POST-OPERATIVE PAIN MANAGEMENT PRACTICE

CURRENT SITUATION AND CHALLENGES
WITHIN NURSING PRACTICE IN A THAI CONTEXT

Manaporn Chatchumni

2016

School of Health, Care and Social Welfare
POST-OPERATIVE PAIN MANAGEMENT PRACTICE
CURRENT SITUATION AND CHALLENGES WITHIN NURSING PRACTICE IN A THAI CONTEXT

Manaporn Chatchumni

Akademisk avhandling

som för avläggande av filosofie doktorsexamen i vårdvetenskap vid Akademin för hälsa, vård och välfärd kommer att offentligen försvaras tisdagen den 30 augusti 2016, 13.00 i Raspen, Mälardalens högskola, Eskilstuna.

Fakultetsopponent: Professor Kenneth Asplund, Mid Sweden University

School of Health, Care and Social Welfare
Abstract

Patients' recovery after surgery is one of the most important health processes in planned hospital healthcare and has a direct impact on welfare and welfare systems. Therefore, what nurses do in the immediate postoperative period is of vital importance. This thesis addresses the question of understanding how nurses work in managing post-operative pain by exploring their daily nursing practices and experiences in responding to the patient in pain within a Thai cultural context.

The project applied a qualitative methodology where the local culture and its day-to-day practices of pain management were studied by using observations, focus groups, in-depth interviews and a critical incident interview approach with nurses. Informants were recruited at a public hospital in Bangkok in a surgical ward. In all, 100 hours of observations, 39 interviews and 69 descriptions of critical incidents related to nurse’s pain management were gathered. The data analysis followed the principles of qualitative research.

The findings showed that, although there is a clearly defined approach to pain management, the response system followed by the nurses to address patients' pain is complex and includes much lead time between assessing patients' pain and the nurses responding to the pain. Furthermore, nurses are caught in what is labeled a patient paradigm, where evidence of pain often is double- and triple-checked by scoring and recording signs that are then subject to confirmation by a third party. Underpinning this is a culture of pain management cultivated between the nurses that rests first and foremost on their own experiences and a working/professional culture where nurses offer each other practical help in urgent situations, but seldom discuss event-based strategies together. Nevertheless, when nurses described situations when they were successful in practicing pain management, they considered their own engagement and their availability of time, space and therapeutic options to be important.

Keywords: Culture of nursing, Nursing in pain management, Pain assessment, Perception of pain, Pain management, Pain post-operative
Post-operative pain management practice:
Current situation and challenges within nursing practice in a Thai context

Manaporn Chatchumni
Abstract


Despite the wide use of pain management guidelines and protocols in the surgical field, inadequate assessment and treatment of pain continue to be an issue in the care provided in the healthcare system in Thailand. The nurse is a key person who is able to improve the quality of pain management and who can provide nursing care to sufficiently meet the patient’s needs.

The overall aim of this thesis was to explore how nurses worked in post-operative pain management within their daily nursing practice within a Thai cultural context in managing post-operative patients’ pain, and to explore their experiences in responding to the patient who is in pain. The project applied a qualitative ethnographic exploratory methodology where the local culture and its day-to-day practices of pain management was studied by using observations, focus groups, in-depth interviews and a critical incident interview approach with nurses. Informants in the study were recruited at a public hospital in Bangkok in a surgical ward employing 59 nurses whose work was organized into three different units. In all, 100 hours of observations, 39 interviews and 69 descriptions of critical incidents relation to nurse’s pain management were gathered from the wards. The analyses of data consisted of utilizing the principles that exist within qualitative research and ethnography, content analysis and critical incident technique.

The findings primarily show that nursing practice in post-operative pain management within a Thai context involves complex communication to address pain and to respond to the patients’ pain. Thai cultural factors can hinder the interactions between nurses and physicians in managing the patients’ pain, however, the nurses also waited for their patients to ask for help. The nurses also use a system of double/triple control. They communicated with the care team through
documents and records. They used their own experiences to assess pain. The nurses missed opportunities to involve patients’ self-reported pain. Despite the large amount of information gathered and documented through various scales, the nurses could not provide the care that the patient needed. The nurses relied on their own experiences from previous anecdotal engagement in relation to pain management strategies and in deciding who should be helped, instead of drawing on evidence-based or research-based practice.

The findings of the thesis indicate that the challenges of organizing the agency of the nurses can be compared to a shift in moving from functional to person-centered care. It was concluded that it is important to understand that the nurses are subject to culturally sensitive factors, which influence their post-operative pain management practice from the perspective of nurses. This research will contribute to the knowledge of the challenges that face nurses in order to promote the quality of nursing care, and to set priorities in relation to ambitions to improve policy and/or protocol related to post-operative care.

*Keywords*: Culture of nursing, Nursing in pain management, Pain assessment, Perception of pain, Pain management, Pain post-operative
Education is not the learning of facts, but the learning of the mind to think.
Albert Einstein

To my family and colleagues
List of Papers

This dissertation is based on the following papers, which are referred to in the text by their Roman numerals.


Reprints were made with permission from the respective publishers.
## Contents

Introduction ........................................................................................................................................... 9  
Nurses’ competencies and nurses’ skills .................................................................................. 11  
Nurses’ perception of patients in pain ..................................................................................... 17  
Nurses’ practices of pain assessment ......................................................................................... 19  
Nurses’ practices of pain management ....................................................................................... 23  
Pain and post-operative pain ....................................................................................................... 28  
The Thai Context: Current situation in nursing practice ...................................................... 31  
  Demographic patterns and cultural in Thailand ........................................................................... 32  
  Health and welfare in Thailand ................................................................................................. 34  

Rationale ............................................................................................................................................ 38  

Aims .................................................................................................................................................. 40  

Methods ......................................................................................................................................... 41  
  Design ............................................................................................................................................ 42  
  Access to the field .......................................................................................................................... 44  
  Participants and setting ................................................................................................................. 46  

Data collection .............................................................................................................................. 47  
  Focus group discussions (Study I) ............................................................................................... 47  
  Observations and participations (Study II) .................................................................................. 49  
  In-depth interviews (Study III) ..................................................................................................... 52  
  Individual interviews: Critical incident technique (Study IV) .................................................... 53  

Data analysis .................................................................................................................................... 54  
  Qualitative content analysis (Study I and III) ........................................................................... 55  
  Ethnographic analysis (Study II) ............................................................................................... 57  
  CIT analysis (Study IV) ............................................................................................................. 59  

Ethical considerations .................................................................................................................... 60
Findings: Current situation of pain management practice……… 61
Nurses’ perception of patients in pain and pain management (Study I)………………………………………………………… 63
Pain management practice within a Thai context (Study II)…... 65
Patient-evidence paradigm (Study III)…………………………….. 68
Nursing approaches in pain management (Study IV)…………. 70

Discussion: Challenges in nursing post-operative pain management practice, suggestion based on descriptions in findings…… 73
Complex response to pain ................................................. 74
The patient-evidence paradigm versus evidence-based nursing paradigm ................................................................. 75
Culture of nurses’ experiences in and of urgencies………………. 77
Success in engagement and availability………………………… 78
Nursing as a key-knowledge in addressing pain…………………. 79
Strengths and limitations.................................................. 81
Conclusions and implications………………………………….. 84
Future studies............................................................... 85
Leaving the field............................................................ 86
Summary in Swedish........................................................ 88
Summary in Thai............................................................. 90
Acknowledgements...................................................... 92
References.................................................................... 94

Appendices:
  Paper I
  Paper II
  Paper III
  Paper IV
## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT</td>
<td>Critical Incident Technique</td>
</tr>
<tr>
<td>IASP</td>
<td>International Association for the Study of Pain</td>
</tr>
<tr>
<td>FGDs</td>
<td>Focus Group Discussions</td>
</tr>
<tr>
<td>NRS</td>
<td>Numerical Rating Scale</td>
</tr>
<tr>
<td>VRS</td>
<td>Visual Rating Scale</td>
</tr>
<tr>
<td>VAS</td>
<td>Visual Analogue Scale</td>
</tr>
<tr>
<td>TNMC</td>
<td>Thailand Nursing and Midwifery Council</td>
</tr>
<tr>
<td>TASP</td>
<td>Thailand Association for the Study of Pain</td>
</tr>
</tbody>
</table>
Introduction

After completing my Bachelor’s degree and graduating with a qualification in nursing sciences, my journey to becoming a nurse has involved working for almost ten years, mainly in the medical and surgical nursing area in the surgical department at a private hospital in Thailand. Consequently, I became interested in pain management while studying towards my first nursing Master’s thesis. Thereafter, I began teaching at the School of Nursing at Rangsit University in Thailand. Because of my many years of working as a nurse in the surgical field in Thailand, combined with my interest in pain management, I decided to focus on this topic in my Ph.D. thesis as a student of Mälardalen University.

