

**PREOPERATIVE INFORMATION RECEIVED, ITS
IMPORTANCE AND ANXIETY LEVEL OF
PATIENTS AT SURGICAL WARDS OF HOSPITAL
UNIVERSITI SAINS MALAYSIA (Hospital USM)**

By

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**Dissertation Submitted In Partial Fulfillment of The
Requirements For The Degree of
Bachelor of Health Science (Nursing)
June 2013**

DECLARATION

I certify that this thesis entitled '**Preoperative Information Received, Level of Its Importance and Anxiety Level of Surgery Patients at Hospital Universiti Sains Malaysia (Hospital USM)**' does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any university, and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due references are made in the text.

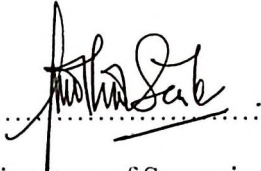


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CERTIFICATE

This is to certify that the dissertation entitled the '**Preoperative Information Received, Level Of Its Importance And Anxiety Level Of Surgery Patients At Hospital Universiti Sains Malaysia (Hospital USM)**', is the bonafied record of research work done by Nurhidayu binti Ghazali, 105146 during period December 2012 until June 2013 under my supervision. This dissertation submitted in partial fulfillment for the degree of Bachelor of Health Sciences (Nursing). Every research work and collection of data belongs to Universiti Sains Malaysia.



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**PREOPERATIVE INFORMATION RECEIVED, ITS IMPORTANCE AND
ANXIETY LEVEL OF PATIENTS AT SURGICAL WARDS OF HOSPITAL
UNIVERSITI SAINS MALAYSIA (Hospital USM)**

ABSTRACT

Patients undergoing surgery still claimed that they received inadequate preoperative information. Even though, it is a common procedure for many surgical procedures, information needs is often overlooked, this usually lead to anxiety preoperative phase. The goal of this descriptive cross sectional study is to determine the preoperative information received, level of its importance and anxiety level among the surgical patients at Hospital Universiti Sains Malaysia (Hospital USM). This study also examined the association between anxiety level and types of surgery and the difference importance level of preoperative information between male and female. A total of 61 surgical patients who were recruited from surgical wards Hospital USM in this study using purposive sampling. Data were collected from February to March 2013 using self administered Ambulatory Surgical Patients' Perception of Preoperative Teaching and Spielberg Trait Anxiety Inventory (STAI) to measure preoperative information received, level of its importance and anxiety level. Data were analyzed using SPSS 20 for frequency, percentage, mean, standard deviation and p-value. Ethical approval was obtained from Research Ethics Community (Human), (USM). Majority preoperative Information received by the surgery patients was at the low level (M= 5.115, SD=1.066). Importance level of preoperative information receive by the surgery patients were at moderate level (M=92.37, SD=10.075). Overall, patients' anxiety level were at moderate level (M=31.15, SD=12.03). The study found that no significant

association between types of surgery and anxiety level ($p=0.343$) and also no significant difference of preoperative information importance level between male and female ($p=0.376$). Surgical patient received inadequate preoperative information, perceived low level of importance and were having moderate level of anxiety. Thus surgical nurses need to identify individual information needs and institute a structure preoperative teaching guideline and provide information to ensure surgical patient received adequate information before surgery. This will help in eliminating surgery patients' anxiety preoperatively.

**MAKLUMAT PREOPERATIF YANG DITERIMA, TAHAP
KEPENTINGANNYA DAN TAHAP KERISAUAN PESAKIT SURGERI DI
HOSPITAL UNIVERSITI SAINS MALAYSIA (Hospital USM)**

ABSTRAK

Pesakit yang menjalani pembedahan menagtakan maklumat berkaitan pembedahan yang mereka terima adalah tidak mencukupi. Walaupun, pemberian maklumat adalah perawatan rutin biasa, maklumat yang diberikan sering mengabaikan kehendak pesakit. Ini biasanya membawa kepada kebimbangan pada masa sebelum pembedahan. Justeru, kajian ini dilakukan bagi mengenalpasti maklumat yang diterima pesakit, tahap kepentingannya dan tahap kerisauan pesakit surgeri di Hospital Universiti Sains Malaysia. Kajian ini juga mengkaji perhubungan antara tahap kerisauan dan jenis pembedahan serta mengkaji perbezaan tahap kepentigan maklumat preoperative diantara lelaki dan perempuan. Secara keseluruhan, 61 orang pesakit surgeri daripada wad surgikal Hospital USM telah diambil untuk kajian berdasarkan prosedur persampelan bertujuan. Maklumat dikumpulkan bermula februari 2013 hingga Mac 2013 menggunakan soalan soal selidik Ambulatory Surgical Patients' Perception of Preoperative Teaching dan Spielberg Trait Anxiety Inventory untuk menilai maklumat yang diterima serta tahap kepntingan dan tahap kerisauan. Data dianalisis menggunakan SPSS versi 20.0 untuk frekuensi, peratus, min, sishan piawaian dan nilai p. Kebanyakan pesakit menerima maklumat sebelum pembedahan pada tahap yang rendah ($M=5.115$, $SD=1.066$). Sementara itu, kepuusan kajian bagi tahap kepentingan maklumat sebelum pembedahan adalah pada tahap sederhana ($M=92.37$, $SD=10.075$). Secara keseluruhan, tahap kerisauan pesakit surgery dalam kajian ini adalah di tahap

