7 – 10 = severe pain

Part 4: The Multidimensional Scale of Perceived Social Support (MSPSS)

To assess social support the researcher used Multidimensional Scale of Perceived Social Support developed by Zimet, Dahlem, Zimet & Farley (1988). That was translated into Vietnamese. It was composed of 12 items. The items tended to divide into factor groups relating to the source of the social support, namely family (items 3, 4, 8, 11), friends (items 6,7,9,12) or significant others (1,2,5,10). The range of each item is from 1 to 7 (1) if you Very strongly disagree, (2) if you strongly disagree, (3) if you mildly disagree, (4) if you are neutral, (5) if you mildly agree, (6) if you strongly agree, (7) if you very strongly agree. Total scores of social support ranges from 12 to 84 and high scores indicate better social support.

Part 5: The Quality of Recovery – 15 Questionnaire (QoR-15)

Patient perceived quality of recovery can be measured by the Quality of Recovery – 15 Questionnaire (QoR-15). The score ranges from 0 to 150 and high score indicates a good recovery. QoR-15 including part A and part B. Part A mansion about feeling of patient in the last 24 hours including 10 items, it ranges from 0 to 10 score (0: none of the time { poor }, 10: all of the time { excellent }). Part B mansion about signs in the last 24 hours including 5 items, it ranges from 10 to 0 score (10: none of the time {excellent}, 0: all of the time {poor}). According to one study indirect Cronbach's alpha and split-half reliability was 0,90 and 0,88 (Kleif et al, 2015).

3.5 Instrument Reliability and Validity

3.5.1 Instrument Reliability

The reliability of all scales was on 30 patients after total hysterectomy at Obstetrics & Gynecology department, then the scores were taken to find the reliability by Cronbach's alpha coefficient. Then they were used in the whole sample to calculate Cronbach's alpha coefficient which yielded Cronbach's alpha of 0.954 in QoR-15, and 0.907 in social support scale.

3.5.2 Instrument Validity

The Quality of Recovery – 15 Questionnaire (QoR-15) scale, Multidimensional scale of Perceived Social Support (MSPSS), Numerical rating scale (NRS) were verified by 5 experts. Their content validity was inspected and suggestions were made. Linguistic changes were made to them before being tested on 30 samples to assure their understanding of the contents.

3.6 Data collection

The researcher submitted research proposal for ethical approval to Institutional Review Board of Nursing faculty, Mahidol University and SMP – IR Institutional Review Board Hanoi National University. After getting the approval and

receiving permission to data collection, the researcher performed data collection in the following manner:

3.6.1 The researcher met the director of Bach Mai hospital, the manager of Obstetrics & Gynecology department, the director of National hospital of Obstetrics & Gynecology, the head nurse of Gynecology department in order to explain the purpose for data collection. The head nurse introduced the researcher to target population.

3.6.2 The researcher self – introduced, made a relationship with the patients, for the confusion patient the researcher made relationship with direct caregivers and then informed the objective of the study, data collection procedure and asked for the research cooperation. In addition, researcher asked patients to sign consent form.

3.6.3 The researcher used four questionnaires for data collection on discharge day. These questions are 1) demographic data. 2) Numerical rating scale (NRS). 3)The Multidimensional Scale of Perceived Social Support (MSPSS) 4) the Quality of Recovery – 15 Questionnaire (QoR-15) 5).The time used was about 30-45 minutes. The researcher interviewed patients twice including at the first day after total hysterectomy and discharge day.

3.6.4 The patients could cancel to participate in the research all the time wherever they want to quit without any consequences to their treatment and caring services. All data were deleted from the database and were not used as any part of the research.

3.6.5 Every information details were confidential and any content related to data that was presented in the thesis or any publication was anonymous.

3.7 Protection of human rights

This study was conducted based on the protection of human rights. The participants were asked to participate in the study. The researcher explained the purpose of the study, the research procedure, benefits, risks, types of questionnaire, length of time for completing questionnaire, and the right to refuse to participate in the study anytime. The participants who agreed to participate were informed and were

assured that the data would be kept confidentially and would be reported only as a group data. Informed consent was signed by all participants

In this research, the researcher had strictly concerned on human rights and ethical issues throughout the research process by;

3.7.1 The researcher collected the data after receiving approval from Hanoi National University, Mahidol University and the Ethical Committee of Research with Human Subjects of Obstetrics and Gynecology ward.

3.7.2 The researcher introduced herself to the participants at Obstetrics and Gynecology ward, informed the patients about the research objective and all data collection process. The patients were informed that they has right to refuse to join in the research process. During anytime throughout the research process, patients had their own right to withdraw from the research project and would not be influenced on their treatment or caring process. If patients agreed to join in the research process, they were invited to sign their name in the consent form.

3.7.3 This research did not cause any risk to the patients physical health. The data collection process took time about 30 to 45 minutes. Although the patients did not get any benefit from this research but the results were benefits for other patients who have the same health care problem as the sample

3.7.4 All contents were kept confidential, only the researcher and the research team were able to get access to the data. Any content related to data that would be presented in the thesis or any publication was anonymous. In case of ones who withdrawn themselves from the research, all data were deleted from the database and were not used as any part of the research.

3.7.5 If the participants have further questions or require more explanation in regard to the research, they were informed to feel free to ask the researcher at any time throughout the research process.

3.7.6 After the participants clearly understood the research process and agreed to join in the research, they were invited to sign their name in the consent form.

3.8 Data analysis

Statistical analyses were conducted using SPSS 20.0 software. Testes of significance are two-tailed, with an alpha level of 0.05

1. Frequency, percentage, mean and standard deviation were used to describe the general characteristics and medical data of the samples.

2. The descriptive statistics in terms of frequency, percentage, mean, standard deviation, and range were used to describe study variables, including postoperative pain, comorbidity, social support and functional recovery of inpatients after total hysterectomy.

3. Pearson's product moment correlation were used to examine association between postoperative, comorbidity, social support and functional recovery in patient after total hysterectomy.

3.9 Assumption for statistic test

For the Pearson product - moment correlation coefficient the assumptions are as follows:

3.9.1 Level of measurement: continuous variable or ordinal variables

3.9.2 Linear relationship

3.9.3 Normality of variables: tests normal distribution

CHAPTER IV

RESULTS

This chapter showed the result of description correlation research. The study aimed to find out the factors related to functional recovery in patients after total hysterectomy including postoperative pain, comorbidities and social support. The sample was 115 patients recruited from Obstetrics & Gynecology Department at Bach Mai Hospital and National hospital of Obstetrics & Gynecology, Viet Nam. The results are given as follow:

- 1) General characteristics of patients.
- 2) Characteristic of illness and health status of patients.
- 3) Variable data of comorbidities, social support, pain and function recovery.
- 4) The relationship between the postoperative pain, comorbidities and social support and function recovery of patients.

4.1 General characteristics of stroke patients

Most of respondents was aged from 41 to 50 (64.3%), with mean age of sample being 48.7 ± 7.6 (years old). The majority of patients lived in rural area (65.2%), had secondary education (73.0%), were married (91.3%). Most of them were farmers (44.3%). The mean monthly income per patient was 169.5 ± 137.8 (USD) and per family was 384.4 ± 284.4 (USD). About 73.0% had health insurance.

Table 4.1: General characteristics of stroke patients by Number and percentage

Variable	Number (n=115)	Percent
Age		
< 40	7	6.1
41- 50	74	64.3
51 –60	27	23.5
> 60	7	6.1
Min: 37		
Max: 86		
Mean±SD: 48.7±7.6		
Living location		
City	37	32.2
Rural	75	65.2
Mountainous	3	2.6
Marital status		
Single	8	7.0
Married	105	91.3
Separated	2	1.7
Education level		
Elementary	6	5.2
Secondary	84	73.0
Bachelor	21	18.3
Others	4	3.5
Occupation		
Professional	5	4.3
Industrial worker	15	13.0
Home worker	9	7.8
Farmer	51	44.3
Salesperson	10	8.7
Retired	4	3.5
Other	21	18.3

Table 4.1: General characteristics of stroke patients by Number and percentage (cont.)