From my practice as a nurse and from teaching students in the surgical field, where I met post-operative patients who were in pain, I observed how pain is experienced as different types of pain (i.e., nociceptive pain, neuropathic pain and psychogenic pain). Because different types of pain cause different responses, it is vital to investigate how to best diagnose these various types of problems in order to provide the best treatment. A patient’s recovery after surgery is one of the most important health processes in planned hospital healthcare that has a direct impact on patients’ welfare and welfare systems. A timely recovery with prompt mobilization and transition back to everyday living activities is of great importance. Not only because it is the most cost-effective strategy for the health and welfare system, but also because it is the most successful factor for every individual patient in order to reduce suffering and to grasp the possibilities of health that the planned surgery intended. After the surgeon has completed his/her treatment, the recovery process involves overcoming the consequences of the surgical procedure. One of the most important aspects of the nurse’s work is to promote a healthy recovery from the very first post-operative minute. The most important aspect of this process is to manage the pain that an invasive surgical procedure generates in the human body. Furthermore, the nurses must function collaboratively with
other professionals within a multidisciplinary team, such as physicians, nurses’ aides, pharmacists, and physiotherapists. Nurses play a key role in providing holistic care in the assessment of symptoms, in giving advice, managing pain and in the medical delivery of pain management to patients in the post-operative phase of recovery in a surgical ward.

In Thailand, few studies have analyzed how nurses work within health promotion in pain management and their work environment. They are frequently influenced by changes in protocol and it is often not known whether any such changes are appropriate to that particular healthcare setting. It is within this complex organizational context that this thesis intended to explore nurses as they encountered challenges and applied strategies in post-operative pain management practice and how they reflect upon their experiences in order to enhance their own skills. In recent years, much quantitative methodology research has been conducted in order to test the effects of non-pharmacological interventions in pain relief. The research reported in this thesis adds to the already existing body of research using qualitative methodology to explore how nurses work in post-operative pain management. I also hope that this thesis can contribute to a deeper knowledge and understanding of the complexity of local cultural norms as an integral part of the nurses’ routine practice. By understanding their work in providing pain management to patients in the post-operative phase of recovery in surgical wards within the Thai context, this thesis aims to support, promote and facilitate opportunities for these nurses to improve and provide the best possible treatment for the patient.
It is the duty of nurses to respond to health needs, and their function in tackling welfare settings in national and international communities is indisputably of great importance. The services provided by nurses in various contexts working to meet health needs throughout the lifespan are a shared global commitment. In every nation and within international organizations, nurses serve as a mainstay of achieving global health. Their roles deserve attention when addressing questions about health and welfare and its development. This is particularly true in such a profession as nursing, because, globally, within nursing practice, there is a need to address the question about nurses’ competencies and nurses’ skills from a critical perspective.

According to recent research, the competencies that are reflected in nursing practice now require a more varied range of skills and nursing knowledge to allow them to integrate and apply these within practices that are based on patient safety and ethics in the healthcare setting (Benner, 2001; Gobet, & Chassy, 2008). Additionally, the nurse’s role must focus on holistic care of the patient. This section will describe the competencies expected within nursing practice, the concept of communication, the culture of nursing, and person-centered care, in relation to the theories and the aim of this thesis. In relation to these elements, post-operative pain is a complex condition that has a direct impact on the individual needs of patients that involves both physical and physiological dimensions, that demands complex nursing competencies, as described in the following sections. This thesis will go beyond these general concepts to examine the competency of nurses in post-operative pain management along with the theoretical perspective underpinning this thesis.

Nurses’ competencies can be defined as the acquisition of knowledge related to the management skills that contribute to upholding quality of care, including the ability to provide care to patients that is relevant to the patient’s cultural background, as well as in consideration of
their religion and beliefs (Paradies, Truong, & Priest, 2014; Booker, 2016). According to Benner (2001), nurses’ skills can be categorized into five stages of development: novice, advanced beginner, competent, proficient, and expert. Benner (2001) conducted a systematic study in seven areas of nursing practice. The findings of the study illustrated that a number of competencies with similar intents, functions, and meanings are developed within thirty-one competencies, emerging from an analysis of actual patient care episodes. Benner identified seven aspects of the progression of the development of these competencies. These are the characteristics that nurses develop over time in order to improve their competency to become expert nurses. They comprise: (1) the helping role, (2) the teaching-coaching function, (3) the diagnostic and patient-monitoring function, (4) effective management of rapidly changing situations, (5) administering and monitoring therapeutic interventions and regimens, (6) monitoring and ensuring the quality of healthcare practices, and (7) organizational work-role competencies (Benner, Tanner, & Chesla, 2009). Because of the complexity and variety of these characteristics, nursing competence has a considerable influence on practice within the healthcare setting.

This idea of the progression of nursing competency has been proven and supports many aspects that affect the nurse’s role in pain management practice, including nursing education and general nursing practice, as routine care usually involves some type of pain management. Previous studies have found that nurses use different competencies for assessing and managing patients’ pain (Sjöström, 1995; Sjöström, et al., 1997; Hamid, Ahmed, Baqir, & Almas, 2012; Fishman, et al., 2013). These findings are consistent with Benner’s theory (2001) in that nurses’ skills and knowledge influence their clinical judgement in pain management.

This thesis did not employ the nurse competence scale developed by Benner (2001), but I will present the relevant literature reviews in relation to the knowledge within similar aspects of nurse competence. The nurse competence scale relates to an instrument that is used to identify and measure nursing competency in clinical nursing care relevant to the theory developed by Benner. There have been several studies conducted that employ the psychometric testing of Benner’s nurse competence scale within the novice to expert competency framework (Sjöström, 1995; Sjöström, et al., 1997; Meretoja, Isoaho, & Leino-
A high level of credibility has been achieved in these tests, one of the factors that influence the accuracy of any instrument, which, for the user, should be an indicator of the reliability of standardized tools (Sjöström, et al., 1997; Watson, Stimpson, Topping, & Porock, 2002; Meretoja, Isoaho, & Leino-Kilpi, 2004; McGrath, et al., 2006). However, the validity of the nurse competence scale as a way of preparing nurses for the real world of work is questionable when applied in actual practice (Tilley, 2008). While the reliability of such tools does not ensure their validity, equally, when all participants provide the same score it does not mean that the tool is measuring what it purports to measure (McGrath, et al., 2006). In contrast, Benner’s theory (2001) describes a more realistic picture of nursing practice within the context of competency. She explicitly describes how ‘the expert has an intuitive perception’, but is unclear about when the nurse becomes an expert, as the older, more experienced nurse performs the routine care and leaves task-orientation to the less experienced nurses who might not understand intuitively what care to provide to the patient. In relation to these expert skills, Benner’s theory has been critiqued as it only takes into consideration the length of experiences that nurses have in practice, rather than also considering how their knowledge develops into a deeper understanding of disease (bio-psychological knowledge), and the knowledge of specific skills required of care provided within special areas, such as cancer or post-operative pain (English, 1993).

Therefore, it is understandable, considering the nurse competence instrument employed earlier in the nursing literature, that this tool does not support accuracy in measuring the use of competency-based approaches in practice; only those of nurse training, which are driven to changes from the novice/advanced beginner/competent/proficient to become the expert. According to Benner’s (2001) five levels of proficiency, nurses with 1–3 years of working experience are considered as novices, and nurses with 4–5 years working experiences are advanced beginners. Nevertheless, the competency levels categorized by Benner do not clearly identify how many years of working experience are necessary to become an expert, in particular between the rankings of working experiences between the competent, proficient and the expert nurse.
The expert’s intuition is usually characterized in relation to rapid perception, awareness of the processes of engagement, presence of emotions, a holistic understanding of the situation, and an overall good quality in the proposed solutions (Gobet, & Chassy, 2008). This thesis used Benner’s theory as a theoretical framework, using it to identify elements of the inclusion criteria to select a sample in each of the sub-studies (Studies I–IV). For the levels of competent, proficient, and expert nurses, where Benner does not provide the number of working years, more than 5 years of working experience were assumed.

**Concept of communication:** Communication concepts are various skills related to communication that are based on a theoretical or empirical framework (Sully, & Dallas, 2005: p. vii). Along with the nurse competencies, nurses are required to possess the ability to convey to their patient an understanding of how their patient expresses themselves and involves the ability to reflect on how their own verbal and non-verbal signals are interpreted by the patient (Sully, & Dallas, 2005; Nordby, 2016). Earlier research related to the nurse-patient communication channel has drawn attention to nursing approaches within the cultural context and traditional attitudes of nursing practices (Phengjard, Yousiri, & Petpichetchian, 2003; Burnard, & Naiyapatana, 2004; Chinnawong, 2007; Mannewat, 2010; Carney, 2011; Hamid, Ahmed, Baqir, & Almas, 2012). Nurses’ competencies depend on a foundation of effective two-way communication, particularly when the patient has conditions such as being unconscious, and speaking a different language adds to the complexity of their patients’ needs and makes communication difficult.