sederhana ($M=31.15$, $SD=12.03$). Kajian juga mendapati, tiada hubungkait diantara tahap kerisauan pesakit dan jenis pembedahan ($p=0.343$) serta tiada perbezaan tahap kepentingan maklumat sebelum pembedahan di antara pesakit perempuan ($p=0.376$).

Pesakit yang menjalani pembedahan menerima maklumat yang tidak mencukupi, berpendapat tahap kepentingan maklumat tersebut adalah pada tahap rendah dan tahap kerisauan mereka adalah rendah. Oleh itu, jururawat perlu mengenalpasti keperluan pesakit secara individu dan membina satu struktur garis panduan pengajaran maklumat kepada pesakit bagi memastikan pesakit menerima maklumat pembedahan yang mencukupi. Ini dapat membantu mengeurangkan tahap kerisauan pesakit di peringkat fasa preoperatif.

CHAPTER 1

INTRODUCTION

1.1 Background of Study

Management of patients prior to surgery were importance aspect of nursing towards surgery patients. One of the most importance preoperative nursing care during preoperative phase is providing preoperative information to the patients. Preoperative information must be provided to the patient during preoperative phase (Tse & So, 2008).

Preoperative information provide surgical patients with pertinent information concerning the surgical process and its purposes, anesthesia and its effects and also information regarding postoperative care that required patient self-involvement to facilitate their recovering period (Kruzik, 2009). Nurses and doctors were source of this information that was responsible to deliver preoperative information to the patient. Providing preoperative information during preoperative phase provides many benefits to the patients such as helping them understand their care and improving skill in coping with their postoperative experiences. Many studied done and resulted on positive effect on preoperative information given. Patient whom received adequate preoperative information needs were better prepared themselves for the surgery and its outcomes in the way to prevent negative outcomes (Janis, 1958 cited in Lithner, Zilling & Thomas, 2000). Besides that, preoperative information also helps them understand their care and its effects in improving their strategy coping style during post-operative period (Callaghan, Lung, Yao & Chan 1998). Well-informed patient are found actively participated in medical decision making due to improvement in knowledge of their

treatment (Keulers, Houterman, Spauwen 2008). Patient satisfaction of pre and post-operative care during hospitalization also increases when the patient receive full information needs during their care (Suhonen & Kilpi, 2006). Moreover, preoperative information given by the nurses also serves as a way to offer appropriate reassurance to the patient via therapeutic communication which help patient to be calm and face the situation in a positive way (Kruzik 2009). Shorter hospital stay, save both time and money, early mobilization during post-operative recovery were other examples benefits of adequate preoperative information given by the nurses (Lithner & Zilling, 2000).

Despite those evidence that show many benefits of adequate information given to the patient, information needs is often overlooked and information given was inadequate to meets patient needs (Baly & Donoghue, 2006). Nowadays, lack of information given was a common complaint by the patients (Bremhar, Borne, & Mullen 1996). Besides, inadequate information given, patient satisfaction of the care given during pre and postoperative phase also decrease (Courtney 2001) and it also may result on inability of controlling patient own health and treatment (Asilioglu & Celik, 2004). Feelings of unable to control of their own health can lead to anxiety and fear due to the upcoming surgery and its outcomes. Refusing to undergo surgery or other treatment by the patient due to inadequate information given also can happen (Keulers, Scheltinga, Houterman, Wilt & Spauwen, 2008).

Surgery patient that awaiting for their surgery will experience significant physical and psychological stress (Guo, 2012). Psychological disturbances such as fear and anxiety also were the commonest feeling that experience by patient that will undergo surgery (Pritchard, 2009). Anxiety is described as uneasy feelings, the source of which is often nonspecific and unknown to the individual but known to cause abnormal hemodynamic as a sequences of sympathetic, parasympathetic and endocrine

stimulation (Matthias & Samarasekera 2012). Preoperative anxiety is a challenging concept in the preoperative care of patients (Jawaid, Mushtaq, Mukhtar & Kahan, 2007). Anxiety feelings may disrupt patient normal human physiology functioning. Physiology alterations that may happen to the patient are increasing in patient heart rate, increasing blood pressure level, increasing hormone production and constrict the blood vessels (Moerman, Dam, Muller & Oosting 1996). Disturbance in patient normal physiology can be a threat to the patient condition during the intra-operative phase where when the operation was conducted.