Variable	Number (n=115)	Percent
Income		
Patient		
< 100 US \$	44	38.3
100-200 US \$	35	30.4
> 200 US \$	36	31.3
Min: 8.1		
Max: 909.1		
Mean±SD: 169.5±137.8		
Family		
< 200 US \$	32	27.8
200-500 US \$	55	47.8
501-800 US \$	23	20.0
>800US \$	5	4.3
Min: 13.6		
Max: 2272.7		
Mean±SD: 384.4±284.4		
Insurance		
No	31	27.0
Yes	84	73.0
Patient' children		
0	11	9.6
1	23	20.0
2 or more	81	81.4

4.2 Characteristic of illness and health status of stroke patients

Among 115 patients, the average length of hospital admission was 5.0 ± 0.9 (days). Most of them had the illness from 1 to 12 months (55.7%). Fibroid was the primary diagnosis among patients (96.5%). Most of them did not have treatment before doing surgery (73.9%).

Table 4.2: Characteristic of illness and health status of patients. (n = 115)

Clinical information	Number (n=115)	Percent
Length stay of hospital		
Min: 4.0		
Max: 7.0		
Mean \pm SD: 5.0 ± 0.9		
Duration of illness		
Less than 1 months	21	18.3
1 to 12 months	64	55.7
13 to 24 months	7	6.1
Over than 25 months	23	20.0
Diagnosis		
Fibroid	111	96.5
Other	4	3.5
Treatment before surgery		
No	85	73.9
Yes	30	26.1

About 40% patients have co-morbidities, including: 15.7% had hypertension, 11.3% had heart disease, 10.4% had diabetes, 11.3% had renal disease and 3.5% had peptic ulcers. About 30.4% had one comorbidity, while 7.0% and 2.6% had two and three diseases, respectively.

Table 4.3: Comorbidity among respondents

Comorbidity	Number (n=115)	Percent
Having co-morbidities		
No	69	60.0
Yes	46	40.0
• Hypertension	18	15.7
• Heart disease	13	11.3
• Diabetes	12	10.4
• Renal disease	13	11.3
• Peptic Ulcers	4	3.5
Number of disease		
No	69	60.0
One disease	35	30.4
Two diseases	8	7.0
Three diseases	3	2.6

Table 4.4 indicates the social support among respondents. The mean social support score of Family domain was 21.64 ± 3.28 , while that of Friend and Other domains were 24.12 ± 3.28 and 20.12 ± 4.15 , respectively. The mean total social support score was 65.88 (SD ± 9.71).

Table 4.4: Social support status among respondents

Social support	Minimum	Maximum	Mean	SD
SS Family	14.8	24	21.64	3.28
SS Friends	18.0	24	24.12	3.28
SS Other	12.0	24	20.12	4.15
SS Total	44.8	72	65.88	9.71

Table 4.5 shows that most of patients had mild pain (69.6%), and 30.4% had moderate pain. The mean pain score was 2.73 ± 1.16 .

Table 4.5: Level of pain among respondents

Level of Pain	Number (n=115)	Percent
Pain		
• Mild pain	80	69.6
• Moderate pain	35	30.4
Pain score		
Mean \pm SD: 2.73 \pm 1.16		
Min: 0		
Max: 6		

Table 4.6 reveals the function recovery among patients. The mean score of function recovery was 124.57 \pm 11.78.

Table 4.6: Function recovery among respondents (n=115)

Level of Recovery	Mean	SD
Able to breathe easily	9.17	1.02
Been able to enjoy food	6.90	1.65
Feeling rested	8.14	1.59
Have had a good sleep	7.18	1.50
Able to look after personal toilet and hygiene unaided	8.02	1.92
Able to communicate with family or friends	9.50	0.99
Getting support from hospital doctors and nurses	9.43	0.91
Able to return to work or usual home activities	7.03	1.56
Feeling comfortable and in control	8.63	1.41
Having a feeling of general well-being	7.97	1.07
Moderate pain	7.71	0.85
Severe pain	9.17	0.80
Nausea or vomiting	9.43	0.86
Feeling worried or anxious	8.37	1.03
Feeling sad or depressed	7.96	1.19
Total score		
Mean \pm SD: 124.57 \pm 11.78		
Max: 147		
Min: 83		

4.3 Correlation between pain, co morbidity, social support and functional recovery in patients after total hysterectomy

All variables in this study were tested for their normal distribution and the results showed that all variables did not have normal distribution. Accordingly, Spearman's rho was employed to test correlation among studied variables. Results of table 4.7 show that only pain score had a negative correlation with functional recovery score ($r = -0.70$, $p < 0.05$).

Table 4.7: Correlation between pain, co morbidity, social support and functional recovery in patients after total hysterectomy

Variables	Co morbidity	Social support	Pain	Functional recovery
Co morbidity	1.00			
Social support	-0.101	1.00		
Pain	0.036	-0.197*	1.00	
Functional recovery	0.005	0.162	-0.697*	1.00

CHAPTER V

DISCUSSION

In this chapter, discussion will be reported according to the objective and the findings of the study. Three items will be consecutively report; functional recovery of patients after total hysterectomy, relationship among all studied variables and conclusion of the discussion.

5.1 Functional recovery among patients after total hysterectomy

The mean score of function recovery was 124.57 ± 11.78 . Of which, “Been able to enjoy food”, “Able to return to work or usual home activities” and “Have had a good sleep” had the lowest score compared to other items. This finding indicated that patients after hysterectomy were in their good recovery process. Majority of patients were in their adult age. About 64.3 % of them had ages ranged from 41 to 50 years with the average age of 48.7 years (SD ± 7.6). People in this age range usually are still very active in social activity and work. They are healthy and ready to resume their previous activities. Most of them (55.7%) have just been diagnosed as having diseases and required hysterectomy within one year. Moreover, majority of them were diagnosed as having fibroid (96.5%) which did not affect their recovery process. It can be stated that, they were in relatively good health prior to hysterectomy leading to good recovery after surgery.

The finding of Powell (2001) and Nicholas (2014) found that patients' health status before surgery affected postoperative recovery. On the other hand, patients with poor health status were more likely to develop postoperative complications leading to delayed recovery. Good recovery among these patients might be due to the hospital policy to encourage patients on early ambulation as the most earliest possible after surgery. Early ambulation not only leads patients to have early recovery but also prevents postoperative complications such as lung atelectasis and

abdominal adhesion band. An evidence found in this study that no one ever come back for re operation and the length of hospital stay was relatively in normal duration with a mean of 5.0 days (SD±0.9 days).

Although in the whole picture, patients seem to have good progress in recovery, there were some items to be concerned. The item “Been able to enjoy food”, “Able to return to work or usual home activities” and “Have had a good sleep” had the lowest score compared to other items. It revealed numbers of postoperative recovery problems these patients experienced. “Been able to enjoy food” showed that patients had delayed recovery of their gastrointestinal function. This might occur from decreased bowel movement after surgery. Likewise, what Bree and the others stated that abdominal surgery commonly causes a temporary inhibition of intestinal motility (Bree et al., 2012) by anesthesia, surgical manipulation resulted in postoperative ileus. Moreover, it might refer to loss of appetite due to poor digestive function. If this problem is not considered by nurses and other health care personnel, patients might have delayed recovery due to poor nutrition intake after surgery.