**Culture of nursing:** The ethnographer, James P. Spradley (1979, 1980), defined the term ‘culture’ as the “acquired knowledge that people use to interpret experience and generate social behavior” (1979, p. 5). Ethnographic researchers can understand this cultural knowledge by doing participant observations of what people do (cultural behavior), what people make and use, such as clothes and tools (cultural artifacts), and what people say (speech messages). Likewise, the culture and social behaviors cultivated by particular healthcare professions help to shape illness beliefs and behaviors, health care practices, help-seeking activities, and receptivity to medical care interventions (Leininger, 2002; Daly, & Rake, 2003).
However, the definition of culture in is much broader and includes the idea that different cultures have established values and norms relating to how individuals communicate, the beliefs they share, and how to interact with each other. All societies have norms that guide their own way of thinking, making decisions, and acting upon them (Leininger, & McFarland, 2002). Therefore, an understanding of the meaning of culture in relation to the term ‘culture of nursing’, can refer to the interactions within the nurse-patient relationship, with other professionals (i.e., physicians, pharmacists and physiotherapists) and the environment in which nursing is practiced. It is here that the local culture of different workplaces in healthcare organizations has also been considered to have an influence on culturally sensitive approaches to care (Suominen, Kovasin, & Ketola, 1997; Leininger, & McFarland, 2002; Foronda, 2008).

Cultural sensitivity is a relevant concept for the healthcare provider that means providing comprehensive care while taking into consideration the attributes of local knowledge with consideration, understanding, respect, and by tailoring care to meet the cultural needs of the patient (Leininger, & McFarland, 2002; Foronda, 2008). However, care is often focused more on patient outcomes rather than on being sensitive to the patient’s cultural context. Therefore, the culturally sensitive approaches employed by nurses involved in pain management may play a crucial role in post-operative pain management.

Person-centered care: Most scholars recommend a system that requests that the healthcare provider responds to their patient needs by providing care that is person-centered (McCormack, & McCance, 2006; Slater, 2006; Morgan, & Yoder, 2012). The concept of person-centered care recognizes the individual as a person, rather than seeing the patient on the basis of the ethical issues and human rights of the receiver of care within the healthcare setting (McCormack, & McCance, 2006; Slater, 2006; Morgan, & Yoder, 2012). This thesis assumes that person-centered care is important to establish within the nursing approach to pain management practice to provide care that is based on the needs of each individual. Furthermore, it assumes that the involvement of nurses in pain management care is imperative to the well-being of surgical patients.

In Thailand, earlier studies have illustrated that some practices were inappropriate in assessing and treating patients. The process of care
must encompass the complete picture, including routines and rituals, and must reflect on fixed assumptions. In that way, nurses would be able to consider the ways that care ought to be delivered and reflect on the lack of commitment involved in implementing new multimodal models of care as well as research utilization and evidence-based practices (Phengjard, Yousiri, & Petpichetchian, 2003; Burnard, & Naiyapatana, 2004; Maneewat, 2010). However, there is a lack of pain management knowledge within many healthcare settings, which may be a consequence of the multidimensional nature of the nurse’s role. This lack of knowledge is associated with the patient’s condition, cultures, beliefs, and nurses’ experiences of their patients’ pain. Understanding the cultural context and having an awareness of cultural sensitivities are crucial requirements within the nurse’s role. The need to explore the nurse-patient relationship, ways of communicating, and the patients’ pain-related health behaviors are issues addressed in this thesis, as many such situations can be encountered in daily practice (Burnard, & Naiyapatana, 2004; Chinnawong, 2007; Carney, 2011). Specifically, there is a need to study, grasp and understand the complex assessment required by nursing approaches in the post-operative care field. Because this thesis relates to the experiences of nurses who practice pain management, it might contribute to an explanation of why nurses provide insufficient pain management to patients in the post-operative phase of recovery in hospitals. This thesis places its focus on the influences of local culture in understanding the day-to-day practices of nursing with regard to the reality of workplace management and the organizational practices of the management of patients’ pain.
Each person’s own perception of pain is based on their individual differences in pain sensitivity and how they express their own feelings, such as pain thresholds and/or the intensity involved in their physiological and psychological responses (Wiesenfeld-Hallin, 2005; Igier, Mullet, & Sorum, 2007; van Dijk, et al., 2012; van Dijk, et al., 2016). Likewise, most explanations of pain sensitivity and differences in sensitivity have focused on biological mechanisms and psychological and socio-cultural dimensions (Wiesenfeld-Hallin, 2005). However, in contrast, very few articles have studied the patient’s perception of pain in relation to the cultural influences of the healthcare provider or pain perception related to a particular racial or ethnic group (with the exception of some studies in the US, China and Thailand) (Finley, Kristjánsson, & Forgeron, 2009; Mongkhonthawornchai, et al., 2013).

For the healthcare professionals’ perception of a patient’s pain, most prefer to rely on the self-reporting of pain provided by the patients (Herr, et al., 2011). The crucial points in maintaining the quality of care consist of the patients’ expressions of pain, which are also included in the evaluation. However, previous studies on the pain assessment issue have found inaccuracies between the perceptions of nurses, physicians and those of the patients to be problematic, which was also found to result in the patient’s pain being under-estimated and under-treated (Igier, Mullet, & Sorum, 2007; van Dijk, et al., 2012; van Dijk, et al., 2016). For instance, the aim of a study published by van Dijk and colleagues (2012) was to examine the differences between the perception of pain by the professionals ($n=303$) and the actual pain perceived by patients ($n=10,434$). There were not any significant differences between the patients’ and professionals’ interpretations of pain scores. They found that only the scores reported by acute pain nurses and their patients differed in their interpretation of post-operative pain, as identified by using the Numerical Rating Scale (NRS), which were interpreted as being higher by the patients. It is
important that the tools designed to help measure the perception of patients’ subjective pain are effective. The literature seems to convey the message that these interpretations do not differ between the patients and health professionals, including physicians, nurses, and nurses’ aides. The different ways of interpreting the intensity of post-operative pain means that the patients complain about their pain and report their dissatisfaction with the treatment, while they receive no treatment for pain from healthcare professionals. The health professionals need to understand the patient’s pain and be sensitive to signs of pain in order to assess the impact of pain management strategies and to implement more effective methods for reducing post-operative discomfort and suffering in their patients. Likewise, it is important to improve the nurses’ ability to perceive patients in pain in order to achieve effective pain management in post-operative practice. Thus it is important to pre-understand a person’s perception of pain. This thesis was based on the idea of a person as embodied subjectivity, that each individual has a direct pre-reflective experience of the world related to the reality of everyday life. This may include the recognition of the ability of one’s living body, such as abnormal body position and restriction of movement. Further, this thesis recognizes the importance of nurses’ perceptions of pain as a key issue in nursing care and in the management of post-operative pain and, as such, has great influence on the quality of care provided.
Nurses’ practices of pain assessment

Pain assessment is an important approach to help healthcare providers; it can clarify the cause of the patient’s pain, and thus provide prompt and effective treatment to patients post-operatively (Taylor, & Stanbury, 2009; Koneti, & Jones, 2013). Pain assessment is complex, however, previous publications have classified pain assessment into three patterns, which can be seen as different ways of assessing pain: (1) the self-reported pattern, (2) judging pain levels by healthcare professionals’ pattern, and (3) the intermediaries’ pattern (the relatives, the nurses’ aides).

The Self-reported pattern is strongly recommended as being the most valuable method for assessing the patient in pain, as the patient’s own expression of their pain is considered to be the best way of communicating. Self-reporting is seen to fit the goal of pain assessment measurement and for which it provides the most valid measurement of pain (Melzack, Wall, & Ty, 1982; van Dijk, et al., 2016). In particular, the pain scores reported by patients are seen to be the best indicator of pain treatment in post-operative pain management, on which to consider the most appropriate treatment, modifying therapeutic nursing and evaluation according to the response. However, this is a complex phenomenon (Koneti, & Jones, 2013; Machado-Alba, et al., 2013). Researchers have developed several pain assessment tools, which comprise the pain rating scales, such as the NRS, the Visual Rating Scale (VRS), the Visual Analogue Scale (VAS), and Wong’s Faces Scale (Klopper, et al., 2006; Koneti, & Jones, 2013; Machado-Alba, et al., 2013). Pain is subjective and unique to each individual and can be assessed by way of a patient’s own report.