There are many factors that can contribute to the anxiety feelings such as stress because of surgical treatment needs and inadequate preoperative information received. Many studies show, adequate information given to the patient before surgery may alleviate patient anxiety level (Davis 1988, McHaughey & Harrison 1994, cited in Callaghan 1998). Details information on surgery procedure, anesthetics technique, post-operative pain management were also give beneficial changes in patient anxiety level during preoperative phase (Millan, Serrano & Aguiree, 2010). Other factors that cause patient anxiety feelings increase is types of surgery. The degree of anxiety level among surgery patients related to many factors such as age, gender, type and extent of the proposed surgery, previous surgical experience, and personal susceptibility to stressful situations (Jawaid, Mushtaq, Mukhtar & Khan, 2007). Besides that, in a research conducted by Scott, (2004) stated that on her research, admission to hospital can provoke feelings of anxiety and stress in many patients, particularly in those who are about to undergo major surgery.

1.2 Problem Statement

Patients whom need to undergo surgery require preoperative information. Preoperative information was referred to the information regarding aspects of patients' care and surgery experience before, during and after surgery. Provision of information to patients was the most importance nursing intervention during preoperative phase. There was many research done and emphasized that adequate information given to the patient results on many positive effects. However, there is still an issues regarding inadequate preoperative information given to the patient by nurses, doctors and anaesthetist in which it may lead to many problems regarding it such as refusal to undergo operation, increase anxiety level, decrease satisfaction on preoperative nursing care and unable to build coping skills because of surgery treatment needs (Bailey, 2004).

Inadequate preoperative information receive by the patient can cause patients unable to decide whether the surgeries are appropriate or not (Ivarsson, Larsson, Luhrs & Sjoberg, 2005). About 185 breast cancer patient refuse surgical treatments in the Northern Alberta Health Region (NAHR) due to the inadequate information receive regarding the surgery and anesthesia and outcome of the surgery (Joseph, Vrowie, Kamaruzzaman, Balbaid, Fenton, Berendt, Yu & Tai, 2012). Furthermore, 66 of 226 older patients with advanced chronic diseases refused on surgical treatments and the refusal common among patients with a greater desire for information compared to those with less desire surgery information (Rothman, Ness, Leary & Fried, 2007). Therefore, this research was helpful to identify either surgery patients at Hospital USM were received adequate preoperative information or not in order to prevent such problems above arise.

At Hospital Universiti Sains Malaysia, surgical patients admitted to the hospital a day before the scheduled surgery date. On admission, nurses usually provide preoperative routine cares and apart of the cares were providing preoperative information to the patient. However, preoperative information that was given by nurses was usually based on what nurses perceived as importance to know by the patient and presumed that the information given was same with surgery patient information needs (Scott, 2004). Differences between nurses and patients perceptions on preoperative information needs may be the reason surgery patient reported of insufficient information received because of the preoperative information provided to them not met their needs. Hence, result from this study was very helpful to identify the preoperative information importance level that perceived by patients in which it will help adequate preoperative information given in order to met patient's needs.

Providing preoperative information to the surgery patients without a well designed preoperative teaching guideline might be difficult. Inconsistent preoperative information to the surgery patient with proper guideline may cause insufficient preoperative information among the surgery patients. This also can be a problem to junior nurses whom were lack of work experience to provide preoperative information adequately. In a research conducted by Norazliah, (2005) found that still there was no preoperative teaching guideline at Hospital USM. Therefore results from this study regarding preoperative information receive and level of its importance can be used to designed preoperative information teaching guideline at Hospital USM.

Patient that needs surgical treatments were usually experience significant physical and psychological stress including feelings of anxiety and depressed due to worries, fears of the surgery (Guo,Linda & Arthur 2012). All significant and relevant information was already given to the patient, but it being ignored and they still

experience anxiety and fear during entering the operating room (Pritchard, 2009). Hence, this study was done to examine the cause of anxiety among surgery patient.

1.3 Research Objectives.

The objectives of this study were to determine the pre-operative information received, level of its importance and anxiety level of surgery patients at Hospital Universiti Sains Malaysia

1.3.1 Specific Objectives

The specific objectives of the study were:

1. To determine the preoperative information received level of its importance and level of anxiety among surgical patients at Hospital Universiti Sains Malaysia (Hospital USM).
2. To examine the association between level of anxiety and types of surgery among surgical patients at Hospital Universiti Sains Malaysia (Hospital USM).
3. To examine the difference of level of importance of preoperative information between male and female surgery patients at Hospital Universiti Sains Malaysia (Hospital USM).

1.4 Research Questions

1. What is the preoperative information received, level of its importance and level of anxiety among surgical patients at Hospital Universiti Sains Malaysia (Hospital USM).
2. Is there any significance association between anxiety level and types of surgery among surgical patients at Hospital Universiti Sains Malaysia (Hospital USM).