“Able to return to work or usual home activities” was one item showing low scores. It indicated that patients might concern about their capability to resume previous activities. Patients underwent total hysterectomy generally suffered stress. They may experience emotional distress and guilty after the uterus were removed because they could no longer be able to have children (Dresner & Kurzman, 2008). Moreover, any surgery can activate a posttraumatic syndrome (Roberta & Stellmaan, 2008) and leading patients to feel uncertainty about their future. Concerning roles and function in society, it was expected to be lower than preoperative phase. A transitional program is therefore importance for these patients because it will enhance them to be easily transit to their usual activities.

“Have had a good sleep” also showed low scores, indicating that patients had problem with sleep or had sleep disturbance after surgery. Sleep disturbance could occur due to many factors. The first factor was related to depletion of estrogen hormones after total hysterectomy with ovarian removal. Acute hormonal depletion led to vasomotor symptom, depression and sleep disturbance. Many symptoms related to sleep disturbance might occur such as difficulty to get to sleep, awaken during the night, awaken earlier than desired, shorten in duration of sleep and sleepy during day

time (Vousoura, Spyropoulou, Koundi, Tzavara, Verdeli, Paparrigopoulos, Augoulea, ,2015). These patients could not perform active activities as usual. If this problem is not solved, they will end up with severe depression and other mood disorders.

These problems should be taken into consideration and the proper management would be employed to improve patients' recovery.

5.2 Relationship between comorbidity, pain level, social support and functional recovery in patients after total hysterectomy

Only pain score had a negative correlation with functional recovery score ($r = -0.70$, $p < 0.05$) while comorbidity and social support were not correlated with patients' recovery.

The explanation is that only 40% of patients in this study had co morbid diseases. About 15.7% had hypertension, 11.3% had heart disease, 10.4% had diabetes, 11.3% had renal disease and 3.5% had peptic ulcers. About 30.4% had one comorbidity, while 7.0% and 2.6% had two and three diseases, respectively. All patients were appointed for hysterectomy so that their co morbid diseases were well controlled prior to the surgery. Accordingly, the comorbid diseases did not affect recovery process among this studied patients. Although the result of this study contradicted with previous studies which found that patients with comorbid diseases would be at risk for delayed recovery after surgery (Powell, 2001; Nicholas, 2014), it can be explained that in those previous studies, patients had more severe co morbid diseases including late stage cancer. Those co morbid diseases would inhibit or delay the recovery process after surgery.

Social support was not related with the recovery after surgery. Majority of the patients (65.2%) had their residency the rural area. They stayed away from their family during hospitalization. The support they received only came from nurses and other health care personnel. Moreover, 44.3% of them were farmers with low monthly incomes. This makes it more difficult to receive instrumental support due to insufficient resources. It is importance to note that the social support score among the studied patients was relatively low with an average score of 65.88 (SD ± 9.71) while the

possible scores ranged from 12 to 84. The lowest score was 44.8 and the highest score was 72. Although social support was not correlated with recovery, patients with hysterectomy should receive more support. Nurses should play vital roles in providing them with support while these patients are away from home. Emotional and information support should be encouraged by nurses. Also, nurses should seek for adequate resources for these patients.

Pain had negative correlation with functional recovery. This finding indicates that patients who had high pain would have delayed recovery. All patients in this study experienced pain, 69.6% had mild pain and 30.4% had moderate pain. The average pain level was 2.73 (SD± 1.16). The explanation is that postoperative pain prevented patients in moving or performing their routine daily activities leading to delayed recovery. Similar to what found in previous studies (Sivrikaya, 2012; Corke, 2013). If there is inadequate pain control after surgery, pain will arouse the sympathetic nervous system, which can lead to variety physiologic responses and eventually cause morbidity and mortality (Sivrikaya, 2012). The study of Theunissen and the others among 468 women after hysterectomy found that patients who experienced postoperative pain without effective pain management developed chronic pain at the incisional wound 3 and 12 month after the surgery. Moreover, these patients had delayed functional recovery, emotional problem, and majority of them could not resume their routine activities at the similar level they used to perform prior to the surgery including go back to work, performing previous roles and functions (Theunissen, et al, 2016).

Thereby, pain control after surgery is vital among patients with hysterectomy (Nelson, et al, 2016; Theunissen,et al,2016).Effective postoperative pain management could reduce patients' suffering, leading to earlier ambulation, decreased length of hospital stay, reduced medical expense, and increased satisfaction of patients and their family members (Azari et al 2013). Good pain control is important to prevent negative outcomes such as hypertension, myocardial ischaemia, arrhythmias, respiratory impairment, ileus and poor wound healing (Corke, 2013).

5.3 Conclusion

The finding from this study partially supports the research hypothesis. Patients after total hysterectomy experienced mild to moderate pain which affected their functional recovery. Meleis' transition theory appropriately described the phenomena of patients underwent total hysterectomy. In order to achieve desired health outcomes or assist these patients transit through their health illness continuum, effective postoperative pain control has to be implemented. Nurses can play vital roles on helping women after total hysterectomy by providing them with nursing therapeutic related to postoperative pain control. Pharmacological pain control using appropriate medications is suggested. In this matter, multidisciplinary team approach should be encouraged. Beside nurses, physicians, pharmacists, physical therapists and social workers should be invited to be parts of the team so that patients would receive comprehensive care during their illness process. Non-pharmacological pain management such as relaxation technique, music therapy and guide imagery are also recommended. Nurses are able to perform the later pain management techniques independently. Continuous care from hospital to home is significance because it will ensure that patients obtain their fully transit to their optimum recovery.

CHAPTER VI

CONCLUSION

6.1 Conclusion of the study

This was descriptive correlation research aimed to study the relationship among patient's comorbidity, pain level, social support and functional recovery in patients after total hysterectomy. The sample in this study were selected according to the inclusion criteria from patients who admitted in the Obstetrics & Gynecology Department at Bach Mai Hospital and National hospital of Obstetrics & Gynecology, Hanoi, Vietnam from August to October, 2016. Transition theory was utilized as a framework in this study. The sample size in this study was calculated by using G*power version 3.1.9.2 program. The sample calculation yielded 115 samples.

The researcher obtained approval from Institutional Review Board of Nursing faculty, Mahidol University and Institutional of Review Board of SMP, Vietnam National University, Hanoi, Vietnam. Then, the researcher used 5 instruments: the demographic data questionnaire, Numerical rating scale (NRS) for Pain, the Multidimensional Scale Perceived Social Support (MSPSS) and The Quality of Recovery – 15 Questionnaire (QoR-15) to collect data. All instruments were tested for their validity and reliability.

The sample included 115 patients underwent total hysterectomy with the ages ranged from 37 to 86 years. The researcher collected data by herself from 11.00 am to 5.00 pm from Monday to Friday until the sample reached the target of the studied sample size. For each sample the researcher spent 30 to 40 minutes on interviewing and collected some data from the patients' records. During data collection, there was no adverse event among the sample. All sample recruited in the study remained throughout the study process with no attrition.

SPSS computer program was employed for data analysis. The descriptive statistics were used to describe general information and study variables. The assumption of Pearson' Product Moment Correlation was tested and it was found that

all variables were not in normal distribution. Accordingly, Spearman's rho was used to examine correlation among all variables.

The findings are summarized as follows:

1. Most of patients' ages ranged from 41 to 50 years (64.3%), with the mean age of 48.7 ± 7.6 years. The majority of patients lived in rural area (65.2%), had secondary education (73.0%), were married (91.3%). Most of them were farmers (44.3%). The mean monthly income per patient was 169.5 ± 137.8 (USD) and 73.0% had health insurance.

2. The average length of hospital stay was 5.0 ± 0.9 days. Most of the patients had the illness from 1 to 12 months (55.7%). Fibroid was the primary diagnosis among them (96.5%). Most of them did not have treatment before receiving surgery (73.9%). About 40% of the patients have co-morbidities, including: hypertension (15.7%), heart disease (11.3%), diabetes (10.4%), renal disease (11.3%) and peptic ulcers (3.5%). About 30.4% had one comorbidity, while 7.0% and 2.6% had two and three diseases, respectively.

