Perception of the Quality of Discharge Teaching and Readiness for Hospital Discharge Among Surgical Patients and Nurses in Indonesia

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I hereby certify that this work has not been accepted in substance for any degree, and is not being currently submitted in candidature for any degree.

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ABSTRACT

The descriptive correlational study aimed to describe the quality of discharge teaching perceived by surgical patients and nurses and to examine the relationship between the quality of discharge teaching and readiness for hospital discharge among surgical patients. Ninety-six surgical patients and 118 surgical nurses selected from general surgical units of four main public hospitals in Bengkulu, Indonesia were enrolled during January to February 2018. Self-report questionnaires were used consisting of demographic data, the Quality of Discharge Teaching Scale (QDTS), and the Readiness for Hospital Discharge (RHDS). The QDTS and RHDS instruments were validated by three experts and the back-translation into Bahasa Indonesian was also performed by two bilingual experts. The Bahasa version of the questionnaires was tested with 20 surgical patients and 20 surgical nurses in a public hospital. The Cronbach's alpha reliability of the QDTS for the patients was .95 and the nurses was .97. Furthermore, the Cronbach's alpha reliability of the RHDS for the patients was .91. Descriptive statistics and Spearman Rank-Order Correlation were used.

The results showed that the quality of discharge teaching perceived by the nurses was at a moderate level (M = 7.43, SD = 1.58), while the patients' perception was at a low level (M = 6.66, SD = 0.46). Overall, the patients' readiness for hospital discharge was also reported at a moderate level (M = 7.11, SD = 0.59). In addition, there was no relationship between the quality of discharge teaching and the readiness for hospital discharge. However, a positive relationship was found in some QDTS and RHDS subscales such as the knowledge, coping ability, content received and expected support subscales.

This finding could indicate the importance of patient focused education in regards to the discharge content and delivery to improve the quality of discharge teaching and the readiness of the patients during the transition process. The exploration of post-hospitalization outcomes is required for further study.

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Chapter 1

Introduction

This chapter presents the details introduction of the study. It begins by explaining the background information and significance of the study, objectives, research questions, theoretical framework, hypothesis, definition of terms, scope and significance of the study.

Background and Significance of the Problem

The hospital transition to home is regarded as a critical process for the patient in a trajectory of acute care. Nowadays, patients tend to be discharged from hospital earlier and continue to engage in self-care at home. Since an increased number of patients are discharged earlier in a stage of intermediate rather than a complete state of recovery, nurses have a significant role in optimizing care and facilitating patients and caregivers during the discharge process (Foust, 2007; Mcmurray et al., 2007; Meleis, 2010; Walker, Hogstel, & Curry, 2007). Previous studies found that some hospital policies result in a patient being discharged earlier. Such policies are based on priorities of shorter stays in hospital, bed availability, standardization for discharge, admission type, and clinical protocols (Greysen et al., 2011; Maloney & Weiss, 2008; Mcmurray., 2007). Hence, the decreased length of hospital stay reduces the time available for nurses to give information to a patient (Foust, 2007; Suhonen & Leino-Kipli, 2006; Weiss et al., 2007).

Meleis' Middle-Range Theory of Transition states that the transition process starts on the day of a patient's discharge and continues on into the post-discharge stage (Meleis, 2010). This theory was used to guide the concept of discharge transition that is relevant to the two main variables in this study, which are discharge teaching and readiness. These variables and the four transition components that correlated are nature of transition, transition conditions, nursing therapeutics, and patterns of response which could be indicators of a healthy transition. Healthy transition indicators include effective coping and emotion, an effective self-care performance with behavior in a new situation, and patient adaptation with the family and community resources. Hence, to achieve a healthy transition, nurse involvement is important in the nursing therapeutics and the pattern of response subscale (Maloney & Weiss, 2008; Meleis, 2010; Meleis, 2012; Weiss et al, 2007). Nursing therapeutics refer to the prevention of an unhealthy transition through discharge teaching, while the pattern of response focused on the readiness of the patient for hospital discharge.

Discharge teaching is a primary nursing strategy in preparing patients for discharge. The skills of nurses in helping patients to understand educational content and the effectiveness of teaching methods are important in the discharge teaching process (Weiss et al., 2007). There are some attributions in the quality of discharge teaching, which are the education content should be easy for patient understanding, the information content must cover patients' needs, during the teaching process appropriate timing and methods are used, and patients' satisfaction must be considered. Furthermore, an adequate discharge process helps promote the health proficiency of surgical patients and caregivers in postsurgical management at home (Mcmurray et al., 2007).

Discharge teaching is often provided as a part of the discharge planning process. In Indonesia, Pertiwiwati and Rizany (2017) found that 59% of nurses in the surgical ward play a role as a nurse educator during the discharge planning period. The nurse educates the patient about medication, complications, and how to manage any emergency needs at home. Verbal and printed instructions, and a follow-up card were the most common methods used in implementing the discharge teaching. Nurses are center to the success of the discharge process. They have been involved in assessing and monitoring patients, developing a nursing care plan, and educating patients based on their health care needs (Bradway et al., 2011).

However, surgical patients may have reported being unready for hospital discharge from their own perspective. The consequences of the unready patient for discharge is poor health outcomes in the post-hospitalization period such as medication discrepancies and an increased readmission rate within 30 days after hospital discharge (Wallace, Perkhounkova, Bohr, & Chung, 2016). Other problems and concerns that commonly come up after discharge were related to daily living activities, pain management, wound care, medication and treatment, determining complications, and getting involved in follow-up care (Weiss et al., 2007).

Discharge readiness is the output of transition phase in a continuum of care after patients return home. Discharge teaching quality given by the nurse is the main factor contributed to the discharge readiness perceived by the patients. The barrier that commonly came up within the perception of discharge teaching and readiness was the process of teaching may have been delivered in a rush, without individualization that was specific to a patients' learning needs, and the patients were discharged without any preparedness assessment (Knier, Stichler, Ferber, & Catterall,

2015; Mcmurray et al., 2007). According to Fenwick (as cited in Weiss et al., 2007; Jack et al., 2009) stated that assessment of discharge readiness is the critical aspect in discharge preparation. However, few studies have directly assessed the discharge readiness perceived by the patients.

Due to the limited data of surgical patients from many hospitals in Indonesia, statistics reported from the largest Regional Hospital of Bengkulu (2017) could reflect some current situations related to the hospital discharge process. There is a significantly increased number of patients who are admitted in surgical units each year, for instance within three months there were 700 surgical patients in 2016 and about 900 surgical patients in 2017 with the most common case being abdominal surgery. This hospital has a standard protocol in discharge planning, but not specific to discharge teaching preparation. On the day of patient discharge, the nurse provides discharge teaching by using verbal and hand-written instructions that are specific to the patient's follow-up care plan. However, this information is only provided based on an available time. Hence, it is necessary to explore the discharge teaching quality perceived by both patients and nurses including the discharge readiness. In addition, to obtain useful information for a nurse in preparing a readiness of patients before discharge, testing the association between the discharge teaching quality and the discharge readiness among surgical patients is also essential.

Objectives of the Study

1. To examine the perception of surgical nurses toward the quality of discharge teaching.
2. To examine the perception of surgical patients toward the quality of discharge teaching and the readiness for hospital discharge.
3. To examine the relationship between the quality of discharge teaching and the readiness for hospital discharge among surgical patients.

Research Questions of the Study

1. What is the level of the quality of discharge teaching perceived by surgical nurses?
2. What is the level of the quality of discharge teaching and the readiness for hospital discharge perceived by surgical patients?
3. Is there a relationship between the quality of discharge teaching and the readiness for hospital discharge perceived by surgical patients?

Theoretical Framework of the Study

Getting patients prepared for hospital discharge is commonly known as a transition process. The transition starts on the day of a patient's discharge and continues on into the post-discharge stage. Meleis' Middle-Range Theory of Transition has been used in guiding the concept of discharge transition for improving the continuum care of surgical patients after discharge. There are four key elements of transition that nurses tend to be involved in, and these are nature of transition,

transition conditions, nursing therapeutics, and patterns of response (Maloney & Weiss, 2008; Meleis, 2010).

Firstly, the nature of transition is the categories, instructions, and resources of transition that are specific to hospitalization care such as type of admission and length of hospital stay. Secondly, transition conditions refer to the individual or substantial conditions that facilitate a healthy transition including the characteristics of a patient such as age, gender, race, socioeconomic status, and living arrangements. Thirdly, nursing therapeutics are focused on preventing unhealthy transitions through discharge education to cope with new roles and to implement new skills before patients go home. In this phase, nurses promote the healthy pattern of response during the transition, represented by discharge teaching. Fourthly, pattern of response refers to develop the patients' understanding toward medical diagnosis, medication and treatment, health care recovery and rehabilitation, and strategies for managing health problems, patient confidence and competence in self-care ability, and feeling connected with supportive persons and the healthcare community. This pattern represented by the readiness of the patients for hospital discharge.

In this study, the nature of transitions refers to the post-surgical patient in the tertiary hospital preparing for discharge. The transition condition refers to surgical patients who are ready to go home. However, only two main elements in the transitional concept are focused on in the present study; nursing therapeutics which are focused on the discharge teaching process and the patterns of response in regards to the readiness for hospital discharge in transition conditions.

Discharge teaching is usually provided in a discharge plan of hospital care. The quality of discharge teaching identified as being correlated with the patient

readiness (Maloney & Weiss, 2008). The study by Lane (2017) defined discharged teaching as an instruction that is provided by the nurse to improve the ability of patients in managing health care demands at home. Weiss and Piacentine (2006) stated that the two principal components of education content and delivery subscale can be a factor analysis of the discharge teaching quality. The content subscale refers to the amount of informational needs and the actual information patients received during the teaching process. While delivery subscale represents the nurses' capability in presenting the content teaching during the transition process. In this study, the content received and the delivery subscale were measured as these are actual subscales which could be responded to by both patients and nurses.

Discharge readiness is an intermediary of a healthy transition outcome (Weiss et al., 2007), which refers to feeling prepared to manage post-discharge difficulties of daily living, healthy maintenance, and emotional adjustment, and having access to health-care community services (Jack et al., 2009; Weiss et al., 2007). The discharge readiness is composed of four subscales consisting of personal status, knowledge, coping ability, and expected support (Weiss & Piacentine, 2006). The teaching delivery is a significant predictor on the patients' readiness which consequently impacts on the post-hospital period, so that a patient-centred approach must be emphasized in the discharge teaching for surgical patients. Both content and the teaching methods used should be individualized to a patient's characteristics. The content received and delivery are then identified in the process of the discharge teaching performed by the nurse in preparing a patient for discharge. So, there may be a relationship between the discharge teaching quality and the discharge readiness, which is necessary to test based on the transitional theory (Figure 1).

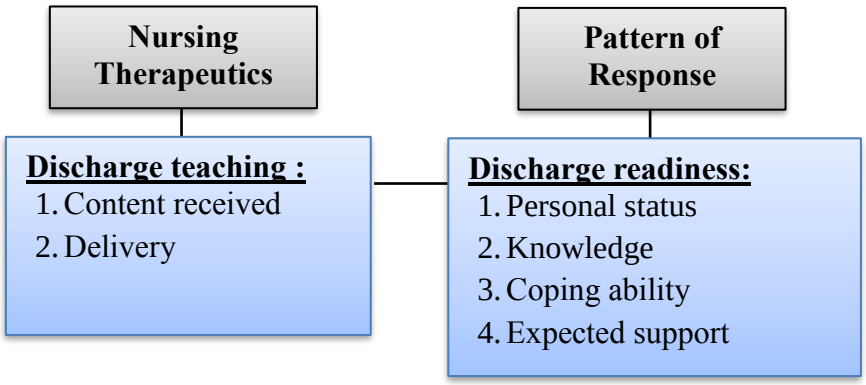

Figure 1. Conceptual Framework of this study

Hypothesis

There is a relationship between the quality of discharge teaching and the readiness for hospital discharge among surgical patients.

Definition of Terms

The quality of discharge teaching refers to the education content and process that is provided by nurses or received by patients. This is composed of teaching content and delivery subscale. The content subscale was measured of easier understanding, the amount of teaching content must be relevant to the patient's needs, and the information should be clear and consistent. While the methods of delivery subscale were measured by an appropriate time for the patients, using teaching methods that are appropriate for the patients, with attention paid to the patients' beliefs and values, and the nurse should listen to and answer the patients' questions and concerns (Bobay, Jerofke, Weiss, & Yakusheva, 2010; Maloney & Weiss, 2008; Weiss & Piacentine, 2006; Weiss et al., 2007). In this study, the

discharge teaching quality was assessed both in patients' and nurses' perceptions in surgical wards. Their perception was evaluated by using the Quality of Discharge Teaching Scale (QDTS) developed based on the concept proposed by Weiss (2007) and the literature review that was specific to adult surgical patients' care. The scale was used on a day before or on the discharge day during the transition process. The higher score means greater quality of discharge teaching given by the nurse.

The readiness for hospital discharge refers to the patients' perception on their readiness to be discharged from hospital. This is composed of four subscales consisting of personal status, knowledge, coping ability, and expected support (Bobay, Jerofke, Weiss, & Yakusheva, 2010; Weiss & Piacentine, 2006; Weiss et al., 2007). In this study, the patient's readiness was evaluated by using the Readiness for Hospital Discharge Scale (RHDS) developed from the concept proposed by Weiss and Piacentine (2006) and the literature review to generate the essential content specific to adult surgical patients care in the discharge process. The readiness for hospital discharge was evaluated on a day before or on the discharge day during the transition phase of a patient. The higher scores indicate a greater readiness of patients for hospital discharge.

Scope of the Study

This study aimed to examine the patients' and nurses' perception toward the discharge teaching quality and the discharge readiness and the correlation between these two variables. Patients who were admitted in a surgical unit and the surgical nurses who have been working in four hospital settings in Bengkulu, Indonesia were included in the study.

Significance of the Study

This study can provide a better understanding to guide nurses for improving discharge teaching and enhancing the readiness of the patient. This finding can also provide the baseline information reflecting patient informational needs in preparing discharge teaching for patient discharge from a surgical unit.

Chapter 2

Literature Review

This chapter describes the literature review for discharge teaching and discharge readiness among surgical patients and nurses. The outline of the literature review is presented as follows.

1. Overview of Discharge Teaching and Readiness in Surgical Care
2. Concept of Transitional Theory and Its Application
3. Discharge Teaching and Readiness for Hospital Discharge
    - 3.1 Concept of Discharge Teaching
    - 3.2 Evidence Based Discharge Teaching for Surgical Patients
    - 3.3 Concept of Discharge Readiness
    - 3.4 Evidence Based Discharge Readiness for Surgical Patients
4. Summary of Literature Review

Overview of Discharge Teaching and Readiness in Surgical Care

Hospital discharge is the transition phase for the patient and caregiver, where in this phase the nurse needs to be involved in implementing and preparing patients for discharge. In Indonesia, over 50% of nurses in the surgical ward play their role as a nurse educator during the discharge planning period. Two aspects that are most important during discharge education are the information content and the delivery methods that have been used in the clinical practice (Pertiwiwati & Rizany, 2017). One of the largest hospitals in Bengkulu could reflect the teaching process most

commonly used in Indonesia. For the daily routine care, the teaching process starts on the first day patients are admitted to the surgical ward to the day of patient discharge. Patients who were undergoing surgery generally received the information specific to pre, intra, and post-surgery care. The teaching methods that were commonly used in this hospital was verbal, written, printed, and teach-back instruction. On the day of patient discharge the nurses focused on the teaching content that was specific to the follow-up care plan for the patients (Ridwan, personal communication, January 01, 2018).