Judging pain levels by healthcare professionals’ pattern is one method of communication within the use of a validated pain intensity measurement tool such as the NRS, VRS, and VAS that involves the way in which healthcare professionals assess their patients’ pain. This pattern communicates aspects about the patient’s pain assessment among members of the healthcare team. However, this method uses
the measurement tools in relation to the interpretation of the health professionals’ communication with their patient, and it may not provide the same result as the patient’s pain scores. This might have certain consequences, for example, negative attitudes toward the use of opioids, and misconceptions about pain, which are the most hindering factors reported for unsatisfactory treatment by patients (Chung, & Lui, 2003; Heikkilä, Peltonen, & Salanterä, 2016). According to the results of studies conducted in Egypt and England, and in the reviews of the post-operative pain documentation, higher quality pain assessment and management can be achieved with the use of pain assessment tools and with good patient observation charts, gathering demographic information and pain assessment documentation. However, these studies have also recommended that nurses should improve their knowledge and skills in pain assessment and management (Mohamed, Ahamed, & Mahmoud, 2013; Purser, Warfield, & Richardson, 2014; Heikkilä, Peltonen, & Salanterä, 2016).

The Intermediaries’ pattern is also one method of communication within the pain assessment process conveyed through the relatives/family/caregiver accompanying the patients. This method can be seen to be effective because the intermediaries are closer to and more familiar with the patients than the healthcare professionals. Also, this pattern may helpful for assessing the intensity of patients’ pain, which, if treated appropriately, will lead to their satisfaction with the care provided. Moreover, this pattern can avoid and help to narrow the gap between the power relations among nurses and patients. It is possible that the patients are afraid to confront the nurses, while sometimes nurses consider their complaints to be the only way that they can communicate directly (Eriksson, et al., 2016). This pattern is appropriate for obtaining integrated measures and evaluating interventions with the patients who are unable to self-report. In addition, this pattern offers a way of interpreting a subjective experience by way of an objective assessment strategy, for instance it involves the interpretation of behaviors, pathology, or estimates of pain by others; it is insufficient by itself (Herr, et al., 2006, 2011).

From these three patterns of pain assessment, the one that is considered to be the most accurate assessment of pain is the patient’s self-report. However, the one most chosen to be applied in practice is a combination of the assessment made by physicians and nurses who are responsible for investigating and evaluating their patients’ conditions
and their response to treatment. Obviously, the most successful pain assessment is a record of pain intensity combining the patient’s self-report and the assessment of pain made by the healthcare providers (i.e., physicians, nurses, and nurses’ aides), which leads to the effective and sufficient treatment of the patient in pain (Ruben, Osch, & Blanch-Hartigan, 2015). Measurement of pain intensity is a complex issue, and numerous studies have compared the pain scores reported by healthcare professionals and the patient-reported measures (Klopper, et al., 2006; van Dijk, et al., 2012; Koneti, & Jones, 2013; Machado-Alba, et al., 2013; Ruben, van Osch, & Blanch-Hartigan, 2015; van Dijk, et al., 2016). These studies concluded that a multifaceted approach is recommended, one that combines direct assessment and observation and considers pain assessment (expression) as multidimensional, involving physiological, psychological (sensory, emotional and cognitive) and cultural factors in the context of the pain (Klopper, et al., 2006; van Dijk, et al., 2012; Koneti, & Jones, 2013; Machado-Alba, et al., 2013; van Dijk, et al., 2016).

In Thailand, as in the other countries, pain assessment practices are based on the principle initiated by identifying patients with high pain intensity, a sign of physical illnesses or tissue injuries. Since 2011, the national guidelines for pain assessment and pain management, provided by the Royal College of Anesthesiologists of Thailand and the Thai Association for the Study of Pain, recommend that healthcare professionals continue to consider pain assessment as the fifth vital sign within the policies of all hospitals in Thailand. However, the effects of considering pain to be the fifth vital sign within the national healthcare ambitions of routinely measuring patients’ pain are not yet known, and it may be that the research has presented systemic inadequacies in nursing practices in terms of under-detection and undertreatment of pain in many patients (Chanvej, et al., 2004; Sookprasert, Phunmanee, Bpharm, 2008; Srisawang, Hirosawa, & Sakamoto, 2013).

One study reported children’s pain assessment through the perspectives of health professionals in a Northeastern Thai context (Forgeron, et al., 2009). The healthcare providers in this study raised issues of difficulties and differences in the perception of pain that included the under-recognition of children’s pain and the complex issues involved in communicating the findings of children’s pain. However, these findings might not be transferable to other healthcare settings. Based
on the research that has been presented, this thesis was designed to explore how nurses assess pain in practice on surgical wards.
Nurses’ practices of pain management

Pain management practice is widely problematic in the surgical field. Despite numerous research studies having developed technological advances in treatment, such as patient controlled anesthesia (PCA), in the area of post-operative pain management there are still incidences of unrelieved pain in most patients (Manias, Botti, & Bucknall, 2006; Schwenkglenks, et al., 2014; Kolvekar, et al., 2016). The practice of having nurses apply pain management strategies for the patients’ post-operative pain can be categorized into three different models, as previous research has concluded: the biomedical model, the non-pharmacological interventions model, and the alternative medicine model, including such treatments as acupuncture. These three models are described below:

The biomedical model focuses on diseases and cure rather than on caring for the patient in pain, for instance, the healthcare intervention is provided based on the regimens of nerve blocks and opioid prescriptions to control the patient’s pain with anesthesia (Crowley-Matoka, et al., 2009; IASP, 2011). However, this model is concerned only with the problems associated with pain quality and its effects on the patients, including the adverse side effects of analgesia (IASP, 2011; Kolvekar, et al., 2016).

The non-pharmacological interventions model is that related to pain management techniques provided by nurses in order to promote effective pain control to reduce pain intensity for their patients and to encourage post-operative mobility and promote the recovery phases. For instance, this might be provided in the form of deep breathing and movement skills with four post-operative mobility activities: (1) turning in bed, (2) sitting at the side of the bed, (3) standing, and (4) walking; as well as in terms of facilities rehabilitation and early recovery from surgery (Phuangjimp, Nantachaipan, & Thongchai, 2010; Samarasee, et al., 2010; IASP, 2011). In practice, the nurse’s role plays an important part in post-operative pain management, especially during
the 24- to 72-hour period following surgery. The commonly used nurse-run pain management activities include techniques such as: the dissemination of advice and information, giving sufficient pain medications, and using appropriate therapeutic nursing techniques. The associated nursing therapeutics used in their practice include, for example: active listening, acknowledging and valuing the individual’s and/or family’s perspective, being empathic, physical strategies (e.g., breathing exercises, turning and positioning, wound support, therapeutic touch, massage, the applications of heat and cold), psychological and behavioral strategies (e.g., cognitive, behavioral strategies, stress management techniques, patient and family education) and counseling, self-management groups, and others that may involve collaboration with a multi-disciplinary team (Richards, & Hubbert, 2007; Rejeh, et al., 2008; Suwanraj, 2010; IASP, 2011).

The alternative medicine model is one of the options chosen for improving the quality of post-operative recovery, for instance: auricular point acupressure, and transcutaneous electrical acupoint stimulation (Khan, et al., 2015). However, the ability of nurses to promote these traditional/alternative systems of treatment depends on whether they are included in the policies of the healthcare setting relating to the management of painful conditions.

In addition to the pain management techniques identified above, successful pain management practice also requires the competence of the healthcare provider. They should be sensitive to the unique needs of each patient’s pain so that the pain management techniques and guidelines are being applied effectively. Measurement of the effectiveness of pain management models that focus on successful pain management outcomes are divided into three aspects, including patient, unit, and hospital outcomes. Patient outcomes involve decreased complications and the relief of suffering. Unit outcomes include quality improvement, development of multi-disciplinary collaboration, an effective referral system, networking with regard to pain management counseling, and the development of practices in applying a pain management model for the nursing team. Hospital outcomes include decreases in the rate of readmissions of patients, reductions in the duration of hospital stays, reductions in medical care costs, and improved patient satisfaction (Wongswadiwat, et al., 2008; Cohen, et al., 2009; Zoëga, et al., 2014).
In practice, the complexity of pain management issues can be attributed to the sensitivity of the healthcare providers to patients’ reactions to pain and behavioral differences between the healthcare providers. Moreover, this complexity may be related to the cultural factors associated with pain management, such as the belief in a culture of medicine, contemporary culture, and the individual cultural background of the patient in pain (such as language, gender, race and ethnicity). In addition, these cultural factors might affect the patient’s pain response as there are several ways to perceive the management of pain and there may be misperceptions surrounding pain management, for example, that it is difficult to treat, and it restricts physical activity. Each issue leads to the patient’s dissatisfaction. In relation to the healthcare providers, cultural factors can lead to them feeling that the care they have provided for managing pain is not sufficient for meeting their patients’ needs.