3. The mean score of function recovery was 124.57 ± 11.78 which reflected good recovery. However, there were some items to be concerned. The item "Been able to enjoy food", "Able to return to work or usual home activities" and "Have had a good sleep" had the lower scores compared to other items.

4. The mean social support score of family domain was 21.64 ± 3.28 , while that of friend and other domains were 24.12 ± 3.28 and 20.12 ± 4.15 , respectively. The mean total social support score was 65.88 (SD ± 9.71).

5. Most of the patients had mild pain (69.6%), and 30.4% had moderate pain. The mean pain score was 2.73 ± 1.16 .

6. Pain had a negative correlation with functional recovery score ($r = -0.70$, $p < 0.05$) while patients' comorbidity and social support did not have.

Transition theory (Meleis et al, 2000) can reflect the trajectory of recovery process among patients undergoing total hysterectomy. In order to facilitate patients' recovery from the operation, the main transition condition to be concerned is pain which can be viewed as patients' personal factor. Nurses can use this finding to facilitate healthy transition in patients with total hysterectomy.

6.2 Recommendations

6.2.1 Implications for nursing practice

1) Nurses should assess patients' functional recovery focusing on patients' gastro intestinal and digestive function after the surgery. When problem is identified, nurses should promote gastro intestinal function by promoting patients' early ambulation and nutritional support.

2) Nurses should assess patients' perception of their abilities to return to work and routine home activities after surgery. Empowering education should be provided to ensure patients' confidence to resume their previous roles and daily activities.

3) Nurses should assess patients' quality of sleep and promote sleep hygiene because it reflects a part of postoperative recovery.

4) Numerical pain scale should be routinely used to assess pain level in patients after hysterectomy. Pain control strategy both pharmacological and non-pharmacological pain management should be implemented so that patients' recovery will be enhanced.

6.2.2 Implications for further study

1) Multi settings research should be conducted to add more sample and more variety of settings in Vietnam to cover the broader picture of patients with hysterectomy.

2) Pain control guidelines for patients with hysterectomy should be developed and test for its effectiveness by Quasi experimental research.

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APPENDICES

APPENDIX A INSTRUMENT

(English version)

- 2 MAY 2016
16.0703

INSTRUMENT (English version)

Patient code.....Date of data collection.....

Part 1 General information of the patients

The following questions related to your personal information. Please tick (✓) or fill in blanks in the following questions:

1. Age: years old (current age in Western calendar)
 2. Location of residence:.....
 3. Name of hospital before to Bach Mai hospital:.....
 4. Marital status:

<input type="checkbox"/> Married	<input type="checkbox"/> Single	
<input type="checkbox"/> Separated	<input type="checkbox"/> Divorced	<input type="checkbox"/> Widowed
 5. What is your education level?

<input type="checkbox"/> Elementary school	<input type="checkbox"/> Upper bachelor degree
<input type="checkbox"/> Secondary school	<input type="checkbox"/> Others (please identify)
<input type="checkbox"/> Bachelor degree	
 6. What is your occupation?

<input type="checkbox"/> Professional	<input type="checkbox"/> Farmer
<input type="checkbox"/> Industrial worker	<input type="checkbox"/> Salesperson
<input type="checkbox"/> Home worker	<input type="checkbox"/> Retired
<input type="checkbox"/> Others jobs (please specify).....	
 7. How much of your income per month?VND
 8. How much of your family income per month:VND
 9. Do you have your health insurance? Yes No
- If yes please answer number 10, If no skip number 10 and continue to answer number 11
- 10.If yes, please indicate how much it covers for your treatment? (Percent)
 11. Do your member in family have gynecology disease? Yes No
 - 12.How many children do you have?.....

Part 2 Information related to illness and treatment

- 1.When did you admit to the hospital?

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2. How long do you have diseases?
3. What is your diagnosis?
4. What do you have for current and past treatment method?.....
5. Which comorbidity do you have?
- 5.1 Hypertension O no O yesfor how long?
- Treatment: Always ; Sometime ; No
- 5.2 Heart disease O no O yesfor how long?
- Treatment: Always ; Sometime ; No
- 5.3 Diabetes O no O yesfor how long?
- Treatment: Always ; Sometime ; No
- 5.4 Renal disease O no O yesfor how long?.....
- Treatment: Always ; Sometime ; No
- 5.5 Others please describe:.....
6. Wound status
- Infection Normal
7. Vital sight: Blood pressure:; Temperature:.....; Pule:.....; Breath:...

Part 3: Quality of Recovery -15 questionnaire (QoR-15)

	0	1	2	3	4	5	6	7	8	9	10
How have you been feeling in the last 24 hours? (0 to 10, where: 0 = none of the time [poor] and 10 = all of the time [excellent])											
1. Able to breathe easily											
2. Been able to enjoy food											
3. Feeling rested											
4. Have had a good sleep											
5. Able to look after personal toilet and hygiene unaided											

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6. Able to communicate with family or friends																			
7. Getting support from hospital doctors and nurses																			
8. Able to return to work or usual activities																			
9. Feeling comfortable and in control																			
10. Having a feeling of general well-being																			
Have you had any of the following in the last 24 hours																			
11. Moderate pain																			
12. Severe pain																			
13. Nausea or vomiting																			
14. Feeling worried or anxious																			
15. Feeling sad or depressed																			

Past 4: Multidimensional Scale of Perceived Social Support (MSPSS)

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

Circle the "1" if you **Very Strongly Disagree**

Circle the "2" if you **Strongly Disagree**

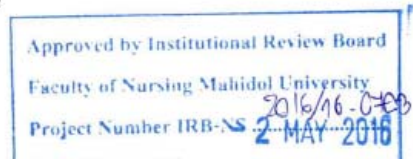
Circle the "3" if you **Mildly Disagree**

Circle the "4" if you are **Neutral**

Circle the "5" if you **Mildly Agree**

Circle the "6" if you **Strongly Agree**

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Circle the "7" if you **Very Strongly Agree**

1.	There is a special person who is around when I am in need.	1	2	3	4	5	6	7
2.	There is a special person with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
3.	My family really tries to help me.	1	2	3	4	5	6	7
4.	I get the emotional help and support I need from my family.	1	2	3	4	5	6	7
5.	I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7
6.	My friends really try to help me.	1	2	3	4	5	6	7
7.	I can count on my friends when things go wrong.	1	2	3	4	5	6	7
8.	I can talk about my problems with my family.	1	2	3	4	5	6	7
9.	I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
10.	There is a special person in my life who cares about my feelings.	1	2	3	4	5	6	7
11.	My family is willing to help me make decisions.	1	2	3	4	5	6	7
12.	I can talk about my problems with my friends.	1	2	3	4	5	6	7

Past 5: Numerical Rating Scale (NRS)

I would like you to rate your pain on a scale from zero to ten. 'Zero' means you have no pain at all. 'Ten' means the worst possible pain you can image. What number would you give to your pain?

0	1	2	3	4	5	6	7	8	9	10
No pain					The worst possible pain					

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Bảng 5: Thang đo đa khía cạnh về Nhận thức hỗ trợ xã hội (MSPSS)

Hướng dẫn: Chúng tôi quan tâm đến việc bạn cảm nhận như thế nào về các câu sau.

Đọc các câu sau cẩn thận. Đưa ra nhận định về suy nghĩ của bạn với mỗi câu sau.