The readiness for hospital discharge refers to the patient's ability to cope with the new situation after the transition period from hospital care to home (Lau et al., 2016). The readiness for hospital discharge is comprised of subscales of the stability of physiological wellness, self-care capability, emotional supports availability, and the availability of community health care which could play a role in increasing readmission rates (Brent & Coffey, 2013). During the transition process, patients who are unready for hospital discharge have a high risk of developing new problems at home (Weiss, Costa, Yakusheva, & Bobay, 2014). The most common problem is the patient worrying about not being able to manage their recovery care at home and feeling unready for actual life after discharge (Rydeman & Kornvist, 2010). The lack of readiness has an outcome effect after discharge which is an increasing hospital re-visit rate within six weeks (Coffey & McCarthy, 2013). Hence, the readiness domain specific to the personal status of the patients consisting of health care knowledge, coping ability, and the availability of supports at home need to be assessed by the nurses to improve the patient safety, satisfaction, and health outcomes after returning home (Weiss et al., 2007).

Furthermore, surgical patients and nurses may perceive the quality of discharge teaching and the readiness for hospital discharge from different view points (Brent & Coffey, 2013; Rydeman & Tornkvist, 2009). Nurses' perception refers to their opinion in preparing patients for discharge toward discharge teaching and readiness. Previous studies found that nurses have significantly greater levels of readiness in the areas of knowledge and personal status than the patients (Weiss & Piacentince, 2006; Weiss, Yakusheva, & Bobay, 2010). The nurses mostly relied on the length of work experience in clinical practice to anticipate the post discharge care needs of the patients (Foust, 2007).

In addition, patients' perception refers to their opinion related to the education content that they received from the nurses and their readiness to go home (Weiss, Yakusheva, & Bobay, 2010). Previous studies found that patients have difficulty coping before returning home particularly in the areas of coping ability and expected support (Coffey & McCarthy., 2012; Maloney & Weiss, 2008; Weiss, Yakusheva, & Bobay, 2010). Their readiness with regard to personal readiness and knowledge were also low which indicated them unready for hospital discharge (Brent & Coffey, 2013). The patients with low readiness for discharge have a high risk of a hospital revisit within 30 days (Weiss, Costa, Yakusheva, & Bobay, 2014). Furthermore, previous studies also found that the patients received less education than what they needed (Maloney & Weiss, 2008; Suhonen & Leino-Kipli, 2006).

Concept of Transitional Theory and Its Application

Meleis' Middle-Range Theory of Transition was chosen as the basic framework to guide the concept of discharge transition which is relevant to the two main variables in this study. This theory has a specific concept of the transition from hospital based to home care. Regarding the previous studies which illustrated that the theory of transition identified a useful concept in the transition phase that was related to the two main variables in this study. These two variables are related to four transition components, which are the nature of transition, transition conditions, nursing therapeutics, and patterns of response (Maloney & Weiss, 2008; Weiss et al., 2007; Weiss, Costa, Yakusheva, & Bobay, 2014). Where, the nursing therapeutics play a role in facilitating a healthy transition through discharge teaching, which can be evaluated by the pattern of response through discharge readiness (Meleis, 2012).

Meleis (2010) stated that the transition process has a significant role in facilitating a person to corporate the new knowledge, alter new behavior, and adapt in a socially in the community. The transition role contributed to the cycle of the health and illness of the individual. Health care providers, therefore, need to be involved in preparing the discharge strategy that may include both preventive and therapeutic elements. Discharge teaching in this study reflects the nursing therapeutic element to prevent surgical patients from role insufficiency as a supplementation role in the transition process. Where, the transition role influences the readiness for hospital discharge for the discharge of each patient.

In addition, Weiss' study (2017) is one of the studies that was guided by Meleis' Transition Theory. This study explored the correlation of parents' perception towards the quality of discharge teaching and the readiness for hospital discharge to

posthospitalization outcomes by the nurses and parents. This study found that the transition condition consisted of knowledge, self-regulation, and social facilitation that can be measured by the Readiness for Hospital Discharge Scale (RHDS). While for nursing therapeutics, this was represented by discharge teaching (knowledge, self-regulation, social support, and delivery method) that can be measured by the Quality of Discharge Teaching Scale (QDTS). Hence, this study found that the quality of discharge teaching and the readiness for hospital discharge correlated.

Discharge Teaching and the Readiness for Hospital Discharge

Concept of discharge teaching

The discharge teaching concept in this study is the definition and evidence-based research of discharge teaching that consists of the content, methods, and the discharge teaching quality assessment.

Definition of discharge teaching. According to Kempe, Sullivan, and Edmed (2014), discharge teaching refers to the education process within the health provider with patients in discharge preparation. This communication includes important information, comprehensive verification, and teaching tailored to make sure of patient safety at home. Lane et al. (2017) defined discharged teaching as an instruction that is provided by the nurse to improve patients' ability to manage their health after hospital visits. Discharge teaching is an important process to ensure patient safety in improving their quality of life in the continuum care. The nurse must be able to deliver the information content easily within the patient's own language capability. Moreover, Maloney and Weiss (2008) described discharge teaching as conceptualism all of the information teaching received by the patient during hospitalization.

Discharge teaching is the primary component of discharge preparation in preparing patients for hospital discharge that has an impact on the health outcomes and the patients' satisfaction with care.

To summarize, discharge teaching is the education content and delivery methods that are provided by the nurses to the patients in the transition phase to improve their quality of life in the continuum care and recovery.

Evidence based discharge teaching for surgical patients

There are topics included in evidence based discharge teaching, such as the discharge teaching content, discharge teaching methods, discharge teaching factors, and discharge teaching assessment**.**

Content of discharge teaching. Successful discharge teaching must contain relevant information that can be easily understood by the patients. There is some surgical education content which must be received by the patient before he/she goes home and this includes signs and symptoms, recognizing complications, wound and drainage care, postsurgical pain management, medical needs and treatment, physical activity, and follow-up care.

Sign and symptoms. Provide detailed information about signs and symptoms that may occur in the postsurgical period and how these might be managed after hospital release such as a change in pain level, bleeding from the surgical site, a change in the level of alertness; confusion, dizziness, or fainting that may indicate internal bleeding after surgery (Daniels & Nicoll, 2012; Foust, 2007; Suhonen & Leino-Kipli, 2006).

Recognizing complications. Recognizing complications should be highlighted during a discharge teaching session. According to Rejeh, Heravi, Karimooi,

Vaismoradi, and Jasper (2013), the complications that occur in a postsurgical patient can reduce their quality of life. The nurse needs to educate the patients about the local manifestation of infection such as the redness, swelling, tenderness at the site of the wound that may occur when a patient does not follow appropriate wound care (Daniels & Nicoll, 2012; Lewis, Dirksen, Heitkemper, Bucher, & Camera, 2011). Another complication that commonly occurs in the postsurgical period is a pressure ulcer wound due to immobility impairment following post-surgery if the patient stays for a long time in bed without any ambulation (Foust, 2007; McMurray et al., 2007; Suhonen & Leino-Kipli, 2006).

Wound and drainage care. Wound and drainage care are often the areas of teaching most requested by the patient and family. It is one of the areas with which the patient may have had no past experience (Coffey & McCarty., 2012; Foust, 2007; McMurray et al., 2007; Suhonen & Leino-Kipli, 2006). The nurse needs to give the appropriate information about the wound and drainage care to the patient. The patient may have had ample opportunity to observe the nurse performing wound and drainage care or changing dressings, there may need to be a practice session to build patient confidence and to provide the opportunity for the nurse to assess the wound and drainage care knowledge of the patient (Lewis, Dirksen, Heitkemper, Bucher, & Camera, 2011).

According to Daniels and Nicoll (2012), the incision of a surgery procedure could damage the nerve tissues and disrupt skin protection. Therefore, wound healing is the main concern that patients should take good care of during the postsurgical phase. The accumulation of fluid around the wound can create pressure, inhibit blood circulation, and lead to infection. For these reasons, the nurse needs to inform the

patient about how to take care of inserted drainage, how to take care not to dislodge drains during wound dressing removal, and how to check that the the color and temperature around the wound are normal. The nurse also needs to make sure the patient knows about the change of a wound drainage color from sanguineous (red) to serosanguineous (pink) to serious (yellow) as a manifestation of healing progress.

Postsurgical pain and pain management. Pain is a complex, multidimensional experience. Annually, patients experience acute pain as a result of injury or surgery that can reduce the quality of life leading to complications, delayed recovery and prolonged hospitalization. Adequate pain management after surgery is therefore important (Rejeh, Heravi-Karimooi, Vaismoradi, & Jasper, 2013). Nurses as a part of the multidisciplinary pain management team have an important role to develop a nursing care plan, facilitate and support surgical patients in managing their pain. The important information that should be given by the nurse related to pain management is about pain relief strategies both pharmacological and non-pharmacological therapy.

The nurse usually writes the prescribed medication names and dosage schedules from the physician on a discharge instruction sheet, along with the healthcare providers' phone number for use should the prescribed medications not be effective in controlling pain. Drug therapy to relieve pain after surgery is generally opioid and non-opioid drugs, while for non-drug treatment these include physical pain relief strategies (massage, exercise, heat and cold therapy), and cognitive therapy as well as music and relaxation therapies (Daniels & Nicoll, 2012; Lewis, Dirksen, Heitkemper, Bucher, & Camera, 2011; Suhonen & Leino-Kipli, 2006).

Treatments and medications. Teaching about medication and treatment are important and the most frequent topic mentioned by patients, followed by activity

recommendations (Coffey & McCarty, 2012). This education includes the instruction to take the medication exactly as prescribed, that is the patient will receive a supply of clearly labelled medications from a pharmacy after discharge. The nurse needs to educate the patient about indication, dosage, how and when to take a medication, as well as the possible side effects and how to manage the side effects of each medication. In this phase, nurses need to collaborate with the pharmacists and physicians to verify the patients' understanding related to medications and treatments that they should be taken carefully at home. Nurses need to alert patients that they should not stop their medication prior to completion of the full course of therapy (Foust, 2007; Jack et al., 2009; Lau et al., 2016; Maloney & Weiss., 2008; McMurray et al., 2007; Suhonen & Leino-Kipli, 2006).

Physical activity. Activity and rest are important topics in the discharge teaching of the surgical patient. It has been known for many years that inactivity post surgically is associated with a number of complications. A hospital discharge form often has a summary phrase to describe the behaviour risk which patients should not perform and what to avoid after surgery particularly for activities of daily living (Lewis, Dirksen, Heitkemper, Bucher, & Camera, 2011). For example, the patient who has had gastrointestinal surgery is not allowed to reach up for things or pull objects down. The patients may be advised not to stretch when they are waking in the morning until the pain has diminished and the wound is well healed. Furthermore, the patient with an abdominal incision should avoid sweeping or vacuuming activities for a time and lifting anything should be done with caution (Daniels & Nicoll, 2012). The nurse should stress that walking is important, and the family support who can be of

assistance for the patient after discharge to home is also important (Coffey & McCarty, 2012; McMurray et al., 2007).

Accessing follow-up services. Educating the patient about future primary or specialty care visits is an important part for postsurgical patients. The nurse needs to explain clearly about further medical appointments to ensure that the follow-up care plan is met and is easily followed by the patients (Coffey & McCarty, 2012; Knier, Stichler, Ferber, & Catterall, 2014; McMurray, Johnson, Wallis, Patterson, & Griffiths, 2007). Identification of the health care provider near the patients' homes. The nurse needs to make sure that the patient and caregiver understand what to do if they encounter any problems. The nurse needs to give directions typically focused on calling emergency services or when to go directly to the emergency room (Knier, Stichler, Ferber, & Catterall, 2014; McMurray et al., 2007; Suhonen & Leino-Kipli, 2006; Weiss et al., 2007).

Methods of discharge teaching. Surgical patients are a challenging group, therefore, different delivery methods of information should be used during the discharge teaching process**.** These methods are associated with the patients**'** understanding about surgical information contents**.** The choices of the individualized methods of instruction are written, video, verbal and teach**-**back, printed, and internet**-**based instructions**.**

Written instruction. All written information is highly legible such as hand-writing from a surgical physician and nurse specialist before discharge that is specific to the patient's surgery. Schmocker et al. (2015) described that written instruction is the summary of information content that patients could implement at home such as medication, follow-up care plan, and individual therapy for rehabilitation. According

to McMurray et al. (2007), standard written instruction is used for all surgical services, which include prescriptions and medical contact, activity restrictions, instructions of the postsurgical wound, the patient's state of health, physician visits scheduled, and diet instructions. The benefit of this instruction is simpler and more specific to the patient's needs. While the weakness of this instruction is that it is not feasible for all of the patients and caregivers. For instance, the patient who has a low education level or low reading grade level will not be able to read the information, and also the style of the hand writing might be difficult to be read by the patient (McMurray et al., 2007; Rydeman & Tornvist., 2010; Schmocker et al., 2015; Suhonen & Leino-Kipli., 2006).

Internet-based instruction. Suhonen & Leino-Kipli (2006) described effective surgical information can be conveyed by the web-based method. The hospital provides an internet-based instruction as a discharge teaching method by uploading material or handouts onto the hospital website which can be accessed by the patient and caregiver. The patient also can search for information to encourage their knowledge and validate what they have received from the healthcare provider. The benefit of this method is the content information can be easily individualized according to the patients' needs. The patient and caregiver can also frequently read the information to get a better understanding.

Video instruction. Based on Suhonen and Leino-Kipli (2006), the video instructions were ranked by surgical patients as the preferred way of providing surgical information. Kornburger et al. (2012) illustrated that the nurse provides a short health literacy video instruction which consists of surgical information to support patient understanding by audiovisual methods. The patient watches the video

for around 5 minutes in a quiet room after having received their usual care instruction. The benefit of this method is that it is easy to understand because using audiovisual methods make it easier to remember the information, particularly for the patient who has a low education level. The weakness of this method may be that it takes more time and the patient cannot ask any questions directly to the nurse if they misunderstand any part while watching the video.

Verbal and teach-back instruction. According to Sawin et al. (2017), the goal of the teach-back method was to improve the patients' understanding on their health care issue, verify the knowledge directly after giving education, and improve the health care outcomes. Kornburger et al. (2013) found the teach-back method is a comprehensive teaching strategy to facilitate the discharge process through appropriate communication. The nurses could educate the patient regarding medical and surgical information by a presentation. After the delivery of the information by the nurse, the patient is asked to restate the information by using their own language. If the patient is incorrect in repeating any of the information, the nurse can take the opportunity to clarify or correct the information using another scripted sentence that is easy for the patient to understand. While the weakness of this method is for the patient who has memory impairment, they will have difficulty to recall and explain the information through verbal communication (Frank-Bader, Beltran, & Dojlidko, 2011; Kornburger et al., 2013; Sawin et al., 2016; Staveski, Parveen, Madathil, Kools, & Franck, 2016).

Printed instruction. Printed instruction was also the most common use for the surgical patient. The delivery of information is through using printed media such as a brochure, leaflet, booklet, and discharge instruction sheets. According to McMurray,

et al. (2007), patients had received printed pamphlet instructions that was specific to their surgery procedure during hospital discharge. Frank-Bader, Beltran, and Dojlidko (2011) mentioned that the printed instructions should be given with a reference in a teaching folder on the day of a patient's admission including information of medication taken, nutrition consumption, infection awareness, physical activity that patients should do and should avoid, and wound care steps.

The printed method could improve patients' satisfaction with readiness for discharge. The benefit of this method is a more interesting view with the combination of words and pictures. The patient can take these sheets anywhere, so the patient can frequently read as much as they need. Sometimes the document also consists of a commercial production from the company that is contracted by the hospital (Frank-Bader, Beltran, & Dojlidko, 2011; Jack et al., 2009; Kornburger et al., 2013; Sawin et al., 2017).

