

# CHAPTER I



## INTRODUCTION

### **The Significance and the Background of the Researched Problems**

An operation is a means of medical treatments to remove the pathological parts of the body and cure the abnormalities of some body organs. No matter how major or minor an operation is, it tends to cause a high degree of anxiety to every patient. It is said that an operation is a life - threatening incident for everyone. Although some of the patients know in advance that they are going to be treated by an operation, they cannot help feeling worried, anxious, and nervous about the upcoming surgical treatment. Ramsay (1972) made a pre- operative interview among 382 patients (183 males and 199 females) in 24 hours' time before they were delivered to the operating room. It was found out that 73% of them were afraid of the surgery while 62 % were afraid of being administered anesthesia. The anxiety and fear occurred the moment they learn of the surgical treatment and would constantly increase when the scheduled operative time came near. These feelings would decrease after an operation. Volicer (1974) found out that the surgical patients had higher anxiety seemed to be increasing no matter major or minor an operation was or whether it was an emergency, a non- emergency, or a prepared operation. It is admitted that an operation can bring about the physical and mental tensions. For example, the reactions to the nervous and endocrine systems can trigger a high degree of anxiety and fear. The level of the anxiety of each person is due

to various factors, such as gender, age, level of education, the expense on the medical treatment, and the part of the body where the operation has to be performed. Luckman and Sorensen (1980) said that there were four factors which affected the patient's anxiety. They were an individual's basic personality, a habitual reaction when facing the state of anxiety, an imagination about an operation and being administered anesthesia including an individual's general mental health.

The results of the pre- operative anxiety may trigger the problems and obstacles in performing an operation. Dugus (1983) said that the patients with a high level of anxiety may have a high risk of unsatisfactory operative result, and they might be able to stand the anxiety caused by the method of an operation. The high level of the anxiety during the pre-operative period can heighten the stimulation and the reaction of the endocrine gland which lengthens the post- operative recovery state of the patient. At the same time, the body will release Catecholamine which causes some complications from anesthetic administration, and a change of anesthetic potency. For instance, some patients may not be able to stand the anesthetic potency, or in contrast, some of them may have to be given a higher dose of anesthesia. The pre- operative anxiety may bring about unfavorable systems such as a nausea, a vomit, a urinary retention, a muscle pain, restlessness and a post- operative insomnia (Janeltes, 1979). Besides this, the pre-operative anxiety may also affect the recovery and the inflammation of the operative wound. A satisfying post- operative recovery and rehabilitation rely on the nursing personnel who are responsive to the physical, mental, and emotional needs of the patient. (Phipps, 1995). The nursing practice that can help the patient to have a rapid recovery state is the practice that responds the needs of the patient by having an

interpersonal relationship between the nursing staff and the patients, giving them some information and Knowledge, and encouraging them to encounter the undesirable incidents ( Rankin & Stalling, 1996). According is Johnson's point of views (1974), he stated that giving the proper and sufficient information to the patients can enable them to better adjust themselves in coping with the threatening incidents because an individual is believed to naturally adjust himself to deal with the tension state or the threatening incidents by interpreting the meaning of the situation and considering the guideline to emotionally and behaviorally respond to the encountering incidents based on their existing knowledge and understanding.

There are several ways of providing the knowledge to the patients to help them lessen their anxiety and recover from their operative state. It is believed that giving them the integrated knowledge, such as the steps of the possible conditions occurring before and after the operation, the post- operation feelings and an individual's practices before and after the operation, is better than giving them only single or one particular item of knowledge. Providing the knowledge to the patients should be made in a program consisting of what they need to know, and what they can practice until it becomes beneficial for their self- improvement. Giving the knowledge step by step and with the distinct guidelines can bring about the extremely effective results (Hathaway, 1986 ). By the way, the problems in providing the patients some knowledge sometimes arise because the patients waiting for an operation tend to be stressful and ultimately anxious and worried. These causes may irritate their perception and intellectual processes ( Nyamathi and Kwasschiwabara, 1988), and prevent them from getting complete and accurate information. Therefore, to give the knowledge, the instructing

nurses should not rush through the process of giving information, but they have to help the patients to alleviate their stresses and anxiety, and teach them to find a better way to deal with the facing stresses and problems, and to consume the practice knowledge and information. The best way to encourage the patients to lessen their stresses and anxiety is to relax (Titlebaum, 1998). There are a number of short and simple relaxation techniques, such as muscles the relaxing, massage relaxation, meditation, creating and imagination, taking a deep and rhythmic breath. All these techniques are simple, convenient, and take less time to practice. The patients can easily do them once or twice a day lasting 10-20 minutes. These techniques will benefit the patients' physical state if they can practice them regularly.