Khoanh tròn "1" nếu bạn hoàn toàn không đồng ý

Khoanh tròn "2" nếu bạn rất không đồng ý

Khoanh tròn "3" nếu bạn không đồng ý

Khoanh tròn "4" nếu bạn không có ý kiến

Khoanh tròn "5" nếu bạn đồng ý

Khoanh tròn "6" nếu bạn rất đồng ý

Khoanh tròn "7" nếu bạn hoàn toàn đồng ý

1.	Luôn có một người đặc biệt ở bên cạnh tôi mỗi khi tôi cần.	1	2	3	4	5	6	7
2.	Luôn có một người đặc biệt ở bên cạnh tôi, người tôi có thể chia sẻ buồn vui.	1	2	3	4	5	6	7
3.	Gia đình tôi luôn cố gắng giúp tôi	1	2	3	4	5	6	7
4.	Tôi nhận được sự giúp đỡ và hỗ trợ về mặt tình cảm từ gia đình tôi mỗi khi tôi cần.	1	2	3	4	5	6	7
5.	Luôn có một người đặc biệt làm cho tôi thấy thoải mái.	1	2	3	4	5	6	7
6.	Những người bạn của tôi luôn cố gắng giúp tôi.	1	2	3	4	5	6	7
7.	Tôi có thể tin tưởng vào những người bạn của tôi khi tôi có những hướng đi sai lầm	1	2	3	4	5	6	7
8.	Tôi có thể nói chuyện với gia đình về các vấn đề của tôi.	1	2	3	4	5	6	7
9.	Luôn có những người bạn ở bên cạnh tôi, người tôi có thể chia sẻ buồn vui.	1	2	3	4	5	6	7
10.	Luôn có một người đặc biệt trong cuộc đời tôi, luôn quan tâm đến cảm xúc của tôi.	1	2	3	4	5	6	7
11.	Gia đình tôi luôn sẵn sàng giúp tôi đưa ra quyết định.	1	2	3	4	5	6	7
12.	Tôi có thể nói chuyện với những người bạn về các vấn đề của tôi.	1	2	3	4	5	6	7

Bảng 6: Thang đánh giá đau NRS

Tôi muốn bạn đánh giá đau của bạn trên thang điểm từ số không đến mười. 'Không' có nghĩa là bạn không có nỗi đau nào cả. 'Mười' có nghĩa là đau cực kỳ mà bạn có thể hình dung ra. Bạn sẽ cung cấp chỉ số đau của bạn là số mấy?

0	1	2	3	4	5	6	7	8	9	10
Không đau					Cực kỳ đau					

APPENDIX B

PARTICIPANT INFORMATION SHEET

- 2 MAY 20
16.070

IRB-NS Form No. 3.1

Participant Information Sheet English version

In this document, there may be some statements that you do not understand. Please ask the principal investigator or his/her representative to give you explanations until they are well understood. To help your decision making in participating the research, you may bring this document home to read and consult your relatives, intimates, personal doctor or other doctor.

Title of Research Project:

Factors related to functional recovery in patients after total hysterectomy

Name of Researcher: Pham Thi Thu Thuy

Contact address: No 50, 5 Street, Yen Phu commune, Tay Ho District, Ha Noi city, Viet Nam. Code: 100000

Mobile: (+84)985858333

E-mail address: thuthuypham73@yahoo.com

Research Site-Office and its telephone number available for contact both in and out of the office hours:

Obstetrics & Gynecology Department, Bach Mai Hospital, 78 Giai Phong Street, Dong Da District, Ha Noi city, Viet Nam. Code: 100000

Telephone number (conveniently accessible): (+84)438683731-3333

Fax: (+84)438691607

Telephone number out of the office hours: Mobile: (+84)985858333

(researcher's mobile phone number available 24 hours)

Source of Fund: No research funding

This research project aims to identify factors related to functional recovery in patient after total hysterectomy.

Although the subjects in this study will not receive any benefit but expected benefit in the future from the data of this study include;

1) Providing basic data about factors related to functional recovery in patient after total hysterectomy.

Participant Information Sheet for version Date 2 June 2016

Approved by Institutional Review Board
Faculty of Nursing Mahidol University
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Date of Approval <u>- 2 MAY 2016</u>

IRB-NS Form No. 3.1

2) In the future, developing program by using this data to promote functional recovery in patient after total hysterectomy.

You are invited to participate in this research project because you are patients after total hysterectomy and being age 18 years old or above

There will be 115 subjects in this research, and the research will last for 30-45 minutes for answer questionnaire.

*To participate in this research is completely VOLUNTARY.

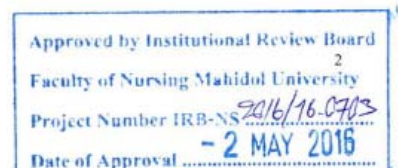
If you decide to participate the research project, you will go through the following procedure.

- 1) The researcher will ask you to sign a consent form
- 2) The researcher will organize a private room to interview you or ask you to answer the questionnaire by yourselves. There are five questionnaires: 1) Demographic data questionnaires (22 questions), 2) Quality of Recovery -15 questionnaire (QoR-15) (15 questions), 3) Multidimensional Scale of Perceived Social Support (MSPSS) (12 questions), 4) Numerical Rating Scale (NRS) (one question). Total items of questions are 50. It will take you about 30 – 45 minutes to complete the questions. During this process, if there are any questions that make you feel unpleasant or discomfort you have rights to not reply the question.
- 3) The researcher will collect some demographic data from your medical record form.

During interviewing or answering questionnaire, you may feel discomfort. You can stop and rest for a while until you feel comfort to continue. If you want to stop participation to this study, you can withdraw from the study at any time

During data collection, you may have unexpected conditions from the adverse events or complications related to your operation for example having severe pain at surgical sites, unstable vital signs. The researcher will stop interviewing or ask you to stop answering questionnaire and will immediately contact with doctors who have responsibility to take care of you. The researcher will take care until you are already stable.

If you have any questions about this research please feel free to contact the researcher. Mrs Pham Thi Thu Thuy via telephone: (+84)985858333.



IRB-NS Form No. 3.1

You don't get any money or payment for participating in this research.

If relevant information arises about benefits and risks of the research project, the researcher will inform the participant immediately and without concealment.

Your information will be kept confidential, it will not be subject to an individual disclosure, but will be included in the research report as part of the overall results. Individual information may be examined by a researcher, the ethics committee.

You have the right to withdraw from the project at anytime without prior notice. And the refusal to participate or the withdrawal from the research project will not at all affect the proper service or treatment that you will receive.

This research project is approved by The Institutional Reviews Boards, Faculty of Nursing (IRB-NS) at the office of IRB-NS room 503 5th floor, Faculty of Nursing, Mahidol University, 999 Phuttamonthon 4 Road, Salaya, Nakhon Pathom 73170 Thailand Tel 66 2 441 5333 ext 2531, 2532 Fax 66 2 441 5333 ext 2531. Email: nsirbnursing@mahido.ac.th, ns.irbnursing@gmail.com.

Then submit document and the result to SMP – IRB institutional review board of Vietnam National University. The name of IRB Chair – SMP: Associate Professor Nguyen Thi Luyen MD-PhD. Address: Y1 Building, No.144 Xuan Thuy street, Cau Giay district, Ha Noi, Viet Nam. Mobile Phone number of IRB chair: (+84)913597423. Telephone of SMP: +84-4-37450188.

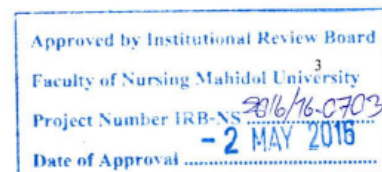
On the condition that you are not treated as indicated in the information sheet distributed to the subjects, you can contact the Chair, or the representative of the IRB-NS and or the IRB chair of SMP – IRB institutional review board of Vietnam National University at the contact address presenting above.

I thoroughly read the details in this document.

Signature..... Participant

(.....)

Date.....



Thông tin dành cho đối tượng nghiên cứu

Phiên bản 02 /ngày 08 tháng 08 năm 2016



THÔNG TIN DÀNH CHO ĐỐI TƯỢNG NGHIÊN CỨU

Tài liệu này sẽ có một số vấn đề Ông/bà có thể không hiểu. Hãy hỏi người nghiên cứu hoặc người đại diện của cô ấy để đưa cho Ông/Bà lời giải thích cho đến khi Ông/Bà hiểu rõ ràng vấn đề. Để giúp cho việc quyết định có tham gia vào chương trình nghiên cứu hay không, Ông/Bà có thể mang tài liệu này về nhà để đọc hoặc hỏi ý kiến người thân và các bác sĩ.