Factors related to discharge teaching. The amount of teaching content and the skill of nurses in teaching delivery are the important factors of success in the discharge teaching process (Weiss et al., 2007). The problems that can be encountered in discharge teaching include nurses missing the opportunity for giving information, nurses having minimal contact with patients, and nurses lacking patients' information (Suhonen & Leino-Kipli, 2006). The nurse practitioners have little understanding of the discharge teaching content (Mcmurray et al., 2007), the content might not be delivered at an appropriate time without individualization to a patient's needs, and lack of educational preparation (Maloney & Weiss, 2008). According to Reiley et al. (as cited in Weiss, Yakusheva, & Bobay, 2010) The previous study found that there was a different rank priority between nurses and patients. Nurses focused on

psychosocial support, while the patients felt that physical support (e.g., self-care, physical ability) was what they needed more rather than other information.

Assessment of discharge teaching quality. The Quality of Discharge Teaching Scale (QDTS) has been established to measure the teaching quality that is provided by nurses (Weiss & Piacentine, 2006). It consists of 18 items which explore two areas; content received and delivery subscale. The QDTS content received subscales measure how much information that a patient actually received during the discharge teaching process. There are six main subscales in the content received subscales which are information about self-care, expectations after discharge, medical need and treatment, practice with treatment, information when to make an emergency call, and family members' informational needs (Knier, Stichler, Ferber, & Catterall, 2015; Maloney & Weiss, 2008; Weiss, Costa, Yakusheva, & Bobay, 2014; Weiss et al., 2007).

Furthermore, the delivery subscale reflects the capability of nurses in delivering the teaching content, which includes some items about listening to and answering patients' questions and concerns, paying attention to the patients' beliefs and values, teaching in easy way and at an appropriate time for the patient and caregiver, providing consistent and clear information, promoting confidence in self-care and teaching the patient what to do in an emergency situation, and decreasing the patient's anxiety when returning home. This tool can be viewed both in patient health outcomes and the activity of nurses in discharge preparation (Knier, Stichler, Ferber, & Catterall, 2015; Maloney & Weiss, 2008; Weiss, Costa, Yakusheva, & Bobay, 2014; Weiss et al., 2007).

Concept of discharge readiness

The readiness for hospital discharge is the outcome of the transition phase from hospital care to home. Based on available evidence-based research, the concept of the readiness for hospital discharge consists of the definition, discharge readiness assessment, and factors related to the readiness for hospital discharge.

Definition of discharge readiness. According to Jack et al. (2009), the readiness for hospital discharge refers to feeling ready, knowing what to do in care recovery, or being ready to handle any difficulties of daily living, medical needs, management of pain, health prevention and maintenance, having emotional and family support, and being ready to access the community health services. Lau et al. (2016) defined the readiness for hospital discharge as the ability of patients to cope with their health demands after the transition process from hospital care to their home. The readiness for hospital discharge is determined by some aspects such as physiological stability, self-care ability, social support and health community resources availability in reducing hospital re-visit rates. Furthermore, Brent and Coffey (2013) explained that the patients' ability and intermeditate health outcomes in the context of cognitive and psychology are contributing to the patients' readiness for hospital discharge.

In this study, the readiness for hospital discharge is defined as the patient's state of being ready to go home during transitioning care in regards to the patient's ability to carry out care management both physically and psychologically and having access to healthcare community services at home.

Evidence based discharge readiness for surgical patients

The evidence based readiness for hospital discharge is based on the literature review including the contributing factors on the patients readiness for hospital discharge and the assessment of patients' readiness**.**

Factors related to discharge readiness. There are some factors that can influence the readiness of surgical patients and nurses during the discharge care process which are due to patients, caregivers, nurses, and organizations factors.

Patients' factors. The patients' factors include their personal characteristics, psychology, and decision making for hospital discharge. Each factor is described as follows.

Fisrtly, patients' characteristics. Previous studies found that patient characteristics have a significant relationship with the readiness for hospital discharge of the patients. Patients who are living alone and younger adults have lower scores of readiness for discharge due to a lack of ability to face any difficulties at home (Bobay et al., 2010; Lau et al., 2016; Coffey & McCarthy, 2011; Wallace et al., 2016; Weiss et al., 2007). Brent and Coffey (2013) showed that the female gender is readier to go home rather than the male gender (M = 6.829, SD = 1.079) and (M = 6.431, SD = 1.309).

Secondly, ppatient's psychology. Previous studies found that the patients who have depressive symptoms and anxiety, mild cognitive impairment, and who have an underlying illness such as pain and fatigue are unready to go home on the day of discharge (Lau et al., 2016). Jack et al. (2009) described when the patients expect themselves unready for hospital discharge due to a lack of confident to do self-care management after returning home. Another previous study found that the patient who has no family support in daily living felt unready for hospital discharge due to

difficulty coping (Coffey & McCarthy, 2011; Lau et al., 2016; Wallace et al., 2016; Weiss et al., 2007).

Thirdly, ppatient's decision-making. According to McMurray et al. (2007) reported that appropriate discharge preparation was associated with health decision-making after hospital discharge. Patients should be actively involved in their discharge preparation, but inadequate participation is frequently reported. Weiss et al. (2007) found that a number of patients were not willing to fully engage in decision making related to their discharge. The patients who felt not fully recovered to return home, their decision was only based on the family decision that should be accepted by the patients even though they were unready for discharge. The patient with cognitive level function disturbance is also influenced in their decision-making for hospital discharge (Walker, Hogstel, & Curry, 2007). The patient makes the decision for discharge due to their work responsibilities in competing demands of family life (Rydeman & Kornvist, 2010).

Caregivers' factors. Several previous studies mentioned that the perspectives of the patients on the readiness for hospital discharge can differ from their caregiver (Brent & Coffey, 2013; Huber et al., 2007; Rydeman & Tornkvist, 2009; Weiss, Yakusheva, & Bobay, 2010). Family factors associated with the readiness for hospital discharge are those such as low income families who prefer to take care of the patients at home due to worry about hospitalization payment, a lack of understanding related to health literacy due to a low level of education, coping difficulties of the family, the complexity of family characteristics, and a lack of communication among the family and health care provider (Knier, Stichler, Ferber, & Catterall, 2015; Suhonen & Leino-Kipli, 2006; Weiss et al., 2007).

Nurses' factors. A previous study found that nurses perceived the patients' readiness as greater readiness than the patients' perception, particularly in the areas of knowledge of health care and personal status (Weiss, Yakusheva, & Bobay, 2010). Mostly the way nurses see patient readiness is according to their work experience of caring in the same situation over time (Foust, 2007). The nurses who had been working in the same situation for some years made a clinical judgment based on their expectations on the patients' progress and the clinical assessments (McMurray et al, 2007).

Organization factors. Some organization factors have an impact on the patients' readiness for hospital discharge such as hospital policy. Each factor is described as follows.

Firstly, hospital policy. Priorities of a hospital such as shorter stays were one hospital policy that leads patients to discharge earlier (Mcmurray et al., 2007). Previous studies found that a decreased length of hospital stay reduces the time available for giving patient information which is associated with the patients' readiness for hospital discharge (Foust, 2007; Suhonen & Leino-Kipli, 2006; Weiss et al., 2007).

Secondly, national health-care policy. Previous studies stated that changes in the government policy related to health care could influence the changes of policy in the health care provider (Greysen et al., 2011; Kane, 2011). Decisions about patient placement or transferring a patient to another health care facility leads the health care provider to make decisions based on bed availability rather than based on the patient's care needs. In addition, the health insurance status also allows the health care provider

to deliver patients to another facility or back home (Greysen et al., 2011; McMurray et al., 2007).

Assessment of discharge readiness. The assessment of the readiness for hospital discharge is important for transition safety, patients' satisfaction with care, and health outcomes after discharge. The most common scales to examine the patients' readiness for hospital discharge are the Patient Preparedness for Hospital Discharge to Home (B-PREPARED) and the Readiness for Hospital Discharge Scale (RHDS).

Firstly, the Patient Preparedness for Hospital Discharge to Home (B-PREPARED) instrument was established by Graumlich, Novotny, and Aldag in 2004 to examine the patients' perception on their discharge preparedness. The content of this tool consists of prescriptions, ready to engage with a social community, health education, safety placement, appropriate assurance, rational expectations, family empowerment, and the availability of health services. This questionnaire was developed to assess the patients' readiness for patients of at least 65 years of age in one week after returning home (Graumlich, Novotny, & Aldag, 2008).

Secondly, The Readiness for Hospital Discharge Scale (RHDS). This tool was developed by Weiss and Piacentine (2006) to examine the patients' perception on their readiness for hospital discharge. The RHDS tool is selected as an instrument which is relevant to two main variables in this study which are the readiness for hospital discharge perceived by patients and nurses. The RHDS can be used for adult patients in the area of medical and surgical care. Four qualities of patient perceptions are identified from four subscales which are personal status, knowledge, coping ability, and expected support. Personal status is the physical and emotional readiness

of the patient on the day they are discharged (Weiss et al., 2007). Knowledge is the adequate information for patients to manage their health concerns after returning home. Coping ability refers to the ability of the patient to manage their personal care after discharge. Expected support is defined as the availabilty of assistance at home to help take care of the patients (Coffey & McCarty, 2012; Dreyer, Hannay, & Lane, 2014; Knier et al., 2015; Mabire, Coffey, & Weiss 2015; Weiss, Costa, Yakusheva, & Bobay, 2014; Weiss & Piacentine, 2006; Weiss et al., 2008).

Summary of Literature Review

Discharge teaching and readiness are a critical process in facilitating the transition period of acute care in the hospital which has an impact on the patients' safety, satisfaction, and readmission rate after hospital visits. However, nurses and patients mostly have different perceptions in regards to discharge teaching and readiness, that can be influenced by their characteristics (age, gender, marital status), hospital care setting (hospital policy and facilities), and health care competency (nurses' competency in delivery information).

Concept of discharge teaching in this study consists of education content, delivery methods, and discharge teaching assessment. For the education content, this consists of signs and symptoms, recognizing complications, medication and treatment, pain and pain management, wound and drainage care, physical activity, and accessing follow-up care. While the delivery methods consist of written, verbal, teach-back, printed, and internet-based instruction. Furthermore, the teaching quality can be measured by the Quality of Discharge Teaching Scale (QDTS).

Concept of discharge readiness consists of the readiness assessment and factors related to hospital discharge. The Readiness for Hospital Discharge Scale (RHDS) is the most commonly used to measure patients' readiness as established by Weiss and Piacentin (2006) as well as the QDTS. The four factors that contributed to the patients' readiness are from patients, caregivers, nurses, and hospital factors.

In addition, previous study reported that the patients who were unready for hospital discharge have a high risk of developing new healthcare issue at home (Weiss, Costa, Yakusheva, & Bobay, 2014), which has outcomes effect after discharge such as an increasing hospital re-visit rate within six weeks, unsatifisfied with care, and medicine discrepencies (Coffey & McCarthy, 2013; Rydeman & Kornvist, 2010). Hence, to support the patients' readiness, the discharge teaching process is one of the contributing factors that nurses need to be considered during the transition phase.

Chapter 3

Research Methodology

This chapter illustrates the study methodology that consists of the study design, research setting, population and sample, instruments set, ethical considerations, procedures of data collection, and data analysis process.

Research Design

A correlational descriptive design was used to examine the perception level and the association between the discharge teaching quality and the readiness for hospital discharge among surgical patients.

Study Setting

There are 12 government hospitals and three private hospitals in Bengkulu province, Indonesia. The government hospitals were selected due to have a similar context in terms of portion of staff and care delivery. Initially, four government hospitals were selected based on being conveniently located within a 500 kilometers radius of the capital city as well as having a large number of surgical patients and nurses (Appendix A). Each hospital was purposively selected with each having at least one surgical unit. They were 1) Dr. M. Yunus Hospital of Bengkulu, 2) Bhayangkara TK IV Jitra Polda Hospital of Bengkulu, 3) DKT Zainul Arifin Hospital of Bengkulu, and 4) Kota Bengkulu Hospital. There were 155 surgical nurses who

worked in the surgical wards, and about 3500 surgical patients who were admitted in the four hospitals each year (Table 1).

Table 1

The Total Number of Working Nurses and the Patients' who Visited Each Month in the Surgical Wards of the Four Hospitals Selected

No	Hospitals	Nurses	Patients
1	Dr. M. Yunus Hospital	36	300
2	Bhayangkara TK IV Jitra Polda Hospital	33	300
3	DKT Zainul Arifin Hospital	44	300
4	Kota Bengkulu Hospital	42	200

Population and Sample

Population. The study population was surgical nurses who worked in the four hospital settings and surgical patients who were admitted to the hospitals.

Sample and sampling procedure. The sample was purposively selected from general surgical wards that included patients and nurses. The sample was selected based on the following inclusion criteria:

Patient. The inclusion criteria of a patient was 1) Adult patients (>18 years old), 2) Patients undergoing abdominal surgery (traumatic and non-traumatic injury) who were in the discharge process, 3) Fluent in the Indonesian language.

Nurse. The nurses' criterion was surgical nurses who have been working in the hospital for at least 3 months.

Sample size. Power analysis was used to estimate the total number of participants. A huge sample size is highly representative of the study population, and results in a low sampling error, and a raised statistic power. However, this consumes more time, there is a need to allow for extra budget, and it can create difficulties in

recruiting study subjects for quantitative research. Power analysis is mostly significant in determining the study findings in group comparison (Polit & Beck, 2012). An adequate sample size must be feasible, economical, and have a strong power. Statistical power (1-β) is the study capacity to determine the association in the study population. Polit and Beck (2012) stated that the acceptable power in a study must be no less than .70. A greater effect size determines a small number of samples. The narrower the alpha level (α), the larger the sample size determined.

Weiss's study (2010) on the perception of nurses and patients toward readiness for hospital discharge related to posthospitalization outcome was used to estimate the effect size, and the correlational result was $r = 0.32$. This study was carried out in the same population. In this regard, by using the significant level (α) of .05, power expectation of .80, and effect size estimation of .30, the total number of the sample size is 88 participants in each group.

The sampling method of the participants was selected based on the eligible inclusion criteria. Five abdominal surgery patients were selected each day allocated from the four hospital settings, with the total number of 96 participants. While, for nurse participants, about 118 enrolled surgical nurses were purposively selected from the general surgical units of the four relevant hospitals.

Instruments

The instrument was divided into two sets; Patients (Set A) and Nurses (Set B). Each set is composed of three parts. Part one is the Demographic Data Questionnaire (DD), which consists of the Patient Demographic Data (P-DD) or the Nurse Demographic Data (RN-DD). Part two is the Quality of Discharge Teaching Scale

(QDTS) which measured the discharge teaching quality perceived by the patients and nurses. Part three is the Readiness for Hospital Discharge Scale (RHDS) which measured the discharge readiness perceived by the patients (Appendix B and C).

Part I: The Demographic Data Questionnaire (DD). The researcher developed the demographic data questionnaire which consists of the Demographic Data of the Patient and Nurse.

Demographic Data Questionnaire of Patient (P-DD). This data consists of the patient's age, gender, marital status, educational level, occupation, income, living arrangements, diagnosis on admission, type of surgery, previous history of surgery, and length of stay.

Demographic Data Questionnaire of Nurse (RN-DD). This questionnaire consists of the nurse's age, gender, work experience, nursing education level, the total number of patients they plan to discharge, discharge teaching duration, and the discharge teaching methods they have been using.

