

# CHAPTER I

## INTRODUCTION

### **Background and Significance of the Problem**

Risk is a threat to human life, and nobody desires to encounter it because it will bring about a lot of damages and devastation , especially to the patients who come to the hospital for medical treatment , and who already have their natural risks. They also have to face the risks from medical services, such as falling off the bed, infecting drug resistant , fire burns, drug error and various misuses of appliances and instruments. These mistakes will cause a lot of damages and devastation (Jarus Suwanvala, 2002:1) . Nowadays, The customers have got the high expectation toward the quality of the hospital, so they tend to choose the safe hospital with high quality. As a result, most hospitals have been alerted to put a hard attempt to improve the service standard to pass hospital accreditation criteria. The initial activities which The Institute of Development and Hospital Accreditation (IDHA) has advised the hospital to, find out, and control the risks. Risk prevention is not a time-consuming activity, but it can come a lot of problems in the long run, and if the hospital cannot decrease the risks, there is no point in developing others (Anuwat Supachutikul,1999:1) . The hospital accreditation system has to guarantee not only the determination to develop and improve the quality but also the standard working process of the medical personnel which can cause the lowest risks. Therefore, IDHA has to urge the hospitals to state and record how the risks in the

unit have been prevented and managed. (Kris Uthairat,1999: 373) .This will help the hospital executives to know whether the hospital has enough measures to control the customers' risk and how the customers will be free from all risks. The hospital itself will be able to decrease damages to the personnel and its reputation. Besides this , the IDHA had regulated a requirement that the hospital has to manage the risks on the whole or in each unit, so the risk management was the most significant thing which the hospital and all departments have to carry out continuously. (Anuwat Supachutikul, 1999: 1) . Owing to the trend of changing , especially the health assurance for all, the national health reform, and the decentralization, every hospital has to accelerate itself to develop the service systems in order to meet the standard of the hospital accreditation, and to be able to complete with other hospitals to make the customers feel the most satisfactory to the services. The most important thing to do is to listen to the customers' opinions because their voices will reflect the quality. Their problems, needs and comments are very useful and valuable to develop and improve the standard of the services and make the patients free from any kinds of risk incidences. (Eisenberg,1997:18 - 31) .

Anesthesia services are one of the specific services in the hospital, which will possible face a high degree of risks because of the surrounding factors in the operating room. For example, the technological capacity of anesthetic machines and all the mechanical monitors can make error and bring about the loss and unfavorable results to the customers. In addition, the declaration of patients' rights and other laws, such as the Act of Consumers Protection, have been playing a big role in changing the people's needs for health services. They have been crying for the rights to obtain the high quality

and the high standard of medical treatments, especially being given anesthesia which is safe from any risks caused by the anesthetic service process (Hoyte , 1994: 261-75 ) . Nowadays, the hospitals and the medical personnel both in Thailand and overseas having been facing the accusation, the complaints and the lawsuits for damage recovery. Some customers have won the lawsuit , so they claims, accusations and filing the lawsuits are increasing steadily (Tingle,1994 cited in Kanya Orprasert,2002: 1) .

Based on the risk incidences in the United State of America, there were 20 – 25 million cases / year coming for anesthesia , but the rate of the risk incidences is very low. It is only one loss in 10,000 cases, or with the percentage of only on 0.01. (J Health Care Technol,1995 quoted in Somrat Jarulaxananun,2000:337 ) . The mortality was even lower for the healthy patients who came for a non- emergency operation. The death rate was 1 in 50,000 to 1 in 100,000 cases. Significantly, 50 - 75 % of anesthetic death rates were what could be prevented. However, when the adverse outcomes arise, it was very difficult to classify whether they were caused by inappropriate services, substandard services, or lapse of vigilance. Sometimes, the staff have conducted the work with optimal care, but the risk incidences were unavoidable (Keat,1998 cited in Somrat Jarulaxananun,2000:338) .

In Thailand, there have not been national risk incidence reports, but only the department reports. In the last 10 years, The number of the petitioners for the damage claims had been increasing. One of the claims was as high as 600 million baht (15 million US dollars) , which was the highest claim compared with those oversea (Prapapun Srijintai, 1999:225) .

The number of anesthetic customers in Maharaj Nakhon Si Thammarat Hospital has been rising steadily. For example, from 2000 to 2002, there were 11,809, 11,954 and 12,328 cases respectively (The data collection and anesthetic service risk incidence report) . The three most adverse outcomes of risk incidence were mortal cases from cardiac arrest and death , halothane hepatitis and blanket warmer burn rose from 0.8 to 1.7, 0 to 0.8 and 0 to 0.8 respectively (Rate : 10,000 population) .