Tên của đề tài nghiên cứu: Các yếu tố liên quan đến phục hồi chức năng của người bệnh sau mổ cắt tử cung hoàn toàn.

Tên người nghiên cứu: Phạm Thị Thu Thủy.

Địa chỉ và điện thoại liên hệ trong và ngoài giờ hành chính (Đại diện của người nghiên cứu): Bệnh viện Bạch Mai: 78 đường Giải Phóng, Quận Đống Đa, Hà Nội, Việt Nam.

Mã bưu chính: 100000. Số điện thoại: (+84) 438683731. Fax: (+84). 438691607.

Nguồn hỗ trợ: Tự túc.

Mục đích của nghiên cứu: nghiên cứu này nhằm đánh giá các yếu tố liên quan đến phục hồi chức năng của người bệnh sau mổ cắt tử cung hoàn toàn, với các lợi ích được kì vọng, bao gồm:

- 1) Nghiên cứu này cung cấp dữ liệu cơ bản về các yếu tố liên quan đến phục hồi chức năng của người bệnh sau mổ cắt tử cung hoàn toàn.
- 2) Trong tương lai, chương trình này phát triển để cải thiện sự phục hồi chức năng của người bệnh sau mổ cắt tử cung hoàn toàn.

Tuy nhiên, trong nghiên cứu này, người tham gia nghiên cứu có thể không thu được các lợi ích trực tiếp nhưng sẽ mang lại nhiều lợi ích cho những người mắc bệnh tương tự trong tương lai.

Bà được mời tham gia chương trình nghiên cứu bởi vì bà trên 18 tuổi và được chẩn đoán là người bệnh sau mổ cắt tử cung.

Sẽ có khoảng 115 người tham gia, buổi nghiên cứu sẽ có phần hỏi - đáp và diễn ra trong vòng 30 - 45 phút

* Việc tham gia nghiên cứu này của Bà là hoàn toàn TỰ NGUYỆN.

Nếu Bà quyết định tham gia đề tài nghiên cứu, Bà sẽ phải tuân theo các bước như sau:

- 1) Nhà nghiên cứu sẽ yêu cầu Bà ký tên vào Bản chấp thuận tham gia nghiên cứu.
- 2) Người nghiên cứu sẽ thu thập một vài thông tin của Bà từ hồ sơ bệnh án.
- 3) Người nghiên cứu sẽ sắp xếp một phòng riêng để phỏng vấn Bà. Sau đó, người nghiên cứu sẽ thu thập số liệu bằng bộ câu hỏi gồm 5 phần với tổng câu hỏi là 47 và thời gian thu thập số liệu là khoảng 30 – 45 phút. Cụ thể như sau: 1) Thông tin chung với 19 câu hỏi. 2) Thang đánh giá sự hồi phục với 15 câu hỏi. 3) Thang đánh giá hỗ trợ xã hội với 12 câu hỏi 4) Thang đánh giá đau với 1 câu hỏi.
- 4) Sau khi thu thập số liệu, người nghiên cứu sẽ kiểm tra lại toàn bộ dữ liệu nghiên cứu.



Thông tin dành cho đối tượng nghiên cứu

Phiên bản 02 / ngày 08 tháng 08 năm 2016

5) Trong suốt quá trình phỏng vấn, nếu Bà không muốn tham gia nghiên cứu, Bà có thể yêu cầu dừng lại. Việc dừng lại không ảnh hưởng đến quá trình chăm sóc và điều trị thông thường ở bệnh viện. Bà vẫn nhận được sự chăm sóc theo đúng tiêu chuẩn thường quy sau khi rút khỏi nghiên cứu.

6) Nếu Bà xuất hiện tình trạng sức khỏe không tốt như đau tăng lên trong quá trình phỏng vấn, hãy nói với người nghiên cứu. Nghiên cứu viên sẽ tạm dừng phỏng vấn ngay lập tức và kết nối liên lạc với bác sỹ để chăm sóc Bà đến khi ổn định.

Nếu Bà không muốn tham gia vào quá trình nghiên cứu vẫn nhận được sự chăm sóc và điều trị theo đúng quy định.

Nếu Bà có bất kỳ thắc mắc nào về dự án, vui lòng liên hệ với người thực hiện nghiên cứu này là Bà Phạm Thị Thu Thủy. Số điện thoại: (+84) 985858333.

Bà sẽ không nhận được cũng như không phải trả bất cứ một khoản tiền nào cho việc tham gia nghiên cứu này.

Nếu có thêm thông tin gì về các lợi ích và rủi ro của nghiên cứu, nghiên cứu viên sẽ thông báo cho Ông/Bà ngay lập tức.

Thông tin của Ông/Bà sẽ được bảo mật tuyệt đối và không được tiết lộ dưới dạng thông tin cá nhân, tuy nhiên nó sẽ được thể hiện trong báo cáo tổng thể như là kết quả của một đề tài nghiên cứu khoa học. Thông tin cá nhân của Ông/Bà sẽ được kiểm tra bởi người nghiên cứu và Hội đồng đạo đức trong nghiên cứu y sinh học.

Ông/Bà có quyền rút khỏi nghiên cứu bất cứ khi nào mà không cần thông báo trước. Việc Ông/Bà rút khỏi chương trình nghiên cứu sẽ không ảnh hưởng đến chất lượng dịch vụ y tế mà Ông/Bà thụ hưởng.

Đề tài nghiên cứu này được chấp thuận bởi Hội đồng Đạo đức, Khoa Điều Dưỡng, Đại học Mahidol Thái Lan đặt văn phòng tại tầng 5 phòng 504, Đại học Mahidol. Đường Phuttamonthon 4, Salaya, Nakhon Pathom 73170 Thái Lan. Số điện thoại: 66 2 441 5333 số máy lẻ 2531, 2532. Fax 0066 2 441 5333 số máy kè 2531. Email: nsirbnursing@mahidol.ac.th, ns.irbnursing@gmail.com

Đề tài nghiên cứu này cũng được chấp thuận bởi Hội đồng Đạo đức trong nghiên cứu Y sinh học, Khoa Y Dược, Đại học Quốc Gia Hà Nội. Địa chỉ: Tòa nhà Y1, số 144 phố Xuân Thủy, quận Cầu Giấy, Hà Nội. Số điện thoại: (+84) 437450118, Fax +84-4-4-37450146, Email: smp@vnu.edu.vn.

Nếu tôi không được hưởng sự điều trị như trong bản thông tin đưa ra, tôi có thể liên lạc với Hội đồng đạo đức, Khoa Điều Dưỡng, Đại học Mahidol Thái Lan, hoặc Hội đồng đạo đức trong nghiên cứu Y sinh học, Khoa Y Dược, Đại học Quốc Gia Hà Nội với các thông tin liên lạc như đã nêu ở trên.

Tôi đã đọc kỹ và hiểu toàn bộ chi tiết nêu trong bản thông tin này.

Ngày..... thángnăm.....

Họ tên, chữ kí của người tham gia nghiên cứu

.....

APPENDIX C CONSENT FORM

- 2 MAY 20
16.0703

IRB-NS Form No. 4

Consent Form for Informed and Voluntary Participation in Research

Date...../...../.....

My name is..... aged.....years
 old. now living at the address
 no.....road/street.....subdistrict/tambon.....
 District/amphur.....province.....Postal
 code.....Tel.No.....

I give my consent to participate as a subject in the research project entitled factor correlated with functional recovery in patients after total hysterectomy.