Part II: The Quality of Discharge Teaching Scale (QDTS). The QDTS was used to examine the perception of surgical patients and nurses' regarding the discharge teaching quality. The researcher developed the QDTS tool based on the concept proposed by Weiss & Piacentine (2006) and the literature review to generate the essential content specific to adult surgical patients' care in the discharge process. This tool consists of the content received (12 items) and delivery subscale (15 items). The content received subscale examined how much information was received by the patients during the teaching process. Furthermore, the delivery subscale reflected the effectiveness of the teaching provided by the nurses (Bobay, Jerofke, Weiss, &

Yakusheva, 2010; Maloney & Weiss, 2008; Weiss & Piacentine, 2006; Weiss et al., 2007).

There were six subscales of the content received subscale consisting of self-care, emotion, medical needs and treatment, medicine taken, emergency call, and family informational needs. Furthermore, the six subscales in the delivery subscale consisted of the items about listening to and answering the patients' questions and concerns, paying attention to the patients' beliefs and values, teaching in an easy way and at an appropriate time for the patient and caregiver, providing consistent and clear information, promoting confidence in self-care and knowing what to do in an emergency, and managing anxiety when returning home (Maloney & Weiss, 2008; Weiss & Piacentine, 2006; Weiss et al., 2007).

Part III: The Readiness for Hospital Discharge Scale (RHDS). The RHDS was used to examine the patients' perception on their readiness for hospital discharge. The researcher developed the RHDS tool based on the concept proposed by Weiss and Piacentine (2006) and the literature review. The RHDS form consists of 20 items with four main subscales: 1) Personal Status (six items) refers to the patients' feeling on the day of discharge including their emotion and physical readiness, pain, strength, stress level, and physical ability for self-care, 2) Knowledge (six items) refers to the self-management information that patients need to know before returning home and this consists of self-care, medical needs, complications, emergency call for any problems, restrictions, and follow-up plan, 3) Coping ability (four items) refers to the ability of the patient to manage demands at home and consists of managing worry, handling demands, and fulfilling medical needs and treatments, and 4) Expected

support (four items) refers to the availability of emotional and physical support at home such as relatives, family, medical care and the social community of the patient.

In addition, the QDTS and RHDS are a Likert-scale format from 0 (none) to 10 (great) for QDTS, and 0 (not at all prepared) to 10 (totally prepared) for the RHDS, with the interpretation of 9-10 (very high), 8-8.9 (high), 7-7.9 (moderate), and <7 (low quality) (Weiss, Costa, Yakusheva, & Bobay, 2014; Weiss & Piacentine, 2006; Weiss et al., 2007; Weiss et al, 2017).

Validity and reliability of the instruments. The content validity of the QDTS and RHDS was established by a panel of three experts that consisted of one Indonesian nurse instructor who is expert in Adult Surgical and Critical Care, and two experts from Adult Health Nursing, Faculty of Nursing, Prince of Songkla University *(*Appendix D*).* Each content was evaluated to make sure of the accuracy and congruency of each item with the study construct. The content validity index *(*CVI*)* of each scale was calculated after adjustments and modifications by the experts. The scale content validity indexes *(*S-CVIs*)* of the QDTS and RHDS was 1.0 for all items, which means that they are valid for measuring the study variables *(*Polit & Beck, 2012*).*

Furthermore, the internal consistency by using the Cronbach's alpha coefficient was tested for the instruments reliability. The Indonesian version of the QDTS and RHDS was examined in 20 surgical patients and 20 surgical nurses in Raflesia Hospital of Bengkulu, Indonesia which was similar in characteristics as the actual population. The Cronbach's alpha reliability of the QDTS for the entire scale for the patients was .95 and for the nurses it was .97. In addition, the Cronbach's alpha

reliability of the RHDS for the patients was .91, therefore, both of these instruments are reliable for measuring the study variables (Polit & Beck, 2012).

Translation of the instruments. The researcher developed the QDTS and RHDS based on the concept of Weiss & Piacentine (2006) and the literature review in the English language. The researcher then translated the instruments into the Indonesian language using the back-translation method recommended by Brislin (as cited in Polit & Beck, 2012). Two bilingual translators and one bilingual reviewer, who are familiar with both languages and the concept of the study, were recruited (Appendix E). The English translation into the Indonesian version was done by the first bilingual translator, then the back translation into the English version was translated by the second bilingual translator. Finally, the comparison of the Indonesian and English versions was checked by the reviewer who has clinical practice and research experience in adult surgical nursing in order to reveal any misunderstandings in meaning.

Ethical Considerations

Permission from the Research Ethics Committee of the Faculty of Nursing, Prince of Songkla University (PSU IRB 2017-NSt 035) and the four relevant hospitals (Appendix F and G) was obtained before conducting the study. The researcher clarified the objectives of the study, the process, potential risks and benefits for the participants. The study benefit for the surgical nurses was that it could evaluate them in regards to the quality of discharge teaching when preparing a patient for discharge without any harmful risks for them and the hospital setting. While the benefit of this study for the patients was to assess the amount of education content they needed to

receive from the nurses to get an adequate amount of information before returning home with no harmful risks for them. The eligible participants were then informed that they had the right to enroll in this study or that they may withdraw without any negative consequences. After the participants had conveyed verbally and given written consent agreement, all the collected data remained confidential (Apendix H).

Data Collection Procedure

The researcher collected the data through the procedures as follow:

1. The researcher met the Education and Research Centre administrator of the four hospitals and explained the details of the study purpose and procedure to get approval for data collection.
2. The researcher explained the study aims and the details of study process to the head nurse of the surgical ward in each hospital. The researcher then identified the surgical nurses who met the inclusion criteria. The eligible nurses in a particular ward was asked by the head nurses to participate in this study.
3. The questionnaire package (set B) was given to the head nurses in each hospital. Due to a limited number of nurses in each ward, the questionnaire was distributed to all eligible nurses by the head nurses. One to two weeks was given for them to respond to the questionnaires and return the completed questionnaires to the head nurses. Upon submission, the questionnaires were checked for completeness, and there were no missing samples during this study. The completed questionnaires were then collected from all of the head nurses.
4. The sample of patients was listed from the medical records in regards to the patients planned for discharge. The researcher then assessed their medical records

to obtain their primary health profile information (e.g., diagnosis on admission, type of surgery, and length of hospital stay) and to make sure they were in the discharge process.

5. The head nurses of the surgical wards introduced the eligible participants to the researcher before collecting data. The self-report questionnaire package (set A) was given to them by the researcher directly. For the patients who were unable to read or understand, the researcher interviewed them based on the questionnaire list. The researcher collected the completed questionnaires on the same day.
6. In order to reach the required number in this study, the patients were approached by the researcher everyday. Five abdominal surgery patients were selected each day allocated from the four hospitals.

Data Analysis

Descriptive and inferential statistics were used in analyzing the data by the statistics expert from Faculty of Nursing, Prince of Songkla University as outlined in the following procedures:

1. Cleaning data was performed for the detection of any errors in the data set.
2. Descriptive statistics was used for presenting the demographic data of the participants and the perception of the surgical patients and nurses toward the discharge teaching quality and the discharge readiness.
3. The assumption for a correlational study was tested. The normality was checked by examining skewness divided by its standard error, and kurtosis divided by its standard error. The values must be in the range of ±3.29 (N = 96). The results revealed that the Quality of Discharge Teaching Scale among surgical patients

did not meet the assumption of normality, while the Readiness for Hospital Discharge among surgical patients met the assumption of normality (Appendix I).

4. The correlation between the discharge teaching quality and the discharge readiness among the surgical patients was examined using Spearman Rank-Order Correlation.

Chapter 4

Results and Discussion

The research findings are presented in three sections. The first section displays the description of the demographic data of the patients and nurses. The second section demonstrates the perception level of surgical patients and nurses toward the quality of discharge teaching and the readiness for hospital discharge. The third section illustrates the association between the discharge teaching quality and the discharge readiness among surgical patients.

Results

Demographic data of surgical nurses. This study was completed by 118 surgical nurses that had been working in four public hospitals in Bengkulu, Indonesia. The participants ages ranged from 23 to 50 years (M = 32.37, SD = 7.54). Female nurses comprised of more than 70% of the sample. More than a half of the participants (54.20%) had completed diploma degree (3 years of nursing college) with the average work experience of about 7.58 years (SD = 5.54). The average number of patients who were discharged from the hospital daily was about 7 patients (SD = 2.33). Over a half of the participants were using verbal and teach-back instruction (58.50%) with the average teaching duration per patient at about 33.94 minutes (SD = 7.94) (Table 2).

Table 2

Frequencies and Percentages of Demographic Data of Surgical Nurses (N = 118)

Characteristic	*N*	**%**
Age (Years)	(*M* = 32.37, *SD* = 7.54, *Range* = 23 – 50)	
23 – 40	91	77.10
> 40	27	22.90
Gender		
Female	85	72.00
Male	33	28.00
Nursing education level		
Diploma	64	54.20
Bachelor	54	45.80
Working experience (Years)	(*M* = 7.58, *SD* = 5.54, *Range* = 1 – 20)	
< 2	14	11.90
2 – 5	46	39.00
5 – 10	37	31.40
> 10	21	17.80
The average number of patients discharged daily	*(M* = 6.57, *SD* = 2.33, *Range* = 5 – 10*)*	
< 5	81	68.60
5-10	37	31.40
Teaching methods used		
Verbal and teach-back	69	58.50
Verbal and written	30	25.40
Verbal and printed	19	16.10
Teaching duration (minutes)	*(M* = 33.94, *SD* = 7.94, *Range* = 30 – 60)	
≤ 30	92	78.00
> 30	26	22.00

Demographic data of surgical patients. A total of 96 patients were admitted for abdominal surgery in four public hospitals based in Bengkulu, Indonesia. The average age of the participants was at 42.34 years old (*SD* = 17.71). Of the initial sample, 63.50% were male. More than a half of the participants were married (69.80%) and 92.70% of participants were living with a caregiver. More than 50% of the participants had completed primary school. About 31.20% were unemployed (housewife) followed by 29.20% who had been working as a farmer. Over a half of the participants had a monthly income of less than a million rupiahs (72.20 US dollars). Almost all of the participants were using government health insurance (95.80%) and 18.80% of the participants had a surgical history. Appendicitis (32.30%) was the most common type of diagnosis admission followed by inguinal hernia (29.20%), and the majority of the participants had laparotomy surgery (57.30%) for the current admission. The average length of stay of the patients was about 3 to 9 days (*M* = 3.79, *SD* = 1.40) (Table 3).

Table 3

Frequencies and Percentages of Demographic Data of Surgical Patients (N = 96)

Characteristics	*N*	**%**
Age (Years)	(*M* = 42.34, *SD* = 17.71, *Range* = 18 – 80)	
18 – 40	46	47.90
41 – 60	34	35.40
> 60	16	16.70
Gender		
Male	61	63.50
Female	35	36.50

Table 3 (continued)

Characteristics	*N*	**%**
Marital status		
Married	67	69.80
Unmarried	29	30.20
Level of education		
Primary school	52	54.20
Secondary school	37	38.50
College/university	7	7.30
Occupation		
Unemployed	30	31.20
Farmer	28	29.20
Private employee	25	26.00
Retired/others	8	8.40
Government employee	5	5.20
Monthly income (Million rupiahs)	(*M* = 1.76, *SD* = 0.57, *Range* = 0 – 3.0)	
< 1.0 (1.0 = 72.20 US dollar)	30	31.2
1.0 – 2.0	59	61.5
> 2.0	7	7.30
People being caregiver		
Spouse/Children/Parents	86	92.70
No caregiver/Others	7	7.30
Health insurance		
Government insurance	92	95.80
No insurance	4	4.20
History of previous surgery		
No	78	81.20
Yes	18	18.80
Diagnosis on admission		
Appendicitis	31	32.30

Table 3 (continued)

Characteristics	*N*	**%**
Inguinal hernia	28	29.20
Peritonitis	12	12.50
Ileus obstruction	8	8.30
Cholecystitis	7	7.30
Abdominal mass	6	6.20
Epigastric mass	2	2.10
Uterina myoma	2	2.10
Type of surgery for current admission		
Minor surgery		
Laparotomy	55	57.30
Herniotomy	28	29.20
Cholecystectomy	7	7.30
Colostomy	6	6.20
Length of hospital stay (days)	(*M* = 3.79, *SD* = 1.40, *Range* = 3 – 9)	
1 – 3	61	63.50
4 – 7	32	33.30
> 7	3	3.10

The quality of discharge teaching perceived by surgical nurses. The discharge teaching quality perceived by surgical nurses was at a moderate level (*M* = 7.43, *SD* = 1.58). For the two main subscales, delivery subscale was reported as having a higher score (*M* = 7.54, *SD* = 1.51) than content received subscale (*M* = 7.30, *SD* = 1.76). For each item in the content subscale, family informational needs item was reported as the lowest score (*M* = 7.30, *SD* = 1.76) while the information about the emergency call item was reported as the highest score (*M* = 7.38, *SD* = 1.74). Furthermore, under the delivery subscale, paying attention to patients' beliefs and

values item was showed as the lowest score (*M* = 7.20, *SD* = 1.81) while managing anxiety when the patients returned home item was reported as the highest score (*M* = 7.78, *SD* = 1.76) (Table 4).

Table 4

Mean, Standard Deviation, and Level of Perception of Surgical Nurses Toward the Quality of Discharge Teaching (N = 118)

QDTS of Nurses	*Range*	*M*	*SD*	Level
Content received subscale	1.4 – 10.0	7.30	1.76	Moderate
Emergency call needs	1.0 – 10.0	7.38	1.74	
Medicine taken	2.0 – 10.0	7.37	2.01	
Medical needs and treatment	1.5 – 10.0	7.37	1.85	
Emotion	1.0 – 10.0	7.30	1.87	
Self-care	1.5 – 10.0	7.22	1.58	
Family informational needs	1.0 – 10.0	7.00	2.01	
Delivery subscale	3.1 – 10.0	7.54	1.51	Moderate
Managing anxiety when returning home	1.0 – 10.0	7.78	1.86	
Providing consistent and clear information	3.5 – 10.0	7.65	1.54	
Teaching in a way that patient could understand at an appropriate time	3.5 – 10.0	7.58	1.51	
Promoting confidence in self-care ability and knowing what to do in an emergency	3.0 – 10.0	7.54	1.51	
Listening to and answering to the patients' questions and concerns	2.5 – 10.0	7.42	1.66	
Paying attention to the patients' beliefs and values	1.0 – 10.0	7.20	1.81	
Total scale	2.4 – 9.9	7.43	1.58	Moderate

The quality of discharge teaching perceived by surgical patients. Overall, the mean score of the discharge teaching quality was at a low level (*M* = 6.66, *SD* =

0.46), both in the content received (*M* = 6.67, *SD* = 0.64) and delivery (*M* = 6.65, *SD* = 0.47). Three items were perceived at a high score, namely the family informational needs (*M* = 8.15, *SD* = 1.16), emotion (*M* = 7.62, *SD* = 1.26) and teaching in easy way in appropriate time for the patient and caregiver (*M* = 7.07, *SD* = 0.77). Furthermore, two items were perceived as the lowest score. Those were emergency call needs (*M* = 5.86, *SD* = 1.15) and managing anxiety when return home (*M* = 5.04, *SD* = 2.33) (Table 5).