3. Is there any significance difference of level of importance of preoperative information between male and female surgery patients at Hospital Universiti Sains Malaysia (Hospital USM).

1.5 Hypothesis

1. Null Hypothesis : There is no significance association between level of anxiety and types of surgery among surgical patients at Hospital Universiti Sains Malaysia (Hospital USM).

Alternative Hypothesis: There is significance association between between level of anxiety and types of surgery among surgical patients at Hospital Universiti Sains Malaysia (Hospital USM).

2. Null Hypothesis : There is no significance difference of level of importance of preoperative information between male and female surgery patients at Hospital Universiti Sains Malaysia (Hospital USM).

Alternative Hypothesis: There is significance difference of level of importance of preoperative information between male and female surgery patients at Hospital Universiti Sains Malaysia (Hospital USM).

1.6 Definition of Terms (Operational)

Preoperative information received by patients and level of its importance.

Preoperative information for this study is refers to providing patients with information during preoperative, intra-operative and postoperative phase. The preoperative information that will be received by the patients can be divided into five dimension including (a) situational/procedural, (b) sensation/discomfort, (c) role

information (d) psychosocial support, and (e) skills training (Lankhiet, 2011). The preoperative information receive will be measure using dichotomous scale which are 'Yes' for receiving the preoperative information and 'No' for not receiving the information. Meanwhile, for the level of its importance will be measure using 5 point Likert-scale ranging from '1' for not importance, '2' slightly importance, '3' moderately importance, '4' moderately importance and '5' for extremely importance.

Anxiety Level

Preoperative anxiety for this study is refers to uneasy feelings that experience by the surgical patients that will undergo surgery (Bailey 2010). It will measured using Spielberg State- Trait Anxiety Inventory (STAI) rated using 4 point Likert-type scale ranging from '0' not at all anxiety, '1' somewhat anxiety, '2' moderately so anxiety and '3' very much so anxiety.

Types of surgery

Types of surgery in this study were referred to types of surgery based on specialties of ward which were general surgery, orthopaedics surgery and obstetrics and gynecology surgery.

1.7 Significance of the study

The findings of this study can provide data to the nurses regarding the information that patient receive or not received during preoperative phase and it also will help nurses to identify the information that surgical patient define as important to receive during preoperative teaching. The information gained from this study can serve as reference to construct the preoperative information teaching guideline in which can be use by nurses at surgical wards at Hospital USM since till date there was no preoperative information teaching guideline at Hospital USM.

This preoperative information teaching guideline also can be included in nursing curricular for student nursing. It was very helpful to provide latest information to the student based on findings of this research.

The data gain from this study also can be use to improve preoperative nursing care to the patient and at the same time it help to implement new strategy to alleviate anxiety level of surgery patients at Hospital USM. Higher anxiety level experience by surgery patients brings undesirable consequences to patient after surgery such as prolong hospital stay and increase risk of complications. Helping patients achieve the best outcome was essential for their fast recovery and safe return home and at the same time also may result in increasing quality of nursing care at Hospital USM.

Lastly, the findings of this study also can be a reference to the future researchers. Suggestions and limitations in this study can be used as a guide to the next so that mistakes made in this study will not be repeated.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter explores the meaning of preoperative information and the importance providing the information to patients. Besides that it also explore the preoperative information receive, preoperative information needs and its level of importance by the patient before the surgery. Furthermore, this chapter also will explore factors that associate with preoperative anxiety level and mainly focus on types of surgery. Finally, it will explore the importance level of preoperative information between male and female.

2.2 Preoperative information.

2.2.1 Importance of preoperative information.

Preoperative information is recognized as an important aspect of patient care that must deliver effectively to the patient (Tse & So 2008). The purpose of providing patient with preoperative information is to make patient aware of their own health, treatments and consequences. There are many studies done and emphasized that preoperative education has been used to improve patients experience for surgery by providing health care relevant information, coping skills and psychosocial support before surgery (Kruzik, 2009 ; Scott, 2004). Besides that, preoperative information is also essential for surgical patients to increase awareness of the procedure itself and to prepare them for postoperative recovery (Guo, 2012). Even though preoperative information had been identified as an important aspect of patient care before surgery, several studies done by

Newton, H. et al 1998, Garden A. L. et al 1996, Farnill, D. 1993 found that many information that needed by the surgical patients during preoperative care had been ignored by the nurses and physician (Courtney, 2001). Inadequate information given regarding the surgery during preoperative period also may result on inability of controlling patient own health and treatment (Asilioglu & Celik, 2004). Feelings of unable to control of their own health can cause anxiety and fear due to the upcoming surgery and its outcomes.