The main factors reported to result in insufficient pain management have been related to the perceptions of both patients and healthcare providers, including those of physicians and nurses (Sjöström, 1995; Cohen, et al., 2009). Barriers that have been found to exist for patients include fear of the side effects of pain medications, resulting in refusal to take medication (Rejeh, et al., 2008; Suwanraj, 2010). Nurses are sometimes cited as contributing to the problem of inadequate pain management (Richards, & Hubbert, 2007), as have deficits in nurses’ knowledge, which may cause nurses to hold negative beliefs and attitudes toward opioid analgesics in the underestimated assessment of post-operative pain (Poomnokom, 2000; Sookprasert, Humane, & Bpharm, 2008; Srissawang, et al., 2013). Nurses have also been reported to have insufficient knowledge of and negative attitudes toward pain as it relates to the recovery of post-operative patients (Horbury, Henderson, & Bromley, 2005).

Studies of pain management techniques in a Thai context found that most of the regimens for managing pain are administered by the physicians and anesthesiologists, who commonly used three techniques, including intravenous patient-controlled analgesia, single-dose spinal morphine, and intermittent epidural morphine. Most of these articles represented such areas as children’s pain, cancer pain and palliative pain (Lukkahatai, 2004; Petpichetchian, & Brenner, 2004; Wiroonpanich, & Strickland, 2004; Yimyaem, et al., 2006; Songkong, Petpichetchian, & Sae-Sia, 2008; Charuluxanananan, et al., 2009; Doorenbos, et al., 2013; Songwathana, Watanasiriwanich, &
Kitrungrote, 2013; Raksamani, et al., 2013; Srisawang, et al., 2013; Thongkhamcharoen, Phungrassami, & Atthakul, 2014). One study that was particularly instructive was a systematic review conducted by Phuangjimp and colleagues (2010) and related to acute pain management using techniques related specifically to pain management among adult persons. They conducted the review by searching the relevant literature, published in both Thai and English during the period 1993–2003. Six randomized controlled trials and nine quasi-experimental studies were identified which found seven types of relaxation techniques, including breathing exercises, meditation, jaw relaxation, progressive muscle relaxation, imagery, quick relaxation, and a combined relaxation technique (Phuangjimp, Nantachaipan, & Thongchai, 2010). The treatments reported in these studies were conducted by nurses and anesthesiologists. Further, one study by Woragidpoonpol and colleagues (2013) presented a review of the literature published within the period 1999–2011 and found that nine articles investigated the effect of non-pharmacological pain management categorized into six intervention techniques, including: guided imagery; patient-child-nurse mutual participation; foot massage; play activities; touching the forehead and shoulder; and touching the skin above the wound sites. In each study reported in the review, using such techniques improved the recovery phases of post-operative care in both school-age and adolescent patients (Woragidpoonpol, et al., 2013). A further technique identified within the alternative medicine model was the use of Thai herbal compression to treat chronic pain in patients with osteoarthritis and muscle pain (Dhippayom, et al., 2015).

From the results of these previous literature reviews, it was clear that there is limited research related to post-operative pain management among Thai nurses, a lack which has been confirmed in a previous study by Paiboonworachat and colleagues (2013), for example. Their study was aimed at evaluating the progression of pain research by conducting a literature review by searching in Thai journals between 1990 and 2009. The number of pain-related articles identified was 233. The number of articles slowly but gradually increased during 1990 to 2002, then drastically increased during 2004 and 2005, and then slightly decreased again by 2009. About 75% of the papers were published in the Thai language. The most common content of the articles was related to acute pain (75%) and these studies were all related to the practices of anesthesiologists in particular. Thus, pain research has been significantly increasing since the Thailand Association for
the Study of Pain (TASP) was founded, especially in the last 10 years. The most common area of pain research is in the field of acute pain. The majority of the articles in this field were found to be published in the Thai language.

According to the previous literature, pain management is an important element of the knowledge of the nurses. It involves engaging in effective communication within the multidisciplinary team to provide person-centered care and comprehensive skills, including: assessing pain, intervention approaches, and medication delivery. If healthcare professionals react to the actual adequacy of the pain control in treating their patient’s pain, this ultimately leads to the patient’s satisfaction. Furthermore, previous studies show that there is very limited research conducted by nurses relating to the existing treatments and to test interventions for providing relief for their patients in pain. In fact, the nurse is a key person who is closely involved in managing the patient’s pain, but, despite this fact, the nurse is largely overlooked in the literature. Thus, this thesis relates to the pain management practices of nurses.
Pain and post-operative pain

This section presents the definitions of the terms used in this thesis in relation to pain and post-operative pain. These are presented in relation to the aims of the studies that focused on post-operative pain management (Studies I–IV).

Pain

Pain is an individual subjective experience and multi-dimensional phenomenon related to six dimensions, which include the physiological, sensory, affection, cognitive, behavioral, and socio-cultural dimensions (McGuire, 1992). According to the definition published in 1979 by the International Association for the Study of Pain (IASP), pain is defined as an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or can be described in terms of such damage (2011, p. 250). The definition of pain most accepted by earlier scholars in nursing practices is the definition proposed by McGuire (1992) and IASP (2011), which understands that an essential foundation in managing the mechanism of pain is to ensure prompt recognition and treatment of pain in the quality of pain management in all healthcare settings.

At the same time, a fundamental ethical principle for nursing is to foster human dignity, in which the nurse’s role is in providing and advocating for humane and appropriate care (Gordon, et al., 2005; Brennan, Carr, & Cousins, 2007). In 2004, the joint venture referred to as the “Global Day Against Pain” was organized by the European Federation of International Association for the Study of Pain (IASP) chapters, the International Association for the Study of Pain and the World Health Organization. This campaign has raised issues related to unrelied pain in three areas of the healthcare setting: acute pain, chronic non-cancer pain, and cancer pain. These issues also could include the
adverse effects of the patient’s pain that involve the physical and psychological effects that lead to the social and economic costs of untreated pain (Brennan, Carr, & Cousins, 2007).

Acute pain is a particularly important indicator of tissue damage and has the potential to have the adverse effect of causing a physiological and psychological response by the patient in pain (Jänig, 2012; Koneti, & Jones, 2013; Machado-Alba, et al., 2013). Additionally, acute pain is a vital sign of physical illnesses and tissue injury, which brings people to hospital, and is regarded as the fifth vital sign as guided by the recommendations of IASP (2011) to monitor the pain intensity of the patients. In addition, pain intensity is used as an indicator to assess the quality of pain treatment.

In this thesis, the definition of acute pain is an individual personal feeling, which is based on causes of discomfort and changes in mood. Because the nurse is a key person who closely monitors the patient, it is important to understand the nurses’ perceptions of their patient in pain.

Post-operative pain

Post-operative pain is a common problem associated with the management of pain. According to the accepted definitions of pain, the primary aim of care is to manage pain to the lowest possible level with different modalities to help improve the post-operative experience, reduce suffering and shorten the recovery period (Samaraee, et al., 2010; IASP, 2011). In the same way, the definition of pain provided by IASP (2011) describes pain in terms of post-operative pain, that is, the potential tissue damage, where the complexity of the pathways of the nervous system transmits responses to injury in the period of surgery and recovery phases. Further, pain can also be defined as an individual feeling, as described in the previous sections, that involves a multi-factorial experience and is dependent on the patient’s own culture, previous pain experience, belief, mood and ability to cope. The effect of pain involves various physiological factors, including the cardiovascular system, gastrointestinal system, respiratory system, metabolic system as well as psychological factors (Jänig, 2012; Koneti, & Jones, 2013; Machado-Alba, et al., 2013). There are multiple factors that influence the patient’s experience of pain.
and its effect is always related to cognitive process such as changed behavioral responses and mood change (Jänig, 2012; Koneti, & Jones, 2013; Machado-Alba, et al., 2013; Heggland, & Hausken, 2014).

Consequently, post-operative pain is a major problem for the patient, which may influence the recovery phase. The issue of inadequate methods for assessing and treating pain and the negative impact this has on the patient’s experience is an important question for any nurse within the surgical field. Post-operative pain is experienced by a majority of patients. The results of earlier studies have revealed that more than 50% of patients have high levels of perceived pain in the first 24 hours after surgery and nearly half of patients report having mild pain after the first 48 hours post-surgery, which then gradually decreases after 72 hours in the post-surgery phase of recovery (Apfelbaum, et al., 2003; Samaraee, et al., 2010; IASP, 2011; Masigati, & Chilonga, 2014). Considering that such a large number of patients have reported moderate to severe pain intensity in the post-operative period, this factor could lead to undesirable effects and patient dissatisfaction.