Table 5

Mean, Standard Deviation, and Level of Perception of Surgical Patients Toward the Quality of Discharge Teaching (N=96)

QDTS of Patients	*Range*	*M*	*SD*	Level
Content received subscale	4.3 – 7.8	6.67	0.63	Low
Family informational needs	5.0 – 10.0	8.15	1.16	
Emotion	4.0 – 10.0	7.62	1.26	
Self-care	3.0 – 8.5	6.76	0.88	
Medical needs and treatment	2.5 – 8.0	6.50	0.83	
Medicine taken	3.5 – 8.0	6.39	0.79	
Emergency call needs	1.0 – 8.0	5.86	1.15	
Delivery subscale	4.2 – 8.0	6.65	0.47	Low
Teaching in easy way in appropriate time for the patients and caregivers	5.0 – 9.0	7.07	0.77	
Listening to and answering to the patients' questions and concerns	4.0 – 8.0	6.82	0.66	

Table 5 (continued)

QDTS of Patients	*Range*	*M*	*SD*	Level

Paying attention to the patients' beliefs and values	4.0 – 10.0	6.80	0.91	
Promoting confidence in self-care ability and knowing what to do in an emergency	4.6 – 9.2	6.80	0.49	
Providing consistent and clear information	3.0 – 8.5	6.47	0.78	
Managing anxiety when returning home	1.0 – 10.0	5.04	2.33	
Total scale	4.4 – 7.9	6.66	0.46	Low

The readiness for hospital discharge perceived by surgical patients. The level of readiness for hospital discharge among surgical patients was perceived at a moderate level (*M* = 7.11, *SD* = 0.59). From four subscales, only personal status subscale was perceived at a low level (*M* = 6.86, *SD* = 0.88). Two items were reported as the highest score, these were family support (*M* = 7.86, *SD* = 0.88) and follow-up care (*M* = 7.52, *SD* = 0.73). Furthermore, three items of personal status were perceived as the lowest score, including physical readiness (*M* = 6.54, *SD* = 1.05), pain (*M* = 6.36, *SD* = 1.69), and stress level (*M* = 6.35, *SD* = 2.06) (Table 6).

Table 6

Mean, Standard Deviation, and Level of Perception of Surgical Patients Toward the Readiness for Hospital Discharge (N=96)

RHDS of Patients	*Range*	*M*	*SD*	Level
Personal status subscale	3.7 – 8.7	6.86	0.88	Low
Strength	3.0 – 10.0	7.35	1.00	
Emotionally ready	3.0 – 9.0	7.16	1.04	
Feeling ready	3.0 – 9.0	7.12	0.97	
Physical readiness	3.0 – 9.0	6.54	1.05	

Table 6 (continued)

RHDS of Patients	*Range*	*M*	*SD*	Level
Pain	1.0 – 9.0	6.36	1.69	
Stress level	1.0 – 9.0	6.35	2.06	
Knowledge subscale	5.5 – 9.5	7.34	0.71	Moderate
Follow-up care	5.0 – 9.0	7.52	0.73	
Emergency needs	5.0 – 9.0	7.41	0.76	
Restriction	4.0 – 9.0	7.40	0.76	
Medical needs	5.0 – 9.0	7.40	0.65	
Complications	3.0 – 9.0	6.94	0.94	
Self-care	5.0 – 9.0	6.82	0.96	
Coping ability subscale	4.5 – 10.0	7.01	0.82	Moderate
Perform medical treatments	3.5 – 9.0	7.11	0.83	
Handle worried	4.0 – 9.0	7.01	0.86	
Handle demands	4.0 – 9.0	6.58	1.01	
Expected support subscale	5.5 – 10.0	7.66	0.84	Moderate
Family support	5.0 – 9.0	7.86	0.88	
Medical care or resources support	5.0 – 9.0	7.44	0.76	
Emotional support	5.0 – 9.0	7.36	0.75	
Household activities support	5.0 – 9.0	7.35	0.79	
Total scale	5.2 – 8.7	7.11	0.59	Moderate

The relationship between the quality of discharge teaching and the readiness for hospital discharge among surgical patients. The results of this study illustrated that there was no significant association between the discharge teaching quality and the discharge readiness among surgical patients. However, a relationship was found between some subscales in the quality of discharge teaching and the readiness for hospital discharge. Content received and expected support subscale were positively correlated ($r = .24$, $p < .05$). While, delivery subscale was statistically

correlated with the knowledge (r = .28, p< .01) and coping ability subscale (r = .25, p< .05) (Table 7).

Table 7

Coefficient Correlation between the Quality of Discharge Teaching and the Readiness for Hospital Discharge Among Surgical Patients (N=96)

Variables	Content received	Delivery	Total QDTS
Personal status	-.08	.10	-.01
Knowledge	.19	.28**	.24*
Coping ability	.12	.25*	.20*
Expected support	.24*	.16	.19
Total RHDS	.09	.19	.14

***. Correlation is significant at the 0.01 level (2-tailed).*
**. Correlation is significant at the 0.05 level (2-tailed).*

Discussion

This section presents the discussion of the findings based on the research objectives and hypothesis, which consist of the discharge teaching quality perceived by surgical nurses and patients, the discharge readiness readiness perceived by surgical patients, and the correlation between the discharge teaching quality and the discharge readiness among surgical patients.

The quality of discharge teaching perceived by surgical nurses. The results showed that overall the discharge teaching quality perceived by surgical nurses was at a moderate level. This may be due to the way of teaching method they have been used in the clinical practice. This study reported that delivery subscale score was higher than content received subscale (Table 4), which reflected the important of the teaching methods used to deliver the teaching content. During the teaching process,

most of the nurses were using a combination of teaching methods, where verbal and teach-back instruction were the most commonly used in the four hospital settings. This is similar to previous studies which stated that verbal and teach-back instruction are a comprehensive evidence-based strategy that has been utilized by nursing staff in the discharge teaching process (Kornburger et al, 2013; Weiss et al, 2007). This method could improve the patients' understanding, verifying the knowledge, and improving health outcomes (Sawin et al, 2017). The benefit of this method is to allow nurses to verify the patients' understanding directly after completing the teaching process, to correct the information if the patient gives inaccurate feedback, and to reinforce the new home care skills before patients return home (Kornburger, 2013; Staveski et al, 2016).

Furthermore, it was found that the discharge teaching process was performed within a half hour in each teaching session, which is regarded as an effective duration in a teaching process (Kornburger, 2013). The experience in nursing practice was also helpful in discharge teaching as stated by Benner's Stages of Clinical Competence in that nurses who have been working in the same clinical practice for about two or three years are in a competent stage. In this stage, the nurses are able to demonstrate and coordinate their skills in nursing practice (Benner, Tenner, & Chesla, 1992). Hence, the nurses in these hospital settings had enough competence to provide the teaching process with an average work experience in clinical practice of eight years.

In addition, four particular items were reported as having the highest score, which all came from the delivery subscale (Table 4). These items were decreasing anxiety when the patient returned home, providing consistent and clear information, teaching in easy way in appropriate time for the patients and caregivers, and

promoting confidence for self-care ability and knowing what to do in emergency situations. The results may reflect that the nurses' skills in the delivery of the teaching content is an important part for an effective teaching process.

Moreover, there were also three items that were reported as having the lowest score, and these were two items from the content subscale consisting of the information about self-care and family informational needs, and one item from the delivery subscale which is paying attention to personal beliefs and values. This might suggest the nurses need to focus on the amount of teaching content which spesific to the patient needs for discharge preparation. After the discharge content has met the patients' learning needs, the nurse could prepare a way of teaching that supports the delivery process including teaching method strategies, teaching duration, and an effective way to demonstrate nursing practice that a patient could cope with at home.

The quality of discharge teaching perceived by surgical patients. The quality of discharge teaching perceived by surgical patients was at the low level. This may be related to the teaching process during the hospitalization phase. This study found that the majority patients were discharged within three days after surgery particularly those who had minor surgery, which means they may not have received a lot of discharge education from the nurses due to the limited time, so the discharge teaching quality was perceived as low by the patients. This is similar to a previous study that stated that a decreased length of hospital stay for surgical patients reduced the time available for information to be given by the nurses (Suhonen & Leino-Kipli, 2006).

This study found that both the content received and delivery subscale were perceived at a low level, which was similar to a previous study (Bobay, Jerofke,

Weiss, & Yakusheva, 2010). This might be due to the information content that patients need which is different for each type of surgery received and different in the nature of an illness. The previous study found that the patients whose needs were unmet regarding the teaching content perceived the discharge teaching quality as low (Maloney & Weiss, 2008).

Furthermore, almost all items under the delivery subscale were reported as a low score except for teaching in easy way in appropriate time for the patients and caregivers. The patients might feel hesitant to ask for additional information during the teaching process because they expect the nurses to provide all necessary information, and this was similar to the previous study (Maloney & Weiss, 2008). In addition, the patients may not be able to apply the discharge information due to lack of confidence and poor experience about their health care issue. Where, in this study most of the patients had received a surgical procedure for the first time and over half of them had only completed their educational level at primary school. They then perceived the discharge teaching quality as low.

The readiness for hospital discharge perceived by surgical patients. The results showed that the discharge readiness overall was perceived at a moderate level. This may be related to the hospitalization issue that leads patients to be ready for discharge. The four hospitals based in this study had the same pattern in caring of surgical patients, where the patients who received a minor surgical procedure should be discharged within three days after surgery. This study found that most of the participants had minor surgery such as a laparotomy or herniotomy, so they may feel ready for discharge earlier and perceive that they would be able to cope and gain some knowledge. In addition, the length of hospital stay was also short and because

the patients did not have any complications after surgery this helped their readiness for hospital discharge. This is similar to the previous study which stated that the hospitalization phase including living arrangement and the length of hospital stay was contributed to the patients' readiness (Weiss et al., 2007).

For each subscale, personal status reflects the patients' feeling on the day of discharge was the lowest score out of four subscales, which is consistent with previous studies (Brent & Coffey, 2013; Knier, Stichler, Ferber, & Catterall, 2014). In this subscale, the participants were emotionally ready to go home, but they were unready in the physical care. Their emotionally readiness for discharge might be linked to the patients' role in the family, where most of them were male who had been working as a farmer or private employee. This role emotionally leads them to be ready for discharge to fulfill their responsibility as the head of the family. This is similar to the previous study which stated that the patients make the decision for discharge due to their work responsibility in the competing demands of family life (Rydeman & Kornvist, 2010).

In addition, the participants rated the expected support subscale at the same level for all the items. These results reflect that the participants were ready enough to seek helpful sources at home (family, relatives, and health care community resources). The present study found that almost the entire group of participants had a caregiver at home which may lead them to be readier to go home. This is similar to previous studies which found that the patients who had been living with a caregiver had perceived their readiness greater than those who lived alone (Brent & Coffey, 2013; Coffey & McCarthy, 2011; Weiss et al., 2007).

In addition, almost all of the participants had health insurance that is provided by the Indonesian government, and this also leads them to feel ready to access the health community services if they are unable to handle care demands after returning home (see table 3). In addition, under the knowledge subscale, the self-care item remained low which is the same as the ability to handle demands at home in the coping ability subscale. These results reflect that if the patients had low knowledge about self-care for themselves, they would not be able to handle their health care demands at home.

The relationship between the quality of discharge teaching and the readiness for hospital discharge among surgical patients. The results of the current study revealed no significant correlation between the discharge teaching quality and the discharge readiness among surgical patients. This finding was slightly different with some previous studies (Bobay, Jerofke, Weiss, & Yakusheva, 2010; Brent & Coffey, 2013; Weiss et al, 2007) which showed that the discharge teaching quality was associated with the discharge readiness. This finding might be related to the care situation of the hospital setting in Indonesia, where patients are allowed to stay with the caregiver within 24 hours during hospitalization. There were three to ten patients in a room, where they were able to share knowledge and learn from each other patients and caregivers. The patients might be get more information related to their health care issue from other patients who had a previous experience in the same case.

In general, people can learn from many sources such as the mobile web internet service which is also helpful for patients to seek the relevant information, so they receive the information not only from the nurses. This is similar to the previous study which stated that the learning process can be conveyed through the internet, the

patients frequently search for information to gain a deeper understanding in relation to their health care issues and to validate the information they have received from the healthcare provider (Suhonen & Leino-Kipli, 2006).

However, in each subscale, it was found a positive relationship between the discharge teaching quality (delivery subscale) with the discharge readiness (knowledge and coping ability subscale). These results indicate that the skills of nurses in delivering effective teaching helped in improving the patients' understanding of their health literacy and ability to manage their care demands at home. This may be because of three possible factors of the way of teaching that has been used in the clinical practice, the teaching methods that are most commonly used by the nurses, and the teaching duration that was given for the patients.

Furthermore, under the way of teaching, the nurses were using a simple language that patient could understand easily. Multiple of teaching methods were also used to deliver the education content such as verbal, teach-back, written, and printed instruction. Furthermore, the appropriateness of a teaching time that was at a good time for the patients and caregivers was also helpful for the patients. Hence, these items are important as a teaching strategy in discharge preparation. Furthermore, the content received subscale and the expected support were also positively correlated. This indicates that the amount of discharge teaching content that was given by the nurses could help to support the person expected to provide care at home such as a relative, family members, and health care community resources. In this context, the family informational need item was well perceived by the patients.

Chapter 5

Conclusions and Recommendations

This chapter presents the details of summary findings and recommendations findings. The strengths and limitations of the study will be presented. Furthermore, the implications and recommendations for future research will also be suggested.

Conclusion

The study aimed to examine the quality of discharge teaching perceived by surgical patients and surgical nurses, the readiness for hospital discharge perceived by surgical patients, and the correlation among surgical patients toward the discharge teaching quality and the readiness for hospital.

A correlational descriptive design was used to collect data from 96 surgical patients and 118 surgical nurses who were purposively selected from general surgical wards in four main public hospitals in Bengkulu, Indonesia. The self-report questionnaire was used in this study consisting of the demographic data of the nurses and patients, the Quality of Discharge Teaching Scale (QDTS), and the Readiness for Hospital Discharge Scale (RHDS). The QDTS and RHDS instruments were validated by three experts and the back-translation was done by two bilingual experts. The Bahasa version of the questionnaires was tested with 20 surgical patients and 20 surgical nurses in a public hospital in Bengkulu, Indonesia. The Cronbach's alpha coefficient of reliability of the QDTS for the patients was .95 and for the nurses it was .97. Furthermore, the Cronbach's alpha coefficient of reliability of the RHDS for the

patients was .91. Descriptive statistics and Spearman Rank-Order Correlation were used for study analysis.

The findings of this study showed that overall the discharge teaching quality among surgical nurses was reported at a moderate level, both in the content and delivery subscale. The discharge teaching quality among surgical patients remained low both in the content received and the delivery subscale. While, the discharge readiness among surgical patients was reported at a moderate level. In addition, the study result reflects that the quality of discharge teaching was not statistically correlated with the readiness for hospital discharge. However, for each subscale, the delivery subscale was positively associated with the patients' knowledge and their coping ability subscale. While, the content received subscale had a positive relationship with the expected support subscale in the patients' readiness.

The Strengths and Limitations of the Study

The strengths of this study were the adequacy of the number of sample was appropriate, thus providing sufficient power analyses of the quality of discharge teaching and the readiness for hospital discharge, and the data were collected from four hospital settings that may reflect the way of teaching by the nurses in preparing patients for hospital discharge. The instruments of this study were developed to generate the essential content that is specific to adult surgical patients' care in the discharge process and their reliability were acceptable and their content validity was supported. While, the limitation of this study was the discharge teaching quality perceived by surgical patients may not represent the actual teaching given by the nurses. The different views in this study about the quality of discharge teaching

among the surgical patients and the nurses may not be limited in comparison due to the lack of a matching technique used during data collection.

Implications and Recommendations

Nursing practice. The patients who have a short hospital stay (three to four days) may be ready for discharge with the help of delivery teaching. A combination of teaching methods is recommended in the delivery of the teaching content. Nurses who have about two years' work experience in the same clinical practice are recommended to handle the discharge teaching process as a nurse educator in the discharge teaching delivery. This study also shows that nurses need to pay more attention to the teaching content in regards to information about self-care, emergency care needs, decreasing the anxiety levels of the patients, and family informational needs. In addition, the patients' feeling on the day of hospital discharge both in the context of physical and emotional wellbeing also need to be assessed during the discharge preparation.