In so doing, I am informed of the background and purpose of research project; its procedural details to carry out or to be carried out; its expected benefits and risks that may occur to the subjects, including methods to prevent and handle harmful consequences; and payment/ incentives, and expense. I thoroughly read the detailed statements in the information sheet given to the research subjects. I was also given explanations and my questions were answered by the head of the research project.

I consent to participate as a subject in this research project.

On the condition that I have any questions about the research procedures, or on the condition that I suffer from an undesirable side effect from this research, I can contact (Indicate the name of the person in charge who is 24-hour ready for contact by phone) Mrs. Pham Thi Thu Thuy via telephon(+84)985858333 or email: thuthuypham73@yahoo.com.

On the condition that I am not treated as indicated in the information sheet distributed to the subjects, I can contact the Chair of The Institutional Reviews Boards, Faculty of Nursing (IRB-NS) at the office of IRB-NS room 503 5th floor, Faculty of Nursing, Mahidol University, 999 Phuttamonthon 4 Road, Salaya, Nakhon Pathom 73170 Thailand Tel 66 2 441 5333 ext 2531, 2532 Fax 66 2 441 5333 ext 2531 . Email: nsirbnursing@mahidol.ac.th, ns.irbnursing@gmail.com

Approved by Institutional Review Board
Faculty of Nursing Mahidol University
Project Number IRB-NS 2016/16.0703
Date of Approval - 2 MAY 2016

IRB-NS Form No. 4

I am aware of my right to further information concerning benefits and risks from the participation in the research project and my right to withdraw or refrain from the participation anytime without any consequence on the service or health care I am to receive in the future, I consent to the researcher's use of my private information obtained in this research, but do not consent to an individual disclosure of private information. The information must be presented as part of the research results as a whole.

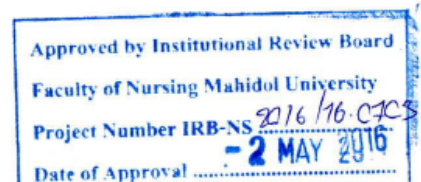
I thoroughly understand the statement in the information sheet for the research subjects and in this consent form. I thereby give my signature.

Signature.....Participants/Proxy/
(.....) Date.....

Signature.....Person in Charge of Informing
and Requesting a Consent/Head of (Mrs. Pham Thi Thu Thuy) Researc Project/Date.....

In case that the participant is not literate, the reader of all the statements for the participant is (Mr./Mrs./Ms.....), who gives his/her signature as a witness.

Signature.....Witness
(.....) Date.....



Bản chấp thuận tham gia nghiên cứu

Phiên bản 02 /ngày 08 tháng 08 năm 2016



KHU BÀN CHẤP THUẬN THAM GIA NGHIÊN CỨU

Ngày...../...../.....

Tên tôi là, Tuổi.....

Mã ID (Người nghiên cứu ghi):.....

Địa chỉ:

Mã vùng:Số điện thoại:

Trước tiên, tôi xin bày tỏ sự đồng ý tham gia vào đề tài nghiên cứu có tên là:
“Các yếu tố liên quan đến phục hồi chức năng của bệnh nhân sau cắt tử cung hoàn toàn”.

Trước khi tham gia nghiên cứu, tôi đã được thông báo về mục đích của nghiên cứu, chi tiết quá trình thực hiện nghiên cứu, các lợi ích và rủi ro có thể xảy ra đối với người tham gia nghiên cứu, các phương pháp ngăn ngừa và giải quyết các tác dụng không mong muốn có thể xảy ra cho người tham gia nghiên cứu, cả về chi phí tham gia nghiên cứu. Tôi đã đọc kỹ toàn bộ thông tin trong bản thông tin dành cho đối tượng nghiên cứu. Bên cạnh đó, các câu hỏi của tôi cũng đã được giải đáp bởi người thực hiện nghiên cứu.

Tôi đồng ý tham gia vào nghiên cứu này như một đối tượng nghiên cứu.

Trong trường hợp có bất cứ câu hỏi nào hoặc có vấn đề mới phát sinh trong quá trình nghiên cứu, tôi có thể liên hệ với chị Phạm Thị Thu Thủy, số điện thoại : +84 0985858333, Email: thuthuypham73@yahoo.com (Số điện thoại liên lạc trên kết nối 24/24 h).

Nếu tôi không được điều trị và chăm sóc như những điều khoản được đề cập trong bản thông tin dành cho đối tượng nghiên cứu, tôi có thể liên lạc với Hội đồng Đạo đức, Khoa Điều dưỡng, Đại học Mahidol Thái Lan, đặt văn phòng tại tầng 5 phòng 504, Đại học Mahidol đường Phuttamonthon 4, Salaya, Nakhon Pathom 73170 Thái Lan. Số điện thoại: 66 2 441 5333 số máy lẻ 2531, 2532. Fax: 0066 2 441 5333 số máy lẻ 2531. Email: nsirbnursing@mahidol.ac.th, ns.irbnursing@gmail.com

Tôi cũng có thể liên lạc với Hội đồng Đạo đức trong nghiên cứu Y sinh học, Khoa Y Dược, Đại học Quốc Gia Hà Nội. Địa chỉ: Tòa nhà Y1, số 144 Xuân Thủy, quận Cầu Giấy, Hà Nội, Việt Nam; điện thoại: 04-37450188; Fax: +84437450146; email: smp@vnu.edu.vn.

Tôi nhận thức được quyền của mình để tiếp tục nhận thông tin liên quan đến lợi ích và rủi ro từ việc tham gia vào các dự án nghiên cứu và tôi có quyền rút khỏi nghiên cứu hoặc từ chối không tiếp tục tham gia nghiên cứu bất cứ lúc nào mà không cần lý do, tôi bằng lòng để nghiên cứu viên sử dụng thông tin cá nhân cho việc nghiên cứu, nhưng không đồng ý việc tiết lộ thông tin cá nhân. Các thông tin phải được trình bày như là một phần của kết quả nghiên cứu.

Tôi hoàn toàn hiểu được tuyên bố trong bản thông tin dành cho đối tượng nghiên cứu và trong phiếu chấp thuận tham gia nghiên cứu này. Sau đây là chữ ký của tôi..

Ngày..... tháng..... năm.....

Chủ đề tài nghiên cứu kí tên

Người tham gia nghiên cứu kí tên

APPENDIX D

COA



MAHIDOL UNIVERSITY

Since 1888

The Institutional Review Board
Faculty of Nursing, Mahidol University
Tel 0-2441-5333 Ext 2531-32

Document No. 0517.0510/IRB-NS 448
Date May 3, 2016
Subject Result of research project considerations after the revision
Dear Chair, Master of Nursing Science Program in Adult Nursing (for Vietnamese Nurses)

According to the student named Mrs. Pham Thi Thu Thuy has submitted the research project entitled Factor related to functional recovery in patients after total hysterectomy protocol no. IRB-NS2016/16.0703 at the Institutional Review Board, Faculty of Nursing, Mahidol University on the (date) May 2, 2016 the IRB committee have examined and found the research protocol and all the research documents are revised according to the suggestions of the IRB. The IRB committee have made the decision and the results are as follows:

- Approve.
On the date May 2, 2016
Please look at the guideline for the research conduct post approval.
The document is attached together with the COA

A handwritten signature in black ink that reads "Fongcum Tilokkulchai".