Despite these findings, many healthcare systems involved in acute post-operative care place the focus of the clinical guidance for pain management on the management of acute post-operative pain only. Because these guidelines are intended to achieve a standard across clinical practice, they should have the potential to relieve all pain experienced by patients, leading to increased quality of pain management. On the other hand, this guidance is seen to be inadequate for relieving pain in the patient in pain based on patient satisfaction reports. However, the management of post-operative pain is a basic responsibility of all healthcare professionals to help their patients relieve pain in the post-operative period. Healthcare professionals need to be aware of the wider issues, especially in dealing with complex problems in post-operative pain. Likewise, the primary aim of post-operative care is to manage pain to the lowest possible level with different modalities to help improve the post-operative experience, reduce suffering and shorten the recovery period. A nurse is a person who works very closely with the patients in post-operative care practice and nurses also greatly outnumber other healthcare professionals, so it is imperative that they should be equipped with this knowledge.
The Thai context: Current situation in nursing practice

After considering the results of previous studies conducted in Thailand that have attempted to examine the prescription and administration of medication and the descriptive documentation of pain management, there is the possibility that these evaluations might not provide a comprehensive understanding of pain assessment, interventions and strategies in pain management within the nursing practice in general. In practice, the nurses manage the patient’s pain in the same way as in other countries, and in Thailand it is normal to educate nurses about the appropriate pharmacological and non-pharmacological interventions to provide during the post-operative pain and recovery phases. However, formally, Thai nurses often allow the physician to decide upon the medical prescription. In general, within the Thailand healthcare system, hospitals are authorized to identify pain and perform evaluations of the patients’ pain in relation to pain intensity and satisfaction with the effect of any intervention provided for pain. Post-operative pain assessment is routinely designated to be the fifth vital sign, and the recording and reporting of pain is a formal responsibility of the healthcare professionals. While the nurses’ aides are responsible for recording and reporting most vital signs, the nurses must record pain assessment if the patient has reported pain intensity of over five points (out of ten). Although several hospitals have collaborated with the faculty of medicine and the department of anesthesiology to form an acute pain team who have developed an algorithm and protocol to address post-operative pain, in practice, the healthcare professionals are not achieving optimal pain relief (Wongswadiwat, et al., 2008).

Therefore, pain management practices must be investigated further, especially among nurses, in order to contribute nurses’ knowledge and to promote the quality of nursing care.
Demographic patterns and cultural context in Thailand

Thailand is a middle-income country located in the South-East Asia region, and current estimates made in 2015 show that it has about 67.4 million inhabitants, a figure that is now inclining to increase nearer to 70 million (Worldbank, 2015; Nation Statistical Office, 2015). The administrative divisions are divided into 76 provinces, which are grouped into six regions of provinces by location and comprise the Northern, Northeastern (Isan), Western, Central, Eastern, and Southern regions. There are two specially-governed districts: the capital, Bangkok (Krung Thep Maha Nakhon), and Pattaya. The Bangkok district is located in central Thailand and encompasses the city and the surrounding Bangkok region, which has more than 14 million people living in this area and has by far the highest population over other regions (Bureau of Policies and Strategy, 2013). More than 90% of the Thai people are Buddhist, although 4% of the population practice Islam as Thai Muslims live in the most southerly provinces near the Malaysian border. Other religions include Hinduism, Confucianism, Taoism, and Christianity, which are mostly practiced by people living in Bangkok, which has a multicultural population that includes people of Chinese, Japanese, Indian and European lineage. A report commissioned by the Bureau of Policy and Strategy (July 2015) found that about 42,989,000 people living in Thailand are of a working age of between 15–59 years, and 9,928,000 persons are over the age of 60 years.
A local cultural aspect that influences interpersonal communication patterns and affects healthcare and the daily lives of the Thai people is the diverse religious and personal beliefs of the population, for instance Buddhism, Islam, Hinduism, Confucianism, Taoism, and Christianity. This diversity has had an effect on Thai culture that has shaped contemporary Thai behavior and has had an influence on shaping the cultural values, beliefs and religion, and education of the Thai people. Because most of the Thai people are Buddhists, the principles and beliefs of Buddhism have much power in influencing Thai behavior in daily life and their attitudes towards healthcare (Chinnawong, 2007). Consequently, the Thai nursing context and its associated relevance to Buddhism has an impact on the nurses’ work and their relationships.
between the patient and other professionals, such as applying Dhamma (Buddhist beliefs and practices), personal/local wisdom, and traditional healing (Burnard, & Naiyapatana, 2004; Chinnawong, 2007).

The nursing practices of the Thai surgical nursing context have been explored in terms of the ways in which organizational culture influences or guides their thinking, decision-making, and actions in a patterned way (Maneewat, 2010). These nursing patterns can be described as a task-oriented working system; it is a routinized, almost ritualized process, which seems to be reflected in fixed assumptions about the way care ought to be delivered. The medical model dominates Thai culture of nursing, however, Maneewat’s study has illustrated a broader picture of the Thai culture of nursing and how nurses are situated within the organization of the surgical field. Previous studies have referred to the influence of Buddhism and the beliefs, culture and religion of the both nurses and patients in pain management practice (Burnard, & Naiyapatana, 2004; Suwanraj, 2010). These authors suggest that it involves six dimensions, including the domains of the physical, psychological, social, spiritual, treatment-seeking and asking health personnel for help. For this reason, this thesis has provided a deeper exploration of how nurses manage pain within a surgical ward.

Health and welfare in Thailand

The health service system in Thailand has identified certain aspects of organizing the service while evolving away from self-reliance by using local wisdom as well as traditional ways of self-care for curative treatment and health promotion. In this way it has directed these new approaches with the aim of serving the health service systems to the benefit of both the providers and recipients of care (Ministry of Public Health, 2011). Healthcare providers mainly provide care to the public sector, but they also provide care to the private and not-for-profit sector. A report from the Public Health Resource (Bureau of Policies and Strategy, 2013) has revealed that the healthcare sectors in Thailand are divided into three sectors, and, based on the number of beds within each medical establishment, the public sector has 1,043 beds (80%) and the private sector has 272 (21%). The health service system as a
whole is made up of five components, including health resources, management, organizational structures, finance, and health services (Ministry of Public Health, 2011; Ikai, et al., 2016). The health service provision is organized by the Ministry of Public Health, which provides the health facilities available in the public sector and these are classified into four levels of healthcare centers, comprising: office of the permanent secretary; medical department; department of health; and the university hospital. These services are funded depending on trends in the population ratio. The metropolitan area of Bangkok was selected to be the site of the research in this thesis. In this region, there are five medical school hospitals, 29 general hospitals, 19 specialized hospital/institutions, three 10-bed community hospitals, and 60 public health centers (Ministry of Public Health, 2011).

The Ministry of Public Health regulates the classification of hospitals in Thailand, whereas private hospitals are managed by the regulations set out by the Medical Registration Division. Further, the care provision in other hospitals is also organized by the government units as well as by public organizations, such as the military, universities, local governments and the Red Cross. In relation to the classification of hospitals, three types can be identified, as follows: (1) regional hospitals, located in provincial centers, that have a capacity of at least 500 beds and that have a comprehensive staff of specialist health workers; (2) general hospitals, located in province capitals or major districts that have a capacity of 200 to 500 beds; and (3) community hospitals, located in the district levels that are classified by the size of capacity, which comprise large community hospitals that have a capacity of 90 to 150 beds, medium community hospitals that have a capacity of 60 beds, and small community hospitals that have a capacity of 10 to 30 beds. The private hospitals are classified in the same way as the general hospitals, whereas, hospitals that have less than 30 beds are classified in the same way as the health centers.

Since 1999, the hospital accreditation system in Thailand has included the hospital’s quality management system, and each organization must cooperate with the Ministry of Public Health in order to obtain approval of the quality of care the hospital provides. In order to meet the standards of the accreditation certification, a hospital must also demonstrate a commitment to person-centered care in quality improvement. This regulation has the consequence that one of the indicators for acceptable quality management is that the hospital must have
a system in place for pain management. This system involves assessing pain based on the reports of pain intensity from the patient and these outcomes of quality of care are measured in relation to the satisfaction of the patients and their length of stay in hospital. Since 2011, the pain management guidance for acute pain and chronic pain have been provided by the Thai Association for the Study of Pain, which proposed and promoted the pain scores to be considered as the fifth vital sign as well comprising one of the indicators for accreditation. However, pain management practice in Thailand is still inadequate, as described in the previous section. In the surgical field, the pain management guidelines or protocols are different in each hospital, for example, between the university and general hospitals, and depend on the knowledge and perceptions of the physicians and anesthesiologists, who are the main contributors to these pain management guidelines.

The welfare state in Thailand provides the health policies, which promote the provision of equitably-accessible, responsive, qualified and efficient services to all Thai citizens. However, reference to the term, ‘universal coverage’, means that there are different levels of service provided for different groups of stakeholders, and these depend on the incomes and socioeconomic status of each individual (Pannarunothai, Patmasiriwat, & Srithamrong, 2004; Tangcharoensathien, Limwattananon, Patcharanarumol, & Thammatacharee, 2014; Damrongplasit, & Melnick, 2015). Since 2001, the Thai government has adopted three main health insurance schemes, comprising the Civil Servant Medical Benefit Scheme (CSMBS) for public employees, the Social Security Scheme (SSS) for private employees, and the Universal Health Coverage Scheme (UCS/30 Baht Program) for the rest of the Thai population, within which Thai citizens can access health insurance through one of three programs (Antos, 2007; Tangcharoensathien, Limwattananon, Patcharanarumol, & Thammatacharee, 2014; Damrongplasit, & Melnick, 2015; Watabe, et al., 2016).