Nursing education. The findings of this study can be used to support the knowledge related to the education content and the delivery skills needed in a discharge teaching program. These results also provided the baseline data about the patients' readiness for hospital discharge during the transition process.

Nursing research. The comparison of the discharge teaching quality between surgical patients and nurses using the matching technique is required for further study. Post-hospitalization outcomes (satisfaction and re-hospital visits) should be conducted to identify the impact of the quality of discharge teaching and the readiness for hospital discharge after the patients have returned home.

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Appendix A

Map of Hospital Settings

Four government hospitals were selected based on being conveniently located within a 500-kilometer radius in the capital city of Bengkulu, Indonesia. While one of the public hospitals was selected for the pilot study.

1. Dr. M. Yunus Hospital of Bengkulu
2. Bhayangkara TK IV Jitra Polda Hospital of Bengkulu
3. DKT Zainul Arifin Hospital of Bengkulu
4. Kota Bengkulu Hospital
5. Raflesia Hospital of Bengkulu

Figure 2**.** *Map of hospital settings*

Appendix B

Set A (Patient Instruments)

Part I: Patient Demographic Data (P-DD)

Participant ID :
Date and time :

Instruction
The following items are some information about yourself. Please answer by making a "√" in the available space of filling in the blank that is appropriate for you.

Filled by Patient
Patient information

1. Age : .....years
2. Gender : □ (1) Female □ (2) Male
3. Marital status : □ (1) Single □ (2) Married
   □ (3) Widowed/divorced/other
4. Level of education : □ (1) High school □ (2) Partial college
   □ (3) 4 years college
5. Living arrangement : □ (1) No caregiver □ (2) Parents/spouse/others
6. Occupation : □ (1) Government employee □ (2) Farmer
   □ (3) Private employee □ (4) Retired/others
7. Monthly income : .....rupiahs
8. Health insurance : □ (1) Yes, state…….. □ (2) No.
9. Previous surgery : □ (1) Yes, state…….. □ (2) No.

Filled by Researcher

11. Diagnosis on admission : …….
12. Type of surgery : .....
13. Length of hospital stay : ……..days

Part II: The Quality of Discharge Teaching Scale for Patients (P-QDTS)

This questionnaire will ask you about the quality of discharge teaching given by the nurse before going home. This instrument consists of content actually received and the delivery process. Please rate your quality level towards the discharge teaching given by the ward nurses with the following score from 0 (none) to 10 (great). Place a "√" mark in the box of your answer.

The Quality of Discharge Teaching Scale (QDTS)	Score										
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Content received											
1. How much information did you receive from your nurses about postsurgical self-care at home (e.g. activities of daily living; bathing, dressing, eating, toileting)?											
2. How much information did you receive from your nurses about postsurgical rehabilitation to be regularly performed after discharge (e.g. breathing and coughing exercises, abdominal exercises, pain management program; full recovery within 1 to 6 weeks)?											
3. How much information did you receive from your nurses about medication taken correctly and regularly at home (e.g. the reason, amount, route, time)?											
4. How much information did you receive from your nurses about the medication's side effects and how to manage the side effects?											
5. How much information did you receive from your nurses about diet restrictions at home?											
6. How much information did you receive from your nurses about wound and drainage care at home?											
7. How much information did you receive from your nurses about recognizing postsurgical complications at home (wound infection, drainage bleeding)?											
8. How much information did you receive about alert signs and symptoms which should be reported as an emergency?											
9. How much information did you receive from your nurses about what to do if you are getting worse after discharge (call number of emergency services, when to call for emergency assistance, when to return to the emergency department)?											
10. How much information did you receive from your nurses about emotional or tension relief after discharge if it happens to you?											
11. How much information did you receive from your nurses about emotional support from family and others in caring for you at home?											

12. How much information did you receive from your nurses about follow-up services after returning home (medical appointment time)?											
Delivery											
13. How well did your nurses assess your discharge informational needs before the teaching process?											
14. How attentively did your nurses ask regarding your personal beliefs and values during the teaching process?											
15. How well did your nurses listen to you and clearly answer your specific questions related to discharge information needs?											
16. How well did your nurses teach you at an appropriate time or at a time that suited you?											
17. How well did your nurses provide consistent information related to postsurgical care?											
18. How well did your nurses demonstrate ways to detect abnormal signs and symptoms for preventing any complications at home?											
19. How well did your nurses demonstrate step by step regarding surgical wound care and drainage, and pain relief techniques at home?											
20. How well did your nurses encourage your confidence to perform activities of daily living at home (bathing, dressing, eating, toileting)?											
21. How well did your nurses educate you to perform self-care related to exercise, physical activity or home rehabilitation?											
22. How well did your nurses demonstrate how to correctly and regularly take your medication at home?											
23. How well did your nurses demonstrate strategies to reduce your anxiety when going home?											
24. How well did your nurses deliver information using multiple methods of teaching (e.g. verbal, teach-back, written form)?											
25. How well did your nurses demonstrate what to do if you are getting worse at home and when to return to the hospital?											
26. How well did your nurses explain all the information by using simple language that was easy to understand or perform during the teaching process?											
27. How well did your nurses clarify the information that you received to make sure of your understanding?											

Part III: The Readiness for Hospital Discharge Scale for Patient (P-RHDS)

This questionnaire will ask you about your readiness for discharge before going home. This instrument consists of personal status, ability to care, ability to cope, and expected support. Please rate your own readiness for discharge you had with the following score from 0 (not at all prepared) to 10 (totally prepared). Place a "√" mark in the box of your answer.

The Readiness for Hospital Discharge Scale (RHDS)	**Score**										
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Personal status											
1. How prepared do you feel for returning home today?											
2. How would you describe your pain today?											
3. How strong do you feel to go home today?											
4. How would you describe your emotionally readiness to go home today?											
5. How would you describe your ability to perform your physical needs today (e.g. sitting, walking, moving on the bed)?											
6. How would you describe your stress level today?											
Knowledge											
7. How prepared do you feel to perform self-care ability at home (activity of daily living; bathing, dressing, eating, toileting)?											
8. How prepared do you feel to manage your medication at home (e.g. the reason, amount, route, time)?											
9. How prepared do you feel to prevent any surgical complications that may occur after returning home (e.g. wound infection, drainage bleeding, pressure ulcer)?											
10. How prepared do you feel to follow your diet restrictions at home?											
11. How prepared do you feel to call for help when you have any emergency conditions?											
12. How prepared do you feel to consult a health care provider based on your follow-up plan?											
Coping ability											
13. How prepared do you feel to control your nervousness or worry in daily life?											
14. How prepared do you feel to handle any demands at home?											
15. How prepared do you feel to perform medical needs at home (e.g. wound and drainage care)?											
16. How prepared do you feel to perform your treatment needs at home (e.g breathing and coughing exercises, pain management program)?											
Expected support											

17. How prepared do you feel to seek another source if you cannot handle any problems at home?											
18. How prepared do you feel to find other relatives or someone to care for your daily needs at home?											
19. How prepared do you feel to use the healthcare system and community resources nearby your home?											
20. How prepared is your family of taking care of you when returning home?											

Appendix C

Set B (Nurse Instruments)

Part I: The Nurse Demographic Data (RN-DD)

Participant ID :
Date and time :

Instruction
The following items are some information about yourself. Please answer by making a "√" in the available space of filling in the blank that is appropriate for you.

Nurse information

1. Age : .....years
2. Gender : □ (1) Female □ (2) Male
3. Nursing education level : □ (1) Diploma □ (2) Bachelor
   □ (3) Master □ (4) Others.....
4. Work experience : .....years
5. How many patients do you plan for discharge daily (by average)?
   □ (1) < 5 patients □ 5-10 patients
6. What methods do you mainly use in discharge teaching?
   □ (1) Written instruction □ (2) Verbal instruction
   □ (3) Internet-based instruction □ (4) Video instruction
   □ (5) Teach-back instruction □ (6) Printed instruction
7. How long do you spend for discharge teaching per patient?
   □ (1) < 30 minutes □ (2) 30 – 60 minutes
   □ (3) > 60 minutes

Part II: The Quality of Discharge Teaching Scale for Nurse (RN-QDTS)

This questionnaire will ask you about the quality of discharge teaching in preparing patients for discharge. This instrument consists of content received and the delivery process. Please rate your quality level toward the discharge teaching process which nurses do in your ward with the following score from 0 (none) to 10 (great). Place a "√" mark in the box of your answer.

The Quality of Discharge Teaching Scale (QDTS)	Score										
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Content received											
1. How much information did your patient receive about postsurgical self-care at home (e.g. activity of daily leaving; bathing, dressing, eating, toileting)?											
2. How much information did your patient receive about postsurgical rehabilitation to be regularly performed after discharge (e.g. breathing and coughing exercises, abdominal exercises, pain management program; full recovery within 1 to 6 weeks)?											
3. How much information did your patient received about medication taken correctly and regularly at home (e.g. the reason, amount, route, time)?											
4. How much information did your patient receive about the medication's side effects and how to manage the side effects?											
5. How much information did your patient receive about diet restrictions at home?											
6. How much information did your patient receive about wound and drainage care at home?											
7. How much information did your patient receive about recognizing postsurgical complications at home (wound infection, drainage bleeding)?											
8. How much information did your patient receive about alert signs and symptoms which should be reported as an emergency?											
9. How much information did your patient receive about what to do if he/she is getting worse after discharge (call number of emergency services, when to call for emergencies, when to return to the emergency department)?											
10. How much information did your patient receive about emotional or tension relief after discharge if it happened to him/her?											
11. How much information did your patient received about emotional support from family and others in caring of you at home?											

12. How much information did your patient receive about follow-up services after returning home (medical appointment time)?											
Delivery											
13. How well did you assess patient informational needs before the discharge teaching process?											
14. How well did you attentively ask regarding the patient's personal beliefs and values during the teaching process?											
15. How well did you listen to the patient and clearly answer their specific questions related to discharge information?											
16. How well did you teach the patient at an appropriate time or at a time that suited the patient?											
17. How well did you provide consistent information related to postsurgical care?											
18. How well did you demonstrate ways to detect abnormal signs and symptoms for preventing any complications at home?											
19. How well did you demonstrate step by step regarding surgical wound care and drainage care, and pain relief techniques at home?											
20. How well did you encourage the patient's confidence to perform activities of daily leaving at home (e.g. bathing, dressing, eating, toileting)?											
21. How well did you educate the patient to perform self-care related to exercise, physical activity or home rehabilitation?											
22. How well did you educate the patient to correctly and regularly take his/her medication at home?											
23. How well did you demonstrate strategies to reduce the patient's anxiety when going home?											
24. How well did you deliver information using multiple methods of teaching (e.g. verbal, teach-back, written form)?											
25. How well did you demonstrate what to do if patients are getting worse at home and when to return to the hospital?											
26. How well did you explain all the information or perform during the teaching process by using simple language that was easy to understand?											
27. How well did you clarify the information that the patient received to check his/her understanding?											

Appendix D

Name List of Instruments Experts

The content validity of the Quality of Discharge Teaching Scale and the Readiness for Hospital Discharge Scale was validated by the following three experts; one Indonesian nurse instructor who is an expert in Adult Surgical and Critical Care, and two experts from Adult Health Nursing.

1. Asst. Prof. Dr. Hathairat Sangchan

   Adult Health Nursing, Faculty of Nursing, Prince of Songkla University, Thailand.

2. Asst. Prof. Dr. Wipa Sae-Sia

   Adult Health Nursing, Faculty of Nursing, Prince of Songkla University, Thailand.

3. Suhartini Ismail, S.Kp., MNS, Ph. D

   Adult Surgical and Critical Care Nursing, Universitas Diponegoro, Indonesia.

Appendix E

Name List of Translation Experts

The translation of the instruments was done by two bilingual translators who were familiar with both the English and Indonesian language and were capable of understanding the construct of the study variables. In addition, one bilingual reviewer had clinical and research experience in adult surgical nursing.

1. Mardiyono, BNS, MNS, Ph. D

   Non-Communicable Disease Care, Health Polytechnic of Semarang, Indonesia.

2. Ns. Dara Febriana, MSc

   Adult and Gerontological Nursing, Syiah Kuala University, Indonesia.

Appendix F

Research Ethics Approval Letter of PSU

Certificate of Approval of Human Research Ethics
Center for Social and Behavioral Sciences Institutional Review Board,
Prince of Songkla University

Document Number: 2017 NSt – Qn 044

Research Title: Perception of the Quality of Discharge Teaching and Readiness for Hospital Discharge among Surgical Patients and Nurses in Indonesia

Research Code: PSU IRB 2017 – NSt 035

Principal Investigator: Nurhayati

Workplace: Master of Nursing Science (International Program) Faculty of Nursing, Prince of Songkla University

Approved Document:
1. Human Subjects
2. Instrument
3. Invitation and Informed Consent

Approved Date: 10 November 2017

Expiration Date: 10 November 2019

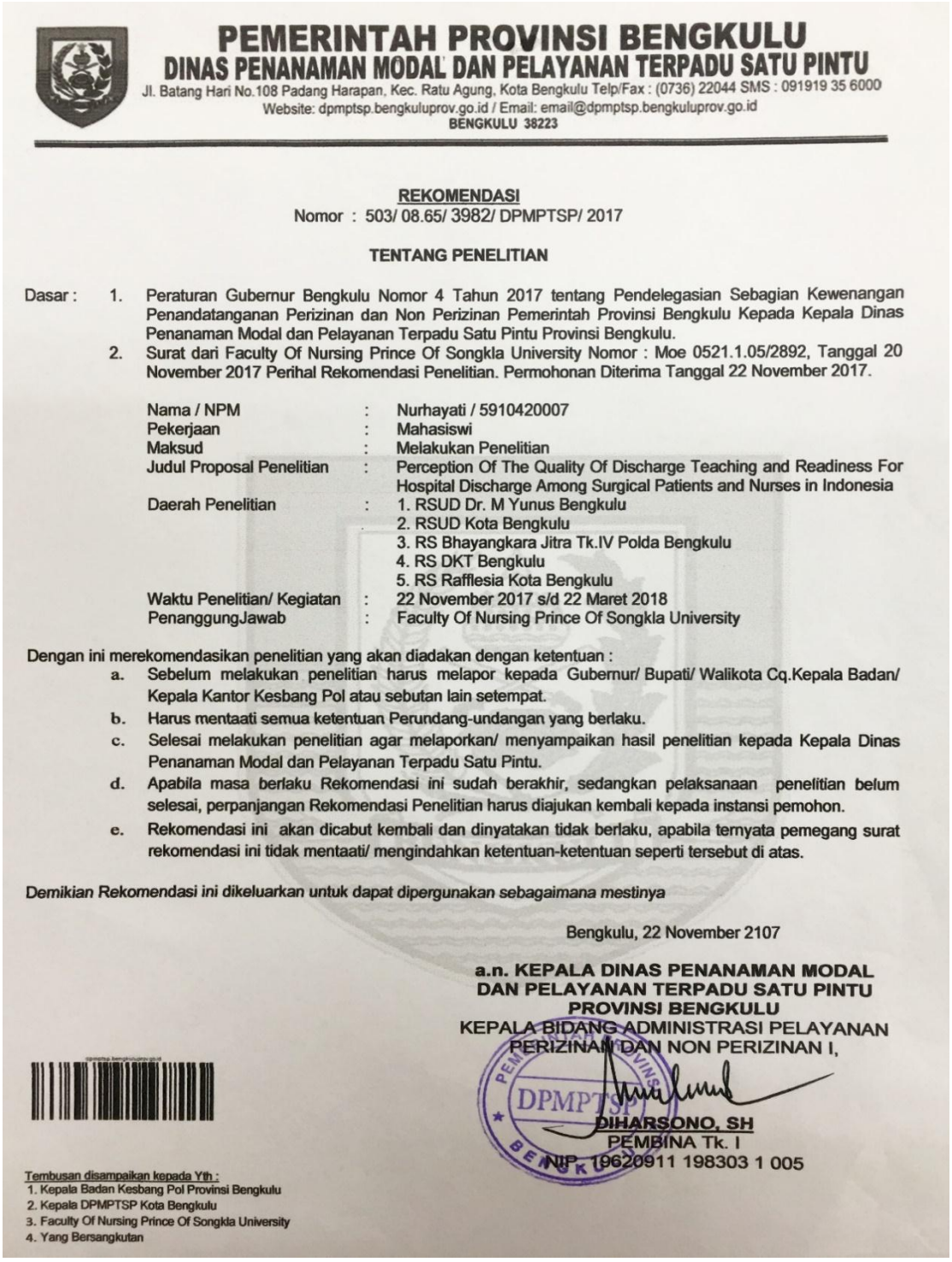
The Research Ethics Review of Center for Social and Behavioral Sciences Institutional Review Board, Prince of Songkla University approved for Ethics of this research in accordance with Declaration of Belmont.