2.2.2. Benefit of preoperative information

The importance and benefits of giving preoperative information has proved in many literatures with many authors found that, preoperative information give good and positive effect to patient condition either before, during or after surgery. One of the first is Janis, 1974 found that well-informed patients could help the patients prepare themselves for the postoperative period, prevent negative reactions, experienced less anxiety and early mobilized after operation (Lithner & Zilling, 2000). Preoperative teaching provide information that may help in reduction of patients' anxiety levels, faster recovery time, reduce postoperative complications and analgesia use, and increase in patient satisfaction of care delivered during hospitalization (Tse & So 2008). Besides that, Egbard et al (1964), Hayward (1975) and Kanto et al (1990) found that, patients who had received pre-operative information requested fewer narcotics in the days of following surgery (Hoe & Karis 2002). Preoperative information also help patient that will undergo cataract surgery by decreasing patient anxiety level and improve their understanding about the surgery and at the same time they also claimed satisfied with their treatment (Guo P., East L. & Arthur A. 2012). Pre-operative information also resulted on improving physical and psychosocial recovery for coronary artery bypass surgery patients (Brittain & Bolton, 1994).

2.2.3 Barrier on providing preoperative information to surgical patients.

Preoperative information is information that must be given by nurses and physician to the patients before patient undergoes surgery during preoperative care period. Besides nurses, during admission also patients will become centre of attention by surgeons and anesthetist. These people are a part of healthcare professionals that responsible to give information regarding hospital stays and treatment to the patient and answer all the questions that being asked. Surgeon is a person who responsible to explain to the patient regarding the surgery will be going such as what the surgeon will do, how long the surgery will be going, what are the complications from the surgery and so on. A surgeon also need to answers the entire question that inquiries by the patient. However, from a research that had been done found that surgeons always underestimated patient needs of information and largely ignored questions that being asked from the patients (Keulers, Scheltinga, Houterman, Van Der Wilt, & Spauwen 2008). Besides that other problems is a surgeon do not have time to come and see the patient before surgery.

Meanwhile, an anesthetist will play a role to explain what are anesthesia, the risks, and effects to the patient and give information regarding postoperative pain management before patient giving consent for the surgical procedures (Tse & So, 2008). But problems that arise are anesthetists also do not have much time to deliver information to the patient. Due to the problems above, surgery wards nurses must play a role to giving information that needs by the patient during preoperative care. In a study done by Radcliff (1993) found that patient were more relaxed to ask questions to the nurses because nurses have more time to build up relationship with patients and cause willingness of the patients to share and discuss their anxieties and care that they will receive during hospital stay (Scott, 2004). But, Aiken et al (2001) found that time is become a barrier between nurses and patient for health teaching session due to nurses

to patient ratio which cause there is little time for them being with the patient (cited in Garrestson, 2004). Besides of that, lack of confident and insufficient knowledge also becoming the barriers that cause nurses do not give preoperative information needs to the patient (Garrestson, 2004).

2.2.4 Time for providing preoperative information.

Information to surgical patient shows to have power effects which help them taking more control of their health care (Suhonen & Kilpi, 2006). When or what time is suitable to give pre-operative information is differ according to the policy of hospitals, health professionals decision thought of what suitable time to give and also depend on patient themselves which when did they want to know about their surgery and treatment (Fitzprick & Hyde, 2005) . Number of studies have been done to identified optimum time period for giving pre-operative information to the patient (Heye., Foster, Bartlett & Adkins, 2002). Some authors such as Christopherson and Pteiffer (1980) and Lepczyk et al 01990) concludes that there is differences whether patients receive information a week before or a day before surgery (Scott, 2004). Davis 1982 and Derham 1991 found that patient s may have more benefit and appreciate information that has been provided as earlier as possible (Scott, 2004).

Another literature found preoperative teaching needs to begin before patient admit to the surgical ward which is during clinical appointment and must continue during hospitalization and continue into post discharge period (Suhonen & Kilpi, 2006).There is a research done in China where the time of admission of patient for surgery was a week before surgery whereas in western country, patient that will undergoing elective surgery are admitted on the day of the procedure teaching (Guo, East & Arthur 2012). In Guo research, he identified that Chinese patient was claimed received adequate preoperative information rather than western patient. This evidence

show that longer hospital stay before surgery gives ample time for the nurses to deliver preoperative information to the patient and it is difficult to the nurses to deliver preoperative information in the limited time available. The issue of the best time for providing the information had not been adequately studied and it was concluded that giving the preoperative information as early as possible lead to increase in patient knowledge about surgery.

2.2.5 Methods on providing preoperative information.

There are several methods that use by the nurses and others information providers for delivered information to the patients (Tse & So, 2008). Ways of giving information by the health provider also depends on patient ways of accepting the information. For example some patients that tend to forget very quickly prefer to get the information in the written form such as pamphlet which they can refer it many times when needed. in the other hand, some patient need to be explained the information by using video so that they will be better understanding about it. Nurses' majority preferred to use face to face verbally explained as a method of delivery and this method is the most common method in current practice (Fitzpatrick & Hyde, 2006). In fact, other methods such as oral explanations with pictures, pamphlets and videos also can help deliver information in effective way (Tse & So, 2008). Patients preferred information to be provided by direct contact with a health professionals and printed information (Donoghue & Blay, 2006). Because of patients have different learning style, nurses should evaluate the most effective method to give preoperative teaching to patient so that patient able to understand and accept the information given (Kruzik N, 2009). Therefore, there is no single method that can be recommended for providing information to surgical patients.