For professional Thai nurses, since 2003, the Thailand Nursing and Midwifery Council (TNMC) has approved the Advanced Practice Nurse (APN) certification for nurses in Thailand, which is a Master’s degree in nursing education. This program promotes the ongoing development of professional practice based on the certification guidelines within six role areas: direct clinical care, educator, consultant, administrator, researcher, and ethicist/legalist (Hanucharurnkul, 1997;
Wongkpratoom, et al., 2010). The nurses can enroll in a specific area of advanced practice nursing within nine areas: maternal and newborn, pediatrics, medical-surgical, mental health/psychiatric, community health, midwifery, infection control, anesthetist and gerontology. Consequently, because this issue has influenced the quality of nursing care, it presents a challenge to researchers to help the nurses to explore and grasp their practices, in order to improve the retention of nurses at the bedside to provide nursing care to their patients.

It is a requirement of the quality of care protocols that two APNs were employed within each special medical and surgical area in the hospitals chosen as the settings for these studies. Therefore, this thesis focuses on the surgical field regarding pain management practices by Thai nurses who have experience in their practical discipline in assessing pain, providing interventions and medical management of the patient’s pain, and their achievement of pain management in exploring the link to positive outcomes of patients, such as their satisfaction, a short stay in hospital, leading to the cost-benefit of reduced healthcare costs. The current status of the pain management protocols will be explored in order to expand upon earlier research knowledge regarding the nurses’ perceptions of the patient in pain, pre- and post-intervention, both pharmacological and non-pharmacological, and the nurse-patient relationship that contributes to the practical knowledge in nursing knowledge. The nurse-patient relationship is an important element within the nurse’s role in nursing care, and determines how they assess and respond to the patient’s demands in pain management. However, there is an issue around the power relationships between physicians, nurses and patients, and the effect that these have on the quality of care. Efforts to narrow gaps between the nurse, physicians and the patients is difficult, and there are differences in power between the patient’s perspective and the healthcare provider’s perspective. However, the gap identified in the literature was that most of the previous research has employed a quantitative methodology, which is a limitation in attempting to understand the post-operative pain management practices of Thai nurses. In response to these concerns, there is a need to focus more closely on the nursing practices in pain management in the surgical field. In addition, this thesis will also provide nurses and policy makers with information relating to the quality of nursing care being provided.
Rationale

Pain management is a crucial part of the recovery process, but still poses challenges in the development of pain assessment and pain management guidelines that are more appropriately sensitive to cultural contexts. In Thailand, despite the availability of pain management guidelines and national standards for the healthcare providers, effective pain management is unsatisfactory in nursing care, particularly in relation to the delivery of pain medication for the patient’s pain. However, nurses are important persons who collaborate with the other professional to provide a holistic approach to care, therefore it is appropriate that they are responsible for treating their patients’ pain.

Based on the literature described in the previous sections, the clinical guidelines of pain management by nurses do not significantly correlate with the pain management practices of nurses. In addition to insufficient pain management techniques, it was found that nurses also underestimate the post-operative pain level of patients and make inappropriate decisions about the administration of pain management to the patient in pain. Furthermore, most of the research was conducted by employing quantitative methodological approaches to test of the effect of treatment interventions and protocols within specific diagnoses, for instance, pain management after cardiac surgery (Raksamani, et al., 2013) and palliative care nursing interventions (Doorenbos, et al., 2013), and did not consider the nurses’ practices from their perspective.

There is currently a lack of knowledge of nursing practice in Thailand as there are few in-depth studies from the nurses’ professional perspective involving the perception, culture, and experiences of surgical nurses. There is a drive to accumulate evidence-based practices to meet the challenges of providing quality pain management care and to empower nurses to improve post-operative care and promote patient comfort. There is a need to fill this knowledge gap and to provide knowledge that could be used to contribute to nursing practice.
knowledge or to provide a set of baseline data to improve nursing practice in relation to pain management, for example, the development of guideline protocols, and to inform the education of nurses in pain management programs in the future.
Aims

The overall aims of this project were to explore how nurses work in post-operative pain management within their daily nursing practice in managing post-operative patients’ pain and to explore how they experience their response to the patient in pain.

*The specific aims are:*

I: To describe nurses’ perceptions of patients in pain and pain management at surgical wards in Thailand.

II: To describe the professional and cultural framework within which pain management is practiced on a Thai surgical ward.

III: To describe Thai nurses’ experiences of pain assessment in a surgical ward.

IV: To describe situations of post-operative pain management in a surgical ward.
Methods

This thesis builds on qualitative methodology. Qualitative methodology is an established and important approach to inquiry in nursing science. Because this methodology is applied in the field, it enables the researcher to understand how events, actions, and meaning are shaped within the circumstances surrounding those individuals who are involved in these occurrences (Maxwell, 2012; Krippendorff, 2013). The major principles of qualitative method are that it addresses knowledge as contextual, and also that reality, to some extent, is socially constructed. This means that qualitative methodology does not aim to seek generalizable facts, but instead, it intends to describe in-depth patterns within specific fields in order to promote understanding.

Qualitative research methods are likely to be especially useful here, and the variety of chosen approaches in particular may offer new ways of researching the nurses’ experiences of managing pain as well. All of the data collected in this research have been interpreted in different ways within each of the sub-studies within this thesis. There is knowledge to be gained from engaging in observations and participation with the nurses to explore their approach to the caring of patients in the pain during the post-operative phase of recovery. The thesis was divided into four qualitative studies, including focus group discussions (FGDs), an ethnographic approach, in-depth interviews, and the critical incident technique (see Table 1).
Design

The research designs for each of the studies are as follows:

First, FGDs were used to describe the nurses’ perceptions of patients in pain and pain management. The FGD method (Barbour, & Kitzinger, 1999) was followed, as the group setting is viewed as being a suitable strategy to help encourage participants to share their perceptions of patients’ notions of pain and pain management through interactions among the members of the group (Study I).

Considering how the nurse interacts with both patients and other professionals, this study was conducted using Spradley’s ethnographic approach (Spradley, 1980), through observing patterns of nurses’ responses to their patient in pain and how they manage pain at a surgical ward in a Thai context (Study II).

Thereafter, the project used a qualitative cross-sectional explorative technique to collect nurses’ practice with closer to experience through individual interviews regarding the nurses’ experiences of pain assessment (Study III).

The final study was conducted using CIT, as guided by Flanagan (1954). The convergence of each of these aspects of the study was also important in order to capture the nurses’ situations and to include both successful and non-successful pain management practices in treating their patient in pain (Study IV).
Table 1 Overview of the four studies included in this thesis with regard to the aim, methodology, sample, data collection, time of data collection, and data analysis method.

<table>
<thead>
<tr>
<th>Paper</th>
<th>Aim</th>
<th>Methodological</th>
<th>Sample</th>
<th>Data collection</th>
<th>Time of data collection</th>
<th>Data Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>To describe nurses’ perceptions of patients in pain and pain manage-</td>
<td>A qualitative design</td>
<td>18 Nurses</td>
<td>3 focus groups: duration of FGDs was between 45 – 60 minutes.</td>
<td>June – July 2012</td>
<td>Content analysis</td>
</tr>
<tr>
<td></td>
<td>ment at surgical wards in Thailand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>To describe the professional and cultural framework within which</td>
<td>Ethnographic approach</td>
<td>Surgical ward</td>
<td>Participant observation through 100 hours.</td>
<td>July – Sep. 2013</td>
<td>Spradley’s ethnographic (1980) analysis</td>
</tr>
<tr>
<td></td>
<td>pain management is practiced on a Thai surgical ward</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>To describe Thai nurses’ experiences of pain assessment in a</td>
<td>A qualitative design</td>
<td>12 Nurses</td>
<td>Individual interviews of approximately 45 – 60 minutes in duration.</td>
<td>Sep. 2013</td>
<td>Content analysis</td>
</tr>
<tr>
<td></td>
<td>surgical ward</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>To describe situations of post-operative pain management in a</td>
<td>Critical incidence technique</td>
<td>9 Nurses: In all, 69 important events</td>
<td>Individual interviews every week for 5 weeks.</td>
<td>April – June 2014</td>
<td>An inductive analysis approach according to CIT method.</td>
</tr>
<tr>
<td></td>
<td>surgical ward</td>
<td>approach</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Access to the field

In hindsight, when I began to write my proposal of the studies, I had already piqued my curiosity about the topic and my research question had been stipulated; thus, the next question was where to conduct the research. Because I was influenced to conduct this research by my personal experience, this raised a question about researching nursing culture within a Thai context. In my own previous research experience in this area, I used a quantitative approach to investigate the effects of a nursing intervention on the patient’s pain in the post-operative period. However, I learned, as a result of seeing things from behind the lens of my own preconceptions, that the quantitative method did not allow me to deeply understand nursing care in pain management practice. It is for this reason that I became interested in conducting my research by employing a qualitative research method, which provided a new way to advocate for my own competency as a researcher.