Aranya Chaowalit

(Assoc. Prof. Dr. Aranya Chaowalit)
Committee Chairman of Center for Social and Behavioral Sciences
Institutional Review Board, Prince of Songkla University

Appendix G

Approval Letter for Data Collection of Hospitals



PEMERINTAH PROVINSI BENGKULU
DINAS PENANAMAN MODAL DAN PELAYANAN TERPADU SATU PINTU
Jl. Batang Hari No.108 Padang Harapan, Kec. Ratu Agung, Kota Bengkulu Telp/Fax : (0736) 22044 SMS : 091919 35 6000
Website: dpmptsp.bengkuluprov.go.id / Email: email@dpmptsp.bengkuluprov.go.id
BENGKULU 38223

REKOMENDASI
Nomor : 503/ 08.65/ 3982/ DPMPTSP/ 2017

TENTANG PENELITIAN

Dasar :
1. Peraturan Gubernur Bengkulu Nomor 4 Tahun 2017 tentang Pendelegasian Sebagian Kewenangan Penandatanganan Perizinan dan Non Perizinan Pemerintah Provinsi Bengkulu Kepada Kepala Dinas Penanaman Modal dan Pelayanan Terpadu Satu Pintu Provinsi Bengkulu.
2. Surat dari Faculty Of Nursing Prince Of Songkla University Nomor : Moe 0521.1.05/2892, Tanggal 20 November 2017 Perihal Rekomendasi Penelitian. Permohonan Diterima Tanggal 22 November 2017.

Nama / NPM	:	Nurhayati / 5910420007
Pekerjaan	:	Mahasiswi
Maksud	:	Melakukan Penelitian
Judul Proposal Penelitian	:	Perception Of The Quality Of Discharge Teaching and Readiness For Hospital Discharge Among Surgical Patients and Nurses in Indonesia
Daerah Penelitian	:	1. RSUD Dr. M Yunus Bengkulu 2. RSUD Kota Bengkulu 3. RS Bhayangkara Jitra Tk.IV Polda Bengkulu 4. RS DKT Bengkulu 5. RS Rafflesia Kota Bengkulu
Waktu Penelitian/ Kegiatan	:	22 November 2017 s/d 22 Maret 2018
PenanggungJawab	:	Faculty Of Nursing Prince Of Songkla University

Dengan ini merekomendasikan penelitian yang akan diadakan dengan ketentuan :
a. Sebelum melakukan penelitian harus melapor kepada Gubernur/ Bupati/ Walikota Cq.Kepala Badan/ Kepala Kantor Kesbang Pol atau sebutan lain setempat.
b. Harus mentaati semua ketentuan Perundang-undangan yang berlaku.
c. Selesai melakukan penelitian agar melaporkan/ menyampaikan hasil penelitian kepada Kepala Dinas Penanaman Modal dan Pelayanan Terpadu Satu Pintu.
d. Apabila masa berlaku Rekomendasi ini sudah berakhir, sedangkan pelaksanaan penelitian belum selesai, perpanjangan Rekomendasi Penelitian harus diajukan kembali kepada instansi pemohon.
e. Rekomendasi ini akan dicabut kembali dan dinyatakan tidak berlaku, apabila ternyata pemegang surat rekomendasi ini tidak mentaati/ mengindahkan ketentuan-ketentuan seperti tersebut di atas.

Demikian Rekomendasi ini dikeluarkan untuk dapat dipergunakan sebagaimana mestinya

Bengkulu, 22 November 2107

a.n. KEPALA DINAS PENANAMAN MODAL DAN PELAYANAN TERPADU SATU PINTU PROVINSI BENGKULU
KEPALA BIDANG ADMINISTRASI PELAYANAN PERIZINAN DAN NON PERIZINAN I,

DPMPTSP

DIHARSONO, SH
PEMBINA Tk. I
NIP. 19620911 198303 1 005

Tembusan disampaikan kepada Yth :
1. Kepala Badan Kesbang Pol Provinsi Bengkulu
2. Kepala DPMPTSP Kota Bengkulu
3. Faculty Of Nursing Prince Of Songkla University
4. Yang Bersangkutan

Appendix H

Informed Consent

Dear Participant,

My name is Nurhayati, and I am a nursing educator in Nursing Department, Faculty of Health Science, Universitas Muhammadiyah Bengkulu. Now, I am a Master student in Faculty of Nursing (International Program), Prince of Songkla University, Thailand. I am conducting a nursing research project to study the Discharge Teaching and Readiness for Discharge by Surgical Patients and Nurses. If you agree to participate, you will be asked to complete a set of questionnaires that will ask about your personal information related to discharge teaching and readiness. It will take around 30 to 60 minutes to complete the questionnaires. Please do not hesitate to ask me if you find any difficulties in understanding any of the items of the questionnaires.

This research project has been approved by the Research Ethics Committee of Institutional Review Board, Faculty of Nursing, Prince of Songkla University, Thailand as well as from the Educational and Research Centre of Bengkulu, Indonesia. The study procedures will not harm your institute. In addition, your personal identity and the information gathered will be kept confidential. Information from this study will be beneficial for the development of surgical nursing particularly in preparing patients for hospital discharge. Your signature on this form will indicate that you understand this study and its procedures, and you are willing to participate in this study. Thank you for your cooperation.

.....	.....
Date	Date
.....	.....
Name of Participant	Name of Researcher
.....	.....
Signature	Signature

If you need more information, please feel free to contact me on any of the following: Department of Nursing, Faculty of Health Science, Universitas Muhammadiyah Bengkulu. Jln. Salak Raya Lingkar Timur Bengkulu 38229 Indonesia. Email: nurhayati_ns@yahoo.com, phone number +62822 2625 0506.

Appendix I

Testing Assumption and Additional Data Analysis

Table 10

Skewness and Kurtosis of Study Variables

Variables	*Skewness*	*SE*	*Kurtosis*	*SE*	$Z_{Skewness}$	$Z_{Kurtosis}$
Patient QDTS	-.811	.246	4.658	.488	-3.29	9.54
Patient RHDS	-.412	.246	1.459	.488	-1.67	2.98

Note. SE: Standard Error

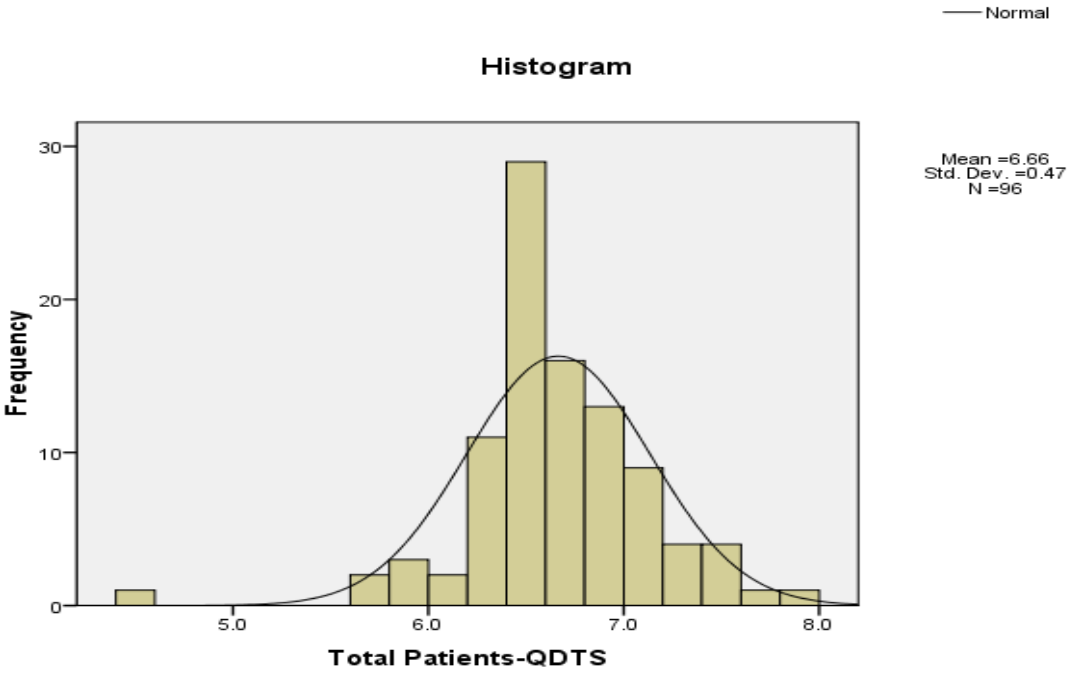


Figure 2. Linearity of the Quality of Discharge Teaching Perceived by Patients Through Histogram

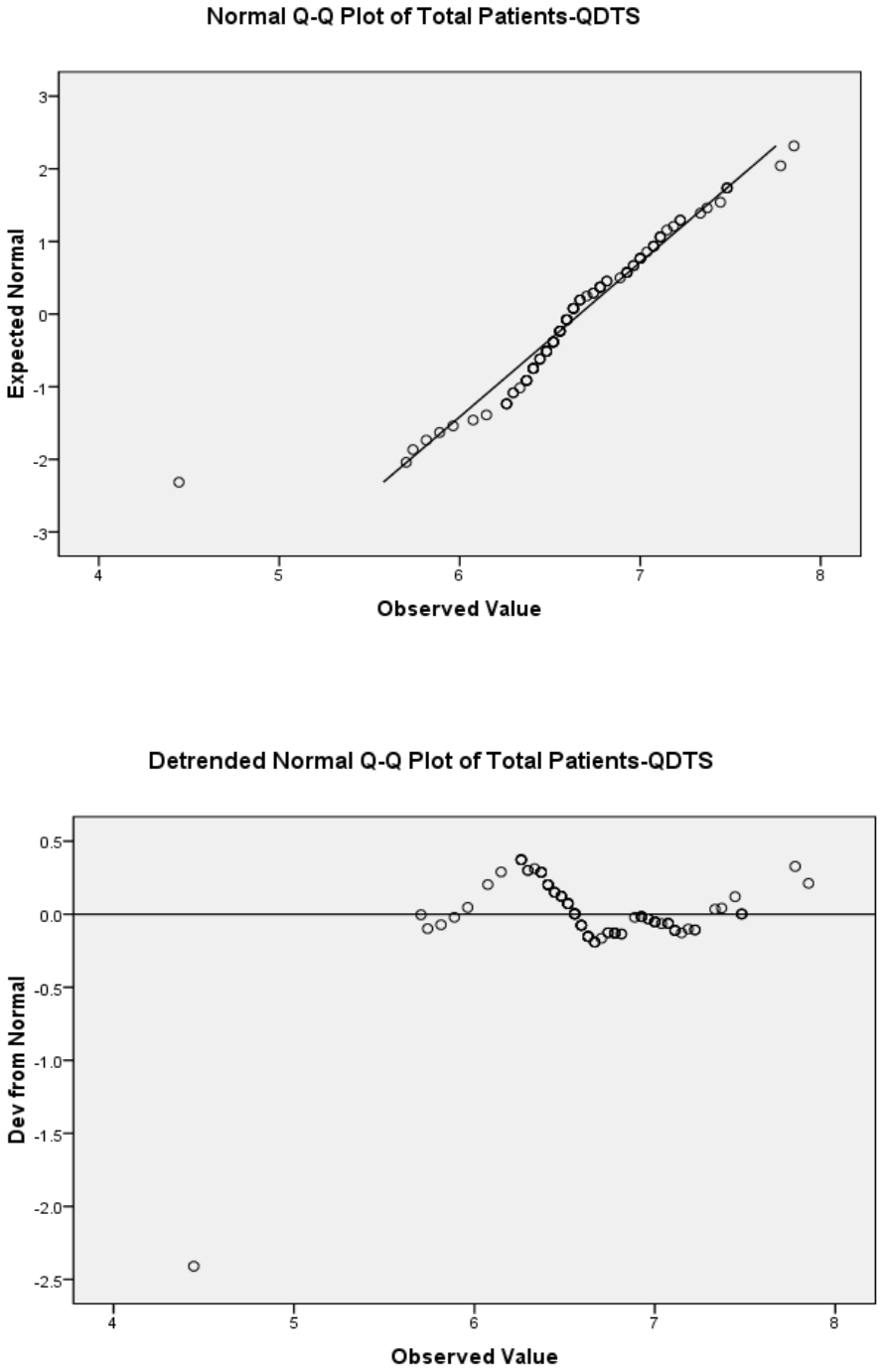


Figure 3. Linearity of the Quality of Discharge Teaching Perceived by Patients Through Q-Q Plot