2.3 Preoperative information received and its level of importance according to five dimensions.

Each day, thousands of patients undergo surgery which it can be described as a stressful and complex event to individual. Anxiety is a common feeling that experience by all the surgical patients. Providing information on what is going to happen to them is important to alleviate the anxiety feelings. However, not all patients want to know the information. Patients with low coping mechanism usually do not seek much on the information regarding their health condition and the surgical procedure. But some patients would like to have more information regarding their health in order to help them actively participating in their care.

Most studies (Garretson, 2004; Tse & So 2008 ;Bolton & Brittain 1994 ;Stern & Lockwood 2005; Lither & Zilling 2000 ; Blay & Donoghue 2006 ; Ivarsson, Larsson Luhrs & Sjoberg 2005 ; Scott 2004 ; Kruzik 2009) used the term preoperative information and preoperative education or teaching. According to the Hathway (1986), preoperative teaching is defined as providing patients with information during preoperative, intraoperative and postoperative phase (cited in Hughes, 2002). Preoperative teaching should be delivered upon admission until the scheduled surgery.

There is little research regarding adult surgical information receive, content of the information receive ant level of its importance (Suhonen & Kilpi, 2006). To ensure the effectiveness of the information given to the patient, differences between the nurses' views on delivering the preoperative information and patient information that they perceived is importance must be identified. According to Cortis & Lacey (1996); Hassling, Babic, Lonn & Cahsmir (2003), patient claimed that they were satisfied with the information provided regarding their operation, possible complications and results of the surgical procedures and its techniques. However, there were some studies (cites

in Suhonen & Kilpi, 2006) which result on patient complaint of did not received adequate information that they perceived is importance to know which are information regarding operation, alternatives form of treatment (Hogan, 2000), anesthesia (Kanerva, Suominen, kilpi, 1999), pain management after surgery (Carr & Thomas, 1997) wound care (Miller & White, 2001) and side effects of surgery (Nillson, Larsson, Johnson, 2002). Inadequate information provided by the nurses can result on patients less satisfied with the care during hospitalization. Besides that, it also will become a barrier for patients to actively participate in their postoperative care and delay post-operation recovery.

Information provider tends to give information to the patient according to their thought of what they think is importance to explain. However, from the view of patient, they may need another type of information that they think is important to know and because of the reason, health care professionals must know clearly what information needs by the patient. Assessment of what information that patient described as importance is the first things information provider must identified. In a study of information desired by patients undergoing laparoscopic found that, information that they think important to know are length of hospital stay, when they can return to normal life, post-operative pain, risk for nausea and vomiting, diet, and potential complication (Blay & Donoghue 2006). According to Courtney (2001), patient want to know the most are information regarding alternative treatment other than surgery, common risk or complications of surgery, how long the operation will be take, how many times and type of surgery that the surgeon had done before and who will be in the operating room during the operation. Another study found that patient expect nurses to explain regarding how and when they can start ambulation after surgery, how to take care of their wound, what they can do to reduce the pain, why they need to be insert with

catheter, why they need to fast before surgery and what they can do to prevent complication during hospital stay (Dalayon, 1994). Lithner & Zilling, (2000) found that there is a little article that investigating what kind on information the patient themselves want to receive. This evidence shows that, information that being provide commonly sometimes not meets patient information desires.

Importance level of preoperative information from view of patient was different between individual. Demographics characteristics such as gender, age, education and working life were found to be clearly related to informational needs (Suhonen and Kilpi, 2006). Masood et al (2009) found on his study that female patients rated information regarding pain management after operation more importance then male surgery patients. Furthermore, a study conducted by Sjöling et al (2003), found that, male patient perceived information of duration of hospital stay were more importance meanwhile, female patients rated postoperative pain management were the most importance information they want to know.

In this study, instruments use by the researcher to explore the information received and its level of importance that will using by the patients at Hospital Universiti Sains Malaysia is the modified questions that already use by the Lisa Lankheit on her study regarding patient perception of the preoperative information received. In the questionnaires, it covered the five dimension of preoperative teaching which are (a) situational/procedural information, (b) sensation/discomfort information, (c) patients role information (d) psychosocial support information, and (e) skills training information. Subjects were asked to rank each item according to the importance on a 5-point Likert-type scale ranging from "very important" to "not important". Patients were also asked to identify whether or not they actually received teaching on each of the items preoperatively. The questions that being asked in the instruments covers the

event that will occur before, during and after surgery , post-operative pain management, anesthesia use and its effects, coping strategy, duration of hospital stay and postoperative skills.