In the past years, medical services have focused on and individual only with providers. Hence, the services haven't covered all facades, and the stakeholders, especially in the customers' aspect. They haven't checked the consumers' needs and opinion toward the services by market-in and product-out scales, which is the major benchmark toward the quality (Chuchart Wiraseranee, 2002) .The Institute of Medicine has started that , the quality should consist of the individual satisfaction. The people's satisfaction toward the medical services should be based on the present modernization (Lohr,1990 cited in Jirut Sriratanaban,2000) . Still, the only one standard of medical practice which the occupational personnel have set up is not sufficient to be used to assess the quality of the hospital's services because the opinions and needs of the customers haven't been used to be linked with the quality of the customers' awareness of health care which is as significant and interesting as the standard quality these days. The quality then becomes more meaningful and complete (Omachuno, 1990 cited in Jirut Sriratanaban, 2000) . Besides this, the people involved have to consider not only the result of medical treatment, and the result of health services but also the significance and the mutual correlation of in bound factors as well as the process, varied results from the providers, the customers and the surrounding circumstances,

which are based on the current resources, and which are relevant to the social circumstances and the changing technology (Holzemer,1990;20:5-12) .

According to the background and rationale, and the characteristic of work, the customers have a tendency to face risk , damages and unfavorable outcomes, and in return the providers will probably be petitioned or sued .As a result, there should be a prevention guideline to avoid the adverse outcomes of both the providers and customers. The researcher, as a nurse anesthetist and a member of risk management committee has been very interested in studying the opinions of customers and the chief providers and the mainstays toward risk incidences in anesthesia at Maharaj Nakhon Si Thammarat Hospital by using the reflections from both the customers and the chief providers and the mainstays against risk incidences. Based on this method, the data obtained can cover every façade of risk incidences. The researcher has also used the concept of the hospital accreditation processes to obtain the outcomes which can be analyzed, assessed and manage in term of anesthetic services, and to set up a practical guide line to avoid risks and to increase the safety of customers and providers properly as well as to improve the quality of anesthetic services continuously.

### **Research Questions**

1. What are the customers and providers's opinions toward risks from anesthetic services at Maharaj Nakhon Si Thammarat Hospital like ?
2. What is the customers' satisfactions toward anesthetic service at Maharaj Nakhon Si Thammarat Hospital like?
3. What factors are related to the customers' opinions toward the risks from anesthetic services at Maharaj Nakhon Si Thammarat Hospital ?

## **Objectives of the Studying**

### **General Objective**

The objective of this research is to study the opinions of customers and providers toward risk incidences from anesthetic services at Maharaj Nakhon Si Thammarat Hospital .

### **Specific Objectives**

1. To study the customers' opinions toward risk incidences from anesthetic services at Maharaj Nakhon Si Thammarat Hospital.
2. To determine the relationship between the opinions of anesthetic customers and sociodemographic characteristics, utilization of anesthetic service as well as anesthetic service process.
3. To study the customers' satisfactions toward anesthetic service at Maharaj Nakhon Si Thammarat Hospital.
4. To study the effect and complications happening to the customers after anesthesia.
5. To study the providers' opinions toward the risk management in anesthetic service at Maharaj Nakhon Si Thammarat Hospital .

## **Expected Benefits and Applications**

1. To assess the basic data from the aspects of the customers and the chief providers and the mainstays for planing and improving the quality of anesthetic services.

2. To establish a process standard for the providers to decrease the risk incidences.
3. To develop the prevention guide line for the providers to decrease the risk incidences.
4. To promote the anesthetic service quality at Maharaj Nakhon Si Thammarat Hospital continuously.

### **Key Words**

Customers' Opinions, Providers' Opinions, Risk incidences, Anesthetic services

### **Operational Definitions**

Opinions of customers toward risk incidences from anesthetic services means an expression of feelings, beliefs and decision making which are based on background knowledge, experience and environment toward the risk incidences in anesthetic service in the physical, emotional, social and spiritual aspects. If the services have good quality and are safe , the risk are low, but if the services have low quality and are not safe, the risk tend to be high. These opinions may be accepted or refused and approved or disapproved by other people.

The satisfactions of customers toward anesthetic services means the customers' pleasure, satisfaction, or favor, which are determined by their experiences from anesthetic services on the basis of service system, the providers, the convenience , and the promptness of the services.

The opinions of the chief providers and mainstays toward risk management from anesthetic services means expression of feeling, belief, and decision making of the chief providers and mainstays. These factors are based on background knowledge, experience and environment on the basis of an expression toward the risk management. The management will cover the policy of risk prevention, A seminar should be held to update the staff's knowledge, to show how to report risk incidences and how to avoid risks.