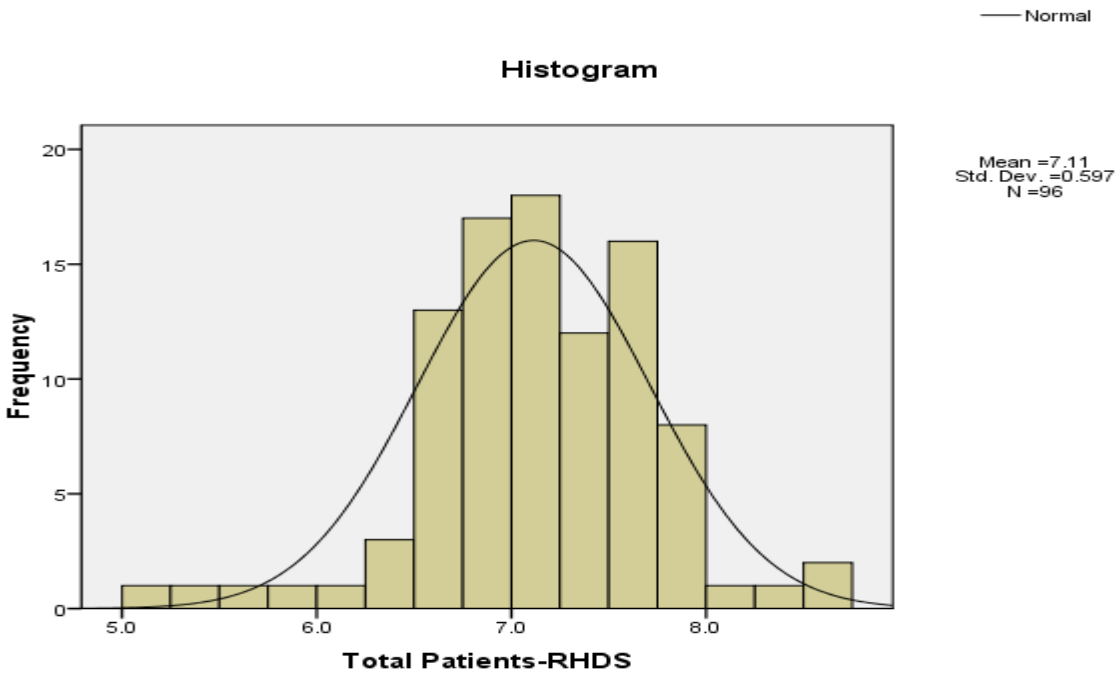
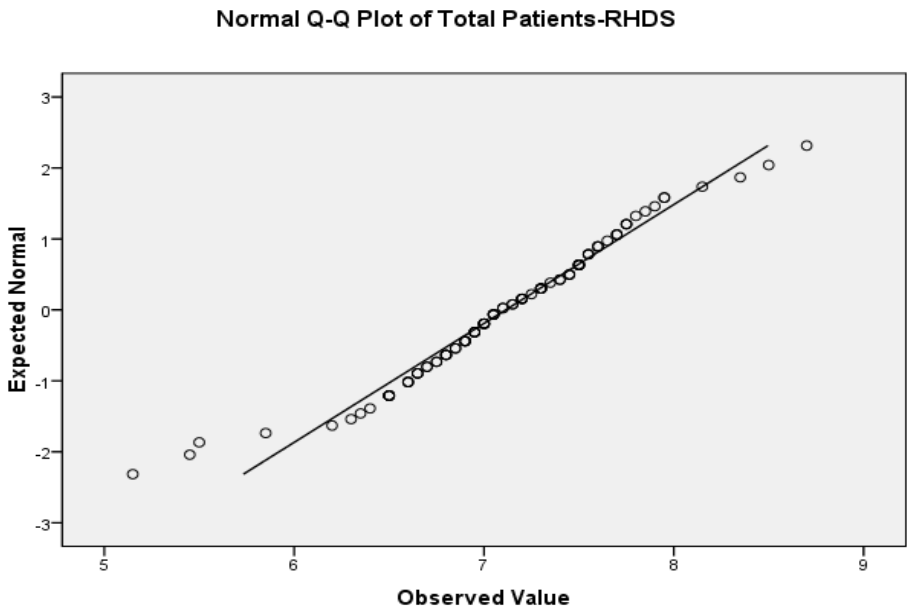


Figure 4. Linearity of the Readiness for Hospital Discharge Perceived by Patients Through Histogram



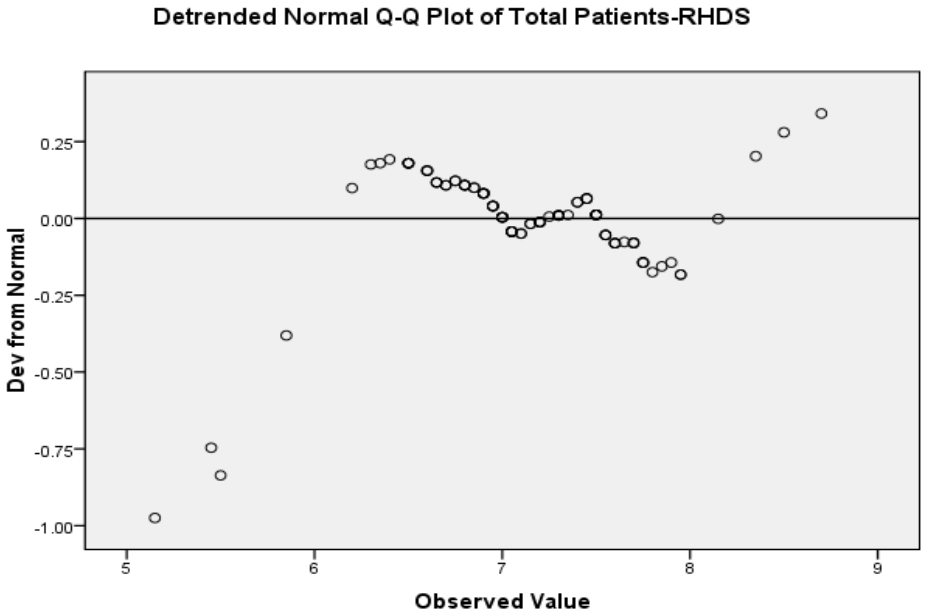


Figure 5. Linearity of the Readiness for Hospital Discharge Perceived by Patients Through Q-Q Plot

Table 11

Frequencies and Percentages of the Quality of Discharge Teaching Perceived by Surgical Patients (N = 96)

Variables	Low	Moderate	High
	n (%)	*n (%)*	*n (%)*
Patient QDTS	71 (74.00)	21 (21.80)	4 (4.20)
Patient RHDS	34 (35.40)	56 (58.40)	

Table 12

Mean and Standard Deviation of the Quality of Discharge Teaching Among Patients

The Quality of Discharge Teaching	*Min*	*Max*	*M*	*SD*
Content received				
1. How much information did you receive from your nurses about postsurgical self-care at home (e.g. activities of daily living; bathing, dressing, eating, toileting)?	3	9	6.92	1.02
2. How much information did you receive from your nurses about postsurgical rehabilitation to be regularly performed after discharge (e.g. breathing and coughing exercises, abdominal exercises, pain management program; full recovery within 1 to 6 weeks)?	3	8	6.60	0.95
3. How much information did you receive from your nurses about medication taken correctly and regularly at home (e.g. the reason, amount, route, time)?	5	10	7.35	0.98
4. How much information did you receive from your nurses about the medication's side effects and how to manage the side effects?	0	8	5.44	1.45
5. How much information did you receive from your nurses about diet restrictions at home?	0	10	7.42	1.38
6. How much information did you receive from your nurses about wound and drainage care at home?	1	10	6.85	1.15
7. How much information did you receive from your nurses about recognizing postsurgical complications at home (wound infection, drainage bleeding)?	0	8	5.37	1.33
8. How much information did you receive about alert signs and symptoms which should be reported as an emergency?	1	8	5.73	1.17
9. How much information did you receive from your nurses about what to do if you are getting worse after discharge (call number of emergency services, when to call for emergency assistance, when to return to the emergency department)?	0	9	6.00	1.42
10. How much information did you receive from your nurses about emotional or tension relief after discharge if it happens to you?	4	10	7.63	1.26
11. How much information did you receive from your nurses about emotional support from family and others in caring for you at home?	5	10	8.16	1.16
The Quality of Discharge Teaching	*Min*	*Max*	*M*	*SD*

12. How much information did you receive from your nurses about follow-up services after returning home (medical appointment time)?	0	8	6.35	1.24
Delivery				
13. How well did your nurses assess your discharge informational needs before the teaching process?	5	8	6.80	0.69
14. How attentively did your nurses ask regarding your personal beliefs and values during the teaching process?	4	10	6.80	0.91
15. How well did your nurses listen to you and clearly answer your specific questions related to discharge information needs?	3	9	6.84	0.86
16. How well did your nurses teach you at an appropriate time or at a time that suited you?	3	8	6.61	0.83
17. How well did your nurses provide consistent information related to postsurgical care?	3	8	6.48	0.87
18. How well did your nurses demonstrate ways to detect abnormal signs and symptoms for preventing any complications at home?	0	8	5.92	1.38
19. How well did your nurses demonstrate step by step regarding surgical wound care and drainage, and pain relief techniques at home?	3	10	6.91	0.98
20. How well did your nurses encourage your confidence to perform activities of daily living at home (bathing, dressing, eating, toileting)?	5	10	7.18	0.79
21. How well did your nurses educate you to perform self-care related to exercise, physical activity or home rehabilitation?	4	10	7.03	0.95
22. How well did your nurses demonstrate how to correctly and regularly take your medication at home?	0	10	7.20	1.22
23. How well did your nurses demonstrate strategies to reduce your anxiety when going home?	0	10	5.04	2.33
24. How well did your nurses deliver information using multiple methods of teaching (e.g. verbal, teach-back, written form)?	4	9	6.57	0.83
25. How well did your nurses demonstrate what to do if you are getting worse at home and when to return to the hospital?	4	9	6.73	0.82
26. How well did your nurses explain all the information by using simple language that was easy to understand or perform during the teaching process?	5	10	7.54	1.14
27. How well did your nurses clarify the information that you received to make sure of your understanding?	3	10	6.47	1.09

Table 13

Mean and Standard Deviation of the Readiness for Hospital Discharge Among Surgical Patients

The Readiness for Hospital Discharge	*Min*	*Max*	*M*	*SD*
Personal status				
1. How prepared do you feel for returning home today?	3	9	7.12	0.97
2. How would you describe your pain today?	0	9	6.36	1.69
3. How strong do you feel to go home today?	3	10	7.35	1.00
4. How would you describe your emotionally readiness to go home today?	3	9	7.17	1.04
5. How would you describe your ability to perform your physical needs today (e.g. sitting, walking, moving on the bed)?	3	9	6.54	1.05
6. How would you describe your stress level today?	0	9	6.35	2.06
Knowledge				
7. How prepared do you feel to perform self-care ability at home (activity of daily living; bathing, dressing, eating, toileting)?	5	9	6.82	0.98
8. How prepared do you feel to manage your medication at home (e.g. the reason, amount, route, time)?	5	9	7.41	0.65
9. How prepared do you feel to prevent any surgical complications that may occur after returning home (e.g. wound infection, drainage bleeding, pressure ulcer)?	3	9	6.95	0.94
10. How prepared do you feel to follow your diet restrictions at home?	4	9	7.4`	0.76
11. How prepared do you feel to call for help when you have any emergency conditions?	5	9	7.42	0.76
12. How prepared do you feel to consult a health care provider based on your follow-up plan?	5	9	7.52	0.74
Coping ability				
13. How prepared do you feel to control your nervousness or worry in daily life?	4	9	7.01	0.86
14. How prepared do you feel to handle any demands at home?	4	9	6.58	1.01
15. How prepared do you feel to perform medical needs at home (e.g. wound and drainage care)?	5	9	7.08	0.81
16. How prepared do you feel to perform your treatment needs at home (e.g breathing and coughing exercises, pain management program)?	0	9	7.15	1.08
Expected support				

17. How prepared do you feel to seek another source if you cannot handle any problems at home?	5	9	7.36	0.75
18. How prepared do you feel to find other relatives or someone to care for your daily needs at home?	5	9	7.35	0.79
19. How prepared do you feel to use the healthcare system and community resources nearby your home?	5	9	7.45	0.76
20. How prepared is your family of taking care of you when returning home?	5	9	7.86	0.89

Table 14

Mean and Standard Deviation of the Quality of Discharge Teaching Among Nurses

The Quality of Discharge Teaching	*Min*	*Max*	*M*	*SD*
Content received				
1. How much information did your patient receive about postsurgical self-care at home (e.g. activity of daily leaving; bathing, dressing, eating, toileting)?	2	10	7.16	2.15
2. How much information did your patient receive about postsurgical rehabilitation to be regularly performed after discharge (e.g. breathing and coughing exercises, abdominal exercises, pain management program; full recovery within 1 to 6 weeks)?	1	10	7.28	1.98
3. How much information did your patient received about medication taken correctly and regularly at home (e.g. the reason, amount, route, time)?	2	10	7.50	1.98
4. How much information did your patient receive about the medication's side effects and how to manage the side effects?	2	10	7.25	1.88
5. How much information did your patient receive about diet restrictions at home?	2	10	7.45	1.92
6. How much information did your patient receive about wound and drainage care at home?	2	10	7.37	1.75

The Quality of Discharge Teaching	*Min*	*Max*	*M*	*SD*
7. How much information did your patient receive about recognizing postsurgical complications at home (wound infection, drainage bleeding)?	1	10	7.32	1.81
8. How much information did your patient receive about alert signs and symptoms which should be reported as an emergency?	1	10	7.33	1.93
9. How much information did your patient receive about what to do if he/she is getting worse after discharge (call number of emergency services, when	0	10	7.28	2.03

to call for emergencies, when to return to the emergency department)?				
10. How much information did your patient receive about emotional or tension relief after discharge if it happened to him/her?	1	10	7.01	2.01
11. How much information did your patient received about emotional support from family and others in caring of you at home?	1	10	7.34	1.87
12. How much information did your patient receive about follow-up services after returning home (medical appointment time)?	1	10	7.40	2.01
Delivery				
13. How well did you assess patient informational needs before the discharge teaching process?	2	10	7.44	1.74
14. How well did you attentively ask regarding the patient's personal beliefs and values during the teaching process?	1	10	7.20	1.81
15. How well did you listen to the patient and clearly answer their specific questions related to discharge information?	3	10	7.41	1.74
16. How well did you teach the patient at an appropriate time or at a time that suited the patient?	3	10	7.40	1.70
17. How well did you provide consistent information related to postsurgical care?	3	10	7.47	1.67
18. How well did you demonstrate ways to detect abnormal signs and symptoms for preventing any complications at home?	3	10	7.55	1.72
19. How well did you demonstrate step by step regarding surgical wound care and drainage care, and pain relief techniques at home?	3	10	7.40	1.58
20. How well did you encourage the patient's confidence to perform activities of daily leaving at home (e.g. bathing, dressing, eating, toileting)?	3	10	7.47	1.65
The Quality of Discharge Teaching	*Min*	*Max*	*M*	*SD*
21. How well did you educate the patient to perform self-care related to exercise, physical activity or home rehabilitation?	3	10	7.70	1.71
22. How well did you educate the patient to correctly and regularly take his/her medication at home?	3	10	7.57	1.60
23. How well did you demonstrate strategies to reduce the patient's anxiety when going home?	0	10	7.79	1.86
24. How well did you deliver information using multiple methods of teaching (e.g. verbal, teach-back, written form)?	3	10	7.46	1.60

25. How well did you demonstrate what to do if patients are getting worse at home and when to return to the hospital?	3	10	7.64	1.59
26. How well did you explain all the information or perform during the teaching process by using simple language that was easy to understand?	3	10	7.77	1.54
27. How well did you clarify the information that the patient received to check his/her understanding?	3	10	7.84	1.58

VITAE

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Educational Attainment

Degree	Name of Institution	Year of Graduation
Bachelor of Nursing	Universitas Muhammadiyah Bengkulu, Indonesia	2011
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Scholarship Awards during Enrolment

1. Education fee and salary

   Thailand's Education Hub for ASEAN Countries (TEH-AC) scholarship award for Master's degree year 2016-2018.

2. Thesis grant

   The Graduate School Dissertation Funding for Thesis, Prince of Songkla University.

3. Conference grant

   Faculty of Nursing, Prince of Songkla University.

4. Training course

   International Training Course in Palliative Care, Priest Hospital, Thailand.

Working Experience

A nurse educator in Department of Nursing, Faculty of Health Science, Universitas Muhammadiyah Bengkulu, Indonesia**.**

List of Publication and Proceeding

1. Nurhayati & Songwathana, P. (2017, July). *Discharge education for mild traumatic brain injury patients at emergency department: a literature review.* Oral presented at the "Ethic, Esthetics, and Empirics in Nursing: Driving Forces for Better Health" Int. Conf., Thailand.
2. Nurhayati & Maneewat, K. (2017, November). *Acute pain management after abdominal surgery: an integrative review.* Poster presented at the "Sigma Theta Tau International Honor Society of Nursing, Phi Omega Chapter-at Large Thailand 4.0 (Towards Nursing Leadership in Thailand 4.0 Era)" Int. Conf. Thailand.
3. Nurhayati, Songwathana, P., Vachprasit. (2018, May). *The quality of discharge teaching perceived by surgical nurses in Indonesia*. Oral presented at the "6th Padjadjaran International Nursing Conference (PINC 2018)" Int. Conf. Indonesia.