2.4 Preoperative anxiety and types of surgery.

Most of patient that waiting for surgery will experience anxiety and it is widely accepted as an expected response. Jawaid et al. (2007) described anxiety as unpleasant state of uneasiness or tension which may be associated with abnormal hemodynamic as a sequences of sympathetic, parasympathetic and endocrine stimulation. Although it is considered as a normal response, in reality it actually give major negative impact on patient condition before surgery, during and after surgery. Physiologic changes that usually occur in anxiety patient are increasing heart rate, vasoconstrictions of blood vessels, increasing blood pressure and also increase patients' body temperature (Moerman, Dam, Muller & Oosting, 1996). Besides that, anxiety may triggers physiologic changes and may also cause increasing in need for anesthesia, increase in post-operative medications requirements which can affect postoperative recovery and increase risk for infection by decrease immune system response (Bailey, 2010).

Anxiety feelings experiences by the patients are varies according to their self individual coping strategy. Besides that, it also depends on many factors such as age, gender, type of surgery, previous surgical experience, education level and types of occupation. Kiyohara et al. (2004) found several risk factors that contribute to the preoperative anxiety which are include history of smoking, self perception, female gender, level of education and physical status. In the other hand, another research conclude that factors that affecting preoperative anxiety levels are female gender, increasing in age, occupation, level of education, types of surgery, frequency of visiting

preoperative clinic and previous experience surgery (Mohammad Faisal, & Fauzia Anis, 2009). Besides that a research done by Matthias et al. (2012) resulted that principal causes for preoperative anxiety are awareness during anesthesia, outcome of the surgery, post-operative pain and waiting for surgery.

In this study, modified Spielberg State- Trait Anxiety Inventory (STAI), (2009) will be use to measure the anxiety levels which is an adaptation questionnaire from 'The *preoperative anxiety level among surgical patient undergoing elective surgery in surgical ward at Hospital Universiti Sains Malaysia*' (Nurliza, 2010) .

This instrument contains 20 questions which all questions are related to explore the anxiety level among the surgical patients at Hospital USM. STAI also was being use in the study done by Kiyohara et al 2004: Millan et al 2010: Jafar & Khan 2009 in order to measure the anxiety level among the patient that participates in their studies. STAI is current gold standard of anxiety measurement because it has shown consistent result in different population and ethnic groups in assessing anxiety (Bailey, 2010).

There are many factors that affecting anxiety levels among surgical patients during preoperative phase. According to Jafar & Khan, (2009) factors that affect preoperative anxiety level are included age which a studies found that by increasing age preoperative anxiety level is low, female experience higher anxiety level than men, higher education also was found to be related to higher anxiety level and lastly for types of surgery unfortunately the results was cannot be indentified because of two reasons. First all the patients in gynecological and obstetrics were female and as mentioned earlier female was have higher anxiety level than men and second reason is majority of these female were housewives occupation group. Besides that in some prior studies done by Moerman, Vandam, Muller, Osting, (1996) and Boker, Brownell, Donen (2002) state that type of surgery was not important in predicting types of surgery but Kindler,

Harms, Amsler, & Scheidegger (2000) found that otolaryngological and thoracic surgeries were associated with higher level of anxiety (cited in Jafar & Khan 2009).

To date, there are little studies done to explore the association between types of surgery and preoperative anxiety level among surgical patients. Jawaid et al , (2006) and Pritchard (2009) mentioned that risk factors that associated with preoperative anxiety are history of cancer, psychiatric disorders, pain, history of smoking, extent of proposed surgery, female gender, level of education, physical status and none of those studies mentioned types surgeries also factors that affect anxiety level. Matthias & Samarasekera 2012 also mentioned there is no significant relationship between Amsterdam Preoperative Anxiety Information Scale (APAIS) anxiety scores and types of surgery.

Moerman et al (1995) explore the types of surgeries as the factors of preoperative anxiety level in their sample. They classified types of surgeries into three which are minor surgery that include minor, intermediate and major surgeries. Minor surgeries referred to orthopaedic surgeries, diagnostic procedure, arthroscopies, laparoscopies, inguinal hernia. Meanwhile intermediate surgeries such as cholecystectomy and hysterectomy and major lastly which give high impact to patient such as laryngectomy, reconstructive and transplant surgeries. Moerman used APAIS to measure anxiety level but again the results of the studies found that the APAIS questionnaire did not distinguish well between anxiety and types of surgeries. Thus he recommended using STAI questionnaire to explore the preoperative anxiety and types of surgery.

2.5 Conceptual/Theoretical Framework

A human communication model provided the base for this study. Human communication models show how individuals interact with one another and relay and receive messages. The model is referred to as the Source, Model, Channel, and Receiver (Mordiffi et al., 2003; Northouse, 1998 cited in Lankheit, 2011). This model described communication between individuals as transactional. during this interaction both individuals act as a source and receiver of information. The information exchanged during the interaction affects between each individuals. During preoperative teaching, the nurse and patient encounter resembled such an interaction.