According to Wilson's study (1981), He found out that relaxation not only lessened the pain and physical suffering after the operation, reduced the amount of the taken analgesics, increased physical strength but also shortened the treating time in the hospital. Also Miller (1987) assigned the cardiac ischemic patients to feel relaxed by inhaling and exhaling deeply and slowly. It was found one that this way could reduce the blood pressure, the pulse rate, the heart rate, and the pain and the post-operative physical suffering, and Lund,(1988) found out that relaxation could help the patients to lessen their stresses and anxiety. Besides this, a study contends that relaxation can enhance slumbering (Jonson, 1993), increase the level of immunity (Houldin , McCorkle,&Lowery, 1993), accelerate the level of gas exchange, and reduce the lung complication. The patients without any stresses and anxiety are believed to recover from their ailment more rapidly than those with stresses and anxiety. The relaxation techniques can help create the good relationship between the patients and the nurses,

and the patients feel more satisfactory to the medical treatment. When the relaxation techniques are added to health education program, there is a tendency to increase the nursing efficiency and it is expected that these techniques will bring the physical, mental and emotional state of the patients back to normal conditions more rapidly. These are the major duties of surgical nurses.

According to the researcher's experience in caring the abdominal surgical patients, it has been found out that the patients' primary problems are that they haven't been able to understand the treatment plan, the reasons of, and the necessity of the operation causing them to have a high degree of anxiety toward an operation. Some of them turned down an operation because they anticipated that there would be a possible discomfort and danger caused by an operation. However, some of the medical problems or diseases would be incurable without an operation, so if the patients ignore an opportunity to be well- informed about the underlying diseases, they will risk a mortality.

Nowadays, the researcher has found out that the medical personnel give the patients some assistances just based on their current problems and incidents. The information provided to the patients do not cover the necessary medical regimen which will help them then they have to face and solve the problems properly. Giving a systematic advice and information is very rare. Giving advice and information is usually carried out after running other activities and unofficially. There has been no planning in giving information step by step, and it is based on the kind of the information and the individual capability of the medical personnel. Sometime it may

confuse the patients and increase their stresses and anxiety. According to the pilot study conducted by 20 abdominal surgical patients by using State-Anxiety Inventory, it was found out that 70% of the patients had a moderate level of anxiety. This would affect the changes of the vital signs, such as increased heart rate and pulse rate, a narrower and less perception, feeling more uncomfortable, and having a less effective learning and problem solution. Sometimes the medical staffs have to handle the patients carefully, help them, and support them until they feel well and successful. According to the ten patients' indepth interviews, the researcher has found out that the patients feel anxious. They are afraid of an operation, being given anesthesia, physical pain, the after – effect and the surgical complications because they haven't been well - informed about their ailment, a necessity of the operation, and a sufficient self- practice. The people which the patients expect to rely on most are the doctors and the nurses. They want the doctors and the nurses to explain to them the details of their ailment, an operation, and the procedure of the pre and post operative self - practices.