The anesthetic service process means providing anesthesia service to the customers by means of an operative treatment or of other special approaches. The anesthetic service process is divided into three periods namely: pre, peri and post anesthesia.

The risk incidences in anesthetic service means the chance which anesthetic customers, their relatives and providers possibly encounter the risks are unfavorable outcomes from injuries, catastrophe, damages, hazard, loss and uncertainty if there are no proper standard systems to prevent them ,such as structure, process and outcome standard.

The customers means the patients who receive general anesthesia and / or regional anesthesia by spinal block at anesthesia department, Maharaj Nakhon Si Thammarat Hospital. They were admitted at different departments such as in general surgical ward, the orthopedic ward , obstetric- gynecology ward and ear, eye, nose throat (EENT) ward. They were 20- 65 years old without gender limitation. They were



conscious and aware of time, place, and identification. They were absolutely conscious and able to answer the questions. They were classified as class 1,2 and 3 by the means of ASA physical status.

**The sociodemographic factors are as follows :**

1. Age is defined as customers who are between 20 - 65 years old.
2. Gender is defined as the male and female customers.
3. The level of Education is define as customers' education ranging from being uneducated to the level of bachelor's degree or higher.
4. Income means the total money earned by parents and off springs per month.

The providers means the leaders and the mainstay of departments working as a teamwork against risk which are likely to happen to the customers who came for anesthetic services and an operation at Maharaj Nakhon Si Thammarat Hospital. The teamwork consists of a general surgeon,an orthopedist, an EENT specialist, an obstetrician, an anesthesiologist, a nurse anesthetist and a surgical nurse.

American Society of Anesthesiologist (ASA) physical status means the risk assessment toward complication circumstances or mortality from anesthesia and / or operation. ASA is divided into 5 classes depending on the seriousness of ailment status. However, this study is based on only class 1, 2 and 3.

**Class 1** means the customers who have no changing of bio-chemistry, physiology, pathology or psychology except the pathology that need to operation.

**Class 2** means the mild or moderate changing of body system. The changes are caused by the operation bearing disease or other diseases.

**Class 3** means the considerable changes of the body system from whether cause. For example, the customers with cardiac conditions belong to class 2B including the customers with severe diabetes mellitus or complicated vascular disease and poor lung compliance condition.

**The sociodemographic factors of the providers consists of :**

1. Age is defined as the providers' age by year .
2. Gender is defined as the male and female providers.
3. Working experience means the period of time during which the person has been working as the chief and providers mainstays against risk incidences.
4. Professional characteristic means the officials who are the chief providers and the mainstays who join together as an operative team and work against risk incidences. The team consists of a surgical doctors, an orthopedist, obstetrician, an EENT specialist, an anesthesiologist, a nurse anesthetist and a surgical nurse.
5. The experience in risk conferences is defined as providers' experience from attending the risk conferences.

## **The Research Variables**

### **Customers' side**

Independent variables consist of :

1. Sociodemographic features, such as : age, gender, education and family income .
2. Utilization of anesthesia , such as: utilization time , operative urgency, ASA physical status, type of anesthesia, admission department , number of anesthesia, History of alcoholic , history of smoking, operative disease and fear.
3. Anesthetic service process are divided into 3 periods namely: pre-anesthesia period , peri-anesthesia period , and post- anesthesia period .

Dependent variables consist of :

1. Customers' opinions toward risk incidences in anesthetic services on the basis of the physical , emotion, social and spiritual aspects.
2. Customers' satisfaction toward anesthetic service system is base on service systems, personnel and promptness.

### **Providers' side**

Independent variables consist of :

- Sociodemographic characteristic, such as : age, gender, professional characteristics, working experience and experience in risk conference .

Dependent variables consist of :

- Opinions of the chief providers and mainstay toward risk management in anesthetic service which are based on customer risks, risk management policy, personnel training , risk incidence report , action to manage risk and a scheme to develop the service quality.

### **Ethical Consideration**

This cross - sectional descriptive study didn't insert or perform any experiments to the sample population , so it is not considered to be ethical involvement .

### **Research Limitations**

1. The researcher could study only the of opinion of the chief providers and mainstay in operation team due to the time limitation. There was a very slight chance of getting information from other chief providers and mainstay by focus group because some of them had a very tough schedule , or had to conduct emergency operations, so the researcher had to interview them in person.
2. There have been no comparative researches in this field before because nobody has ever studied the opinions of customers and providers toward risk incidences in anesthetic service, so there were no more additional data.