During the admission into the ward, nurses will do routinely assessments on the patient and at the same time patient provides their medical history to the nurse, thus, patient at that time serving as the source of information regarding to the nurses and nurse at the same time serves as the receiver of information. The same type of interaction occurs when the nurse provides preoperative teaching to the patient, although the roles of source and receiver are exchanged by nurse and patient. The nurse during the preoperative teaching is the source of information.

The Source, Model, Channel, and Receiver Model emphasized the affect of both the source and receiver on each other depending on each person's attitude and behavior (Mordiffi et al., 2003; Northouse, 1998 cited in Lankheit, 2011). In the interactions which occur between nurse and patient during preoperative teaching, their behaviors toward each other could alter effectiveness of teaching. If a patient's show less interest to know more regarding their surgery toward the nurse, the nurse may feel the patient knows the information and may not provide thorough information to the patient. Conversely, if the patient's attitudes act a person that would like to know about their surgery and health, the nurse may provide more preoperative information to the patient.

The opposite may occur as well which is dependent on the nurse's attitude or behavior. If the nurse showed uninterested while providing patient preoperative information, the patient may feel the nurse is not knowledgeable to provide appropriate information to the patient. On the other hand, if the nurse is calm and welcoming to the patient a sense of security and trust may be felt by the patient which cause them will asking more about their condition.

The information that received by the patient also will affect patient anxiety level before undergo their surgery. Five subcomponents of information anxiety as described by Wurman, (1989), are not understanding information, feeling loaded by the amount of information to be understood, not knowing if certain information exists, not knowing where to find information, and knowing exactly where to find the information, but not having the key to access it (Girard & Allison, 2008). At this situation the anxiety level for surgical patients were affected by the information provided by the nurses. Patient will experience anxiety feeling when they are in the deficient in knowledge regarding their surgery.

Effectiveness of nurses and patient interactions during providing information will be helpful to decrease patient anxiety level before their surgery. During providing information to the patient, nurses' interaction must be clear and easily understand by the patient in order to ensure patients understand the information given and not being loaded by the information. Besides that, by showing calmly and caring attitude to the patient, trust relationship will be build and patient automatically will confident to ask information regarding their surgery to the patient. Nurses at that time will act as their source of information.

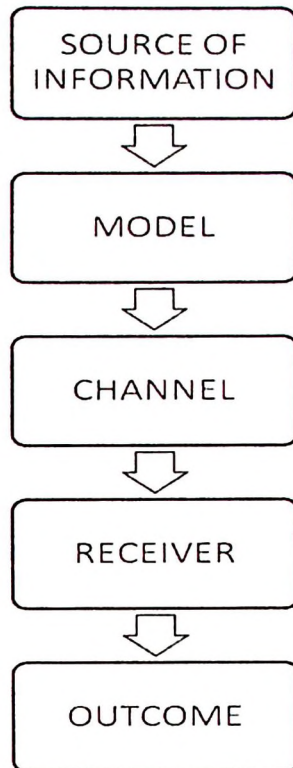


FIGURE 1: Theoretical framework of study adaptation from Source, Model, Channel and Receiver Model (Mordiffi et al., 2003).

2.5.1 Conceptual Framework of the study

The conceptual framework in this study based on Source, Model and Receiver Model adapted and modified from Mordiffi et al (2003). Preoperative information for this study is refers to providing patients with information during preoperative, intra-operative and postoperative phase. The preoperative information that will be received by the patients can be divided into five dimension including (a) situational/procedural, (b) sensation/discomfort, (c) role information (d) psychosocial support, and (e) skills training (Lankhiet, 2011). The preoperative information receive then will be measure using dichotomous scale which are 'Yes' for receiving the preoperative information and 'No' for not receiving the information. Later, all the information that patient received

or not will be evaluated its importance level using 5 point Likert-scale ranging from '1' for not importance, '2' slightly importance, '3' moderately importance, '4' moderately importance and '5' for extremely importance. Difference perspective importance level of preoperative information received will be evaluated between and female.

Later, anxiety level of surgery patient was evaluated. Anxiety feelings experience by surgery patient at preoperative phase also known as preoperative anxiety. Preoperative anxiety for this study is refers to uneasy feelings that experience by the surgical patients that will undergo surgery (Bailey 2010). It will measured using Spielberg State- Trait Anxiety Inventory (STAI) rated using 4 point Likert-type scale ranging from '0' not at all anxiety, '1' somewhat anxiety, '2' moderately so anxiety and '3' very much so anxiety. Factors that may caused anxiety feelings will be evaluated to determined either types of surgery is one of the factor that might cause the feelings. Types of surgery in this study were referred to types of surgery based on specialties of ward which were general surgery, orthopedics surgery and obstetrics and genecology surgery.