Based on the statistics of the general surgical ward at Thungsong Hospital from January to December 2002, the average number of the abdominal surgical patients were 40 cases per month, and each admitted patient had to stay in the hospital about 4 – 20 day in average, but some of them had to be at the hospital as long as a month because of the post – operative complication and the insufficient caring. The budget spent on the average surgery is from the minimum 5000 bath to the maximum 20,000 bath, not including the accommodation fee and the medical treatment expenditure, as we can see that it is such a waste of time and money of both the family and the hospital. It is believed that giving the knowledge and information to the patients while they are being

anxious and stressful and useless because they are not able to perceive and remember any information, nor can they follow or comply with any necessary medical instructions, so they will probably develop some complications which will affect their physical, mental, and emotional health. These problems will surely lengthen their recovery condition. Therefore, the surgical nurses are the key persons in the health care team who have to help prepare and ready the patients physically and mentally before the operation in order to relieve their stresses, anxiety, and the possible post – operative complication, so that they can recover from their affliction more quickly. As a result, the researcher has been interested in studying the result of the systematic health education program which will affect their pre - operative anxiety. This program consists of preparing the patients for the pre- operative readiness and the post- operative self- practices together with relaxation techniques which can lessen the patients' anxiety so that they can recover from their affliction rapidly and without any unfavorable post- operative complications.

### **The Objectives of the Research**

1. To compare the level of the anxiety of the experimental group and the control group of the abdominal surgical patients.
2. To compare the post- operative complications between the experimental group and the control group of the abdominal surgical patients.
3. To survey the opinions of the experimental group of the abdominal surgical patients about the health education program services.

## **The Hypothesis of the Research**

1. The level of the pre operative anxiety of the abdominal surgical patients who have been given a systematic health education program is lower than that of the routinely- treated group.
2. The possible post- operative complications of the experimental group of the abdominal surgical patients who have been given a systematic health education program are lower than those of the control group who have been routinely – treated to some extent of the research.

## **Limitation**

The study subjects were limited in only the non- acute appendicitis, cholecystitis and gallstone patients of Thungsong Hospital in the province of Nakornsithamarat. The subjects might not be representative for all surgical patients.

## **Ethical Consideration**

The control group have no ethical problems because they are treated with routine nursing care.

## **The Scope of the Research**

1. This research is aimed at studying the patients with non- acute appendicitis, cholecystitis and gallstone of Thungsong Hospital in the province of Nakornsithamarat.
2. The studied variables are as follows:



2.1 The independent variables are to give a systematic health education program and relaxation techniques to the patients namely:

- Breathing relaxation
- Muscle relaxation

2.2 The dependent variables are the scores of the following matters:

- The anxiety level of the patients.
- The post- operative complications.
- The opinions of the patients toward the health education services.

### **The Primary Agreements**

1. The revealed anxiety of the patients could be measurable.
2. Providing the pre- operative systematic health education program together with the relaxation techniques to the sample group during the experimental period turns out to have the same level of the anxiety.

### **The Definitions of Some Technical Terms**

1. Preoperative anxiety refers to a state in which the individual feels uneasiness, tension, insecurity, nervousness, worry , and apprehension manifested by activation of the autonomic nervous system in anticipation of surgery. It was measured by visual analogue scale of anxiety (Gaberson, 1991).
2. Abdominal surgical patient refers to individual admitted to general surgical wards of Thungsong Hospital,Thungsong District in the Province of

Nakhonsithamarat and scheduled for elective abdominal operation under general anesthesia.

3. A routine nursing care means giving the patients advice and providing them with medical care and assistance about pre and post- operative self-practices by the stationed nurses and the patients' ward staff.
4. A health education program means giving the patients some knowledge and information together with the relaxation techniques which are designed by the researcher. This program consists of the knowledge and the information of the incidents that the patients have to encounter and to deal with accurately both before and after the operation. The staff nurses have to train to patients to follow and comply with these medical instructions properly.
5. The post- operative complications mean the negative and adversary results happening to the abdominal surgical patients after the operation, such as the abnormalities of the respiratory system, the blood circulation system, the digestive system, the urinary tract system. The operative wounds and the fever condition.
6. The opinion mean the opinion of the abdominal surgical patients toward the health education program services.

### **The Expected Benefits**

1. To know the comparative results of the change of the level of pre- operative anxiety of the experimental and control groups of the abdominal surgical patients admitted at the surgical ward after they have been given a systematic health education program and relaxation techniques

2. To know the possible post- operative complications of the experimental and the control groups of the abdominal surgical patients.
3. To learn of the patients' opinions toward the systematic health education program.