(Associate Professor Dr. Fongcum Tilokkulchai)
Chair, Institutional Review Board

Copy to Assistant Professor Dr. Orapan Thosingha
Mrs. Pham Thi Thu Thuy



CERTIFICATE OF APPROVAL

From

Institutional Review Board Faculty of Nursing Mahidol University

COA No.IRB-NS2016/341.0205

Title of Project: **FACTORS RELATED TO FUNCTIONAL RECOVERY IN PATIENTS AFTER TOTAL HYSTERECTOMY**

Project Number: **IRB-NS2016/16.0703**

Principle Investigator: **Mrs. Pham Thi Thu Thuy**

Name of Institution: **Faculty of Nursing Mahidol University**

Approval includes
1) IRB-NS Submission form version received date 2 May 2016
2) Participant Information sheet version date 2 May 2016
3) Consent form version date 2 May 2016
4) Questionnaire version received date 2 May 2016

Institutional Review Board Faculty of Nursing Mahidol University is in full compliance with International Guidelines for Human Research Protection such as Declaration of Helsinki, The Belmont Report, CIOMS Guidelines and the International Conference on Harmonization in Good Clinical Practice (ICH-GCP)

Date of Approval: **02 May 2016**

Date of Expiration: **01 May 2017**

Signature of Chair:

(Associate Professor Dr. Fongcum Tilokskulchai)

Chair

Signature of Dean, Faculty of Nursing

(Associate Professor Dr. Yajai Sitthimongkol)

Dean, Faculty of Nursing

Guideline for the research conduct post approval

The Institutional Review Board, Faculty of Nursing, Mahidol University

- 1 . Use only documents with the stamp from the Institutional Review Board, Faculty of Nursing, Mahidol University (IRB-NS) for conducting the research (e.g., Instruments/ Questionnaires, Informational letter, Informed consent form)
- 2 . If the investigator wishes to make any changes on the research protocol, the "Protocol Amendment Form" and all amended documents are required to submit to the IRB-NS for considerations before continuing the research.
3. If the serious adverse events or the suspected unexpected serious adverse events occur to the research participants, the "Adverse Event Report Form" is required to submit to the IRB-NS for considerations before continuing the research.
4. IF the research project is completed within 1 (one) year, the "Study Closure Form" is required to submit to the IRB-NS. If the project is needed to extend, the "Progress Report Form" is required to submit to the IRB-NS 1 (one) month in advance of the expiry date.
5. If the report for data collection is required, report as follows:
 - Normal (Report at the renewal of the COA or at the project closure)
 - Report at 25% of the data collection
 - Report at 50% of the data collection

Date May 2, 2016

KHOA Y DƯỢC
HỘI ĐỒNG ĐẠO ĐỨC
TRONG NGHIÊN CỨU Y SINH HỌC

CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM
Độc lập - Tự do - Hạnh phúc

Số: / KYD-HĐĐĐ

Hà Nội, ngày 16 tháng 08 năm 2016

GIẤY CHỨNG NHẬN
Chấp thuận của Hội đồng đạo đức trong nghiên cứu y sinh học

Căn cứ Quyết định số 89/QĐ-KYD ngày 22/10/2013 của Khoa Y Dược về việc thành lập Hội đồng đạo đức trong nghiên cứu y sinh học Khoa Y Dược nhiệm kỳ 2013-2018;

Căn cứ Quyết định số 235/QĐ-KYD ngày 23/10/2015 của Khoa Y Dược về việc điều chỉnh, bổ sung thành viên Hội đồng đạo đức trong nghiên cứu y sinh học Khoa Y Dược nhiệm kỳ 2013-2018;

Căn cứ Biên bản họp ngày 02/08/2015 của Hội đồng đạo đức trong nghiên cứu y sinh học Khoa Y Dược nhiệm kỳ 2013-2018;

Hội đồng đạo đức trong nghiên cứu y sinh học Khoa Y Dược chấp thuận về các khía cạnh đạo đức trong nghiên cứu đối với đề tài sau:

1. Tên đề tài: **Các yếu tố liên quan đến phục hồi chức năng của người bệnh sau mổ cắt tử cung hoàn toàn**
2. Người thực hiện nghiên cứu: **Phạm Thị Thu Thủy** (Học viên cao học điều dưỡng ĐH Mahidol)
3. Địa điểm nghiên cứu lâm sàng: **Bệnh viện Bạch Mai và Bệnh viện Phụ sản Trung Ương**
4. Thời gian nghiên cứu: Từ tháng 08/2016 đến tháng 12/2016

Các tài liệu được chấp thuận bao gồm:

1. Đề cương nghiên cứu (tiếng Anh) phiên bản số 01 ngày 08/08/2016
2. Thông tin dành cho đối tượng nghiên cứu (tiếng Việt) phiên bản số 02 ngày 08/08/2016
3. Bản chấp thuận tham gia nghiên cứu (tiếng Việt) phiên bản số 02 ngày 08/08/2016
4. Bộ câu hỏi nghiên cứu (tiếng Việt)

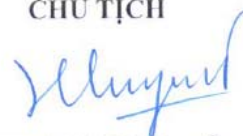
Ngày chấp thuận: Ngày 16 tháng 08 năm 2016

Nghiên cứu viên chính phải tuân thủ việc báo cáo cho Hội đồng đạo đức trong nghiên cứu y sinh học Khoa Y Dược về các trường hợp có biến cố bất lợi, báo cáo tiến độ theo đúng các hướng dẫn và quy định hiện hành.

Nơi nhận:

- Bệnh viện Bạch Mai
- Bệnh viện Phụ sản Trung Ương
- Nghiên cứu viên
- Lưu HĐĐĐ

CHỦ TỊCH



PGS.TS. Lê Thị Luyến

APPENDIX E

LIST OF EXPERTS

1. Associate. Prof Dr. Pham Ba Nha, MD, PhD
Dean of Obstetrics and Gynecology Department, Bach Mai Hospital, Vietnam.
2. Dr Nguyen Du Dau, PhD
Deputy of Obstetrics and Gynecology Department, Bach Mai Hospital, Vietnam
3. Dr Tran Quoc Nhan, PhD
Deputy of Obstetrics and Gynecology Department, Bach Mai Hospital, Vietnam
4. Dr Vu Cong Khanh, PhD
Deputy of Obstetrics and Gynecology Department, Bach Mai Hospital, Vietnam
5. Bachelor. Bui Minh Thu
The heats nurse of Bach Mai hospital

PHỤ LỤC 5: DANH SÁCH CÁC CHUYÊN GIA

1. PGS.TS Phạm Bá Nha
Trưởng khoa Phụ - Sản Bệnh viện Bạch Mai, Hà nội, Việt Nam
2. BSCKII Nguyễn Dư Dậu
Phó trưởng khoa Phụ- Sản Bệnh viện Bạch Mai, Hà nội, Việt Nam
3. BSCKII Trần Quốc Nhân
Phó trưởng khoa Phụ- Sản Bệnh viện Bạch Mai, Hà nội, Việt Nam
4. BSCKII Vũ Công Khanh
Phó trưởng khoa Phụ- Sản Bệnh viện Bạch Mai, Hà nội, Việt Nam
5. CN Bùi Minh Thu
Điều dưỡng trưởng Bệnh viện Bạch Mai, Hà nội, Việt Nam

BIOGRAPHY

NAME	Pham Thi Thu Thuy
DATE OF BIRTH	3 th December 1973
PLACE	Hanoi City, Vietnam
INSTITUTIONS ATTENDED	1992 – 1994: Bach Mai Medical school 2006-2008: Bachelor of general Nursing Hanoi Medical University 2015 – 2016: Master of Nursing Science (Adult Nursing) Mahidol University,
POSITION AND OFFICE	1994 – 2012: Nursing in Obstetrics and Gynecology Department, Bach Mai Hospital, Hanoi, Vietnam 2013 – Present: Head nurse of Obstetrics and Gynecology Department, Bach Mai Hospital, Hanoi, Vietnam
EMPLOYMENT ADDRESS	No. 78 Giai Phong Street, Dong Da district, Hanoi, Vietnam Workplace telephone number: +(84)38693731 Website: http://www.Bachmai.gov.vn
HOME ADDRESS	No. 50 – Street 5 – Yen Phu commune – Tay Ho District – Hanoi City - Vietnam Mobile telephone: (84) 985858333. Email: thuthuypham73@yahoo.com