Because I was a doctoral student at Mälardalen University, which collaborates with Rangsit University in Bangkok, this setting was appropriate for me to be stationed during the research and doctoral program. After presentation of my proposed research project and gaining approval from Mälardalen University, I then contacted the head nurse in a public hospital in Bangkok. I also started discussing and sharing my research idea with representatives of Rangsit University who assisted by allocating partner hospitals that might be interested in taking part in the research. Being a public hospital, one of the university hospitals located in an urban community was chosen as the site in which I conducted the studies. This hospital has a department of surgery that provides health care to the patients treated in hospital for surgical problems and is divided into three wards, as described in an overview of the hospitals’ capacity in the next section.

Thereafter, I formed my research application and gained ethical approval, both in Sweden and Thailand, based on this research plan. I knew it was going to be conducted in Thailand. After discussion at
Rangsit University, I stepped up on the first rung of the ladder of my work by formally contacted a hospital. Soon after, I was contacted by the hospital and I informed them of the studies and my research criteria and a date and time was set so that I could visit the surgical ward to attend a meeting of the nursing staff. At that meeting, I described the research proposal to the nurses and informed them about all of the studies, and then invited them to participate. This process is explained further in the following section.

I decided to conduct all my sub-studies at this hospital, because it was a good representation of the context I wanted to study and it was the most conceivable choice in relation to the resources and funding available to the project. This decision was also based on convenience, as I was to divide my time between two countries, two universities, and also include this extensive data collection at the same time. I had been given four years within which to complete the program of research.
Participants and setting

All four studies were conducted in the surgical ward at a public hospital in Bangkok, Thailand. The hospital involved was a tertiary care level facility with 600 beds. There were three surgical wards, including the female surgical ward (18 RN), the male surgical ward (24 RN), and the private surgical ward (17 RN).

The male surgical ward was first selected as the setting for Study II to conduct observations and interviews because this unit provides all of the types of surgery for the male patients who are hospitalized. However, on the female surgical ward, there is also the provision of the services to the patient with cancer, such as breast cancer and colorectal cancer, and in the private surgical ward, the main service for the orthopedic surgeries is also provided. Hence, it was decided that participants for Study II would be selected from all three wards, therefore the chosen recruitment strategy was purposive.
Data collection

Data were collected through theoretical sampling based on Benner’s nursing theory (2001) (Studies I, III and IV). Benner (2001) introduced five levels of proficiency within nursing competency: novice, advanced beginner, competent, proficient, and expert competency; this guided the sampling. According to Benner (2001), nurses with 1–3 years of working experience are considered to be novice, and nurses with 4–5 years working experiences are advanced beginners. Nurses with more than 10 years of working experience were considered to have an expert level of competency.

Focus group discussions (Study I)

The interviews began after obtaining informed consent from the hospital administration and participating nurses. A purposive sampling strategy was adopted to recruit the participants. The inclusion criteria included fulltime clinical nurses working in the two surgical wards of the hospital and, in all, 18 nurses participated in the study. The nurses were divided into three groups according to their length of service, with six in each group: Group 1 (G1) included nurses having novice competency, while Groups 2 (G2) and 3 (G3) comprised nurses with the competency of advanced beginners, proficient and expert healthcare providers.

The interview guide employed a semi-structured format in Thai, which was the mother tongue of all the participants and two of the researchers. The moderator posed open-ended questions to start the discussions, to clarify the participants’ statements, and to initiate new topics when necessary in a quiet room in the surgical ward. The FGD guide included the following open-ended questions: (1) What do you think about pain? (2) What is the impact of pain on the patients? (3) What do you think about pain management? (4) What do you do to manage the patients’ pain? (5) Can you give some examples? and (6)
How do you communicate with patients, relatives, and physicians regarding several pain resources? These main open-ended questions were followed by more specific questions or probing statements such as: ‘I’m a bit unclear with that explanation ...’, ‘... but I think I missed why we’re responding this way to the patients’ pain’, and ‘I think I might have missed something while I was taking notes here ... could you say it again?’ The duration of the FGDs was between 45–60 minutes. All of the FGDs were recorded by a digital voice-recorder.
Observations and participations (Study II)

Spradley’s ethnographic methodology informed the observations, which advocates a systematic approach to studying cultures through a prescribed research process. Spradley (1980) prescribes a 12-step research process as illustrated in Figure 2, which was followed throughout this study:

**Figure 2**: 12 steps of the research process in Spradley’s method.
Source: The manuscript of paper II (©Chatchumni, et al., 2016, p.3)
(1) **Locating an informant:** This study was conducted with the full-time clinical nurses who worked in the male surgical ward, which has a maximum of 50 beds (see Figure 3), and examined the nursing care provided to the patients. A total of 40 nursing staff worked on the ward, including one head nurse (female), one sub-head nurse (female), and 24 nurses (20 females and 4 males). The nurses ranged in age from 21 to 49 years and in nursing experience from 1 to 28 years. The 14 nurses’ aides and three the practical nurses (all female) ranged in age from 32 to 54 years and in working experience from 1 to 25 years. This ward had a nurse manager and an assistant manager, as well as two teams of nurses responsible for 22 to 28 beds each, with four nurses per team in the day shift, three nurses per team in the evening shift, and two nurses per team in the night shift. These teams provided care to similarly mixed surgical populations.

![Figure 3](image)

**Figure 3** Illustrates the layout of the surgical ward  
Source: The manuscript of paper II (©Chatchumi, et al., 2016, p.4)

**Steps 2–5 comprise the collecting of data, including interviewing and making observations, making an ethnographic record, asking descriptive questions, and analyzing ethnographic interviews and field notes.**

Before the ethnographic fieldwork, the hospital administration and all staff were contacted and informed about the study and those nurses who participated gave their informed consent in a meeting held on the 19th of June, 2013, and the interviews were conducted during the
fieldwork. The data collection took place over three months, during the period of July to September, 2013. Data were collected through 100 hours of field observation and interviews. During an interview, I would follow the nurses for 5–10 minutes, while taking notes and tape recording the interviews. Throughout the data collection period, usually early in the morning, the recordings were conducted and assessed by the first author. During each step of the process, the methods of recording and summarizing data were discussed with the second author, who has expertise in the Thai context.

Steps 6–12 comprise the analysis of data and writing up the ethnographic observations, which included making a domain analysis, asking structural questions, conducting a taxonomy analysis, asking contrasting questions, conducting a component analysis, discovering cultural themes, and writing an ethnography. These steps will be explained in the next section which discusses data analysis.
In-depth interviews (Study III)

Study III used in-depth interviews as a method of data collection. The nursing staff from Study I were first contacted through their head nurse and were given information about the study and an invitation to participate. Afterwards, the nurses who gave their consent to participate were provided with an appointment for interviews. Due to the prescribed limitations of the inclusion criteria, participants were recruited by employing a purposive strategy and classified as guided by Benner’s five levels of proficiency: novice (one to three years of experience), advanced beginner (four to five years of experience), competent, proficient, and expert competency (more than 10 years of experience) (Benner, 2001). Twelve nurses participated in this study, all of whom worked full time, and ranged in age from 23 to 49 years (mean age: 34.8 years). Almost all of the nurses were female (n=9). One of the nurses had a Master’s degree in nursing. The nurses’ experiences of working in the nursing field ranged from 1 to 28 years with a mean average of 11.33 years.

With regard to the data collection, data were gathered using a semi-structured interview, which was designed to include such questions as follows: (1) How do you know when patients are in pain? (2) What do you use to measure the patients’ pain? Please, could you tell me how you assess pain in your daily practice? (3) If the patient’s pain is not relieved with painkillers, how do you assess their pain afterwards? (4) Regarding someone who has been in a high level of pain and/or when differences exist between individuals, how do you assess their pain? and (5) Do you have a way of sharing with the team members or other nurses involved in pain assessment practice in order to manage the patients’ pain? Probes for each question included: Could you describe more about that? Could you give me an example of that? What does that mean to you? Additionally, a form was issued to inform the participants of the basic topics that would be covered, in the context of pain assessment and the management of the patients who are in pain. All the interviews were conducted in the Thai language, which was the mother tongue of both the interviewer and interviewees, and lasted approximately 45–60 minutes, and all interviewees were given enough time to express themselves. The interviews were recorded using a digital voice recorder with the participants’ permission, and were later transcribed verbatim.
Individual interviews: Critical incident technique (Study IV)

All 26 nurses working on the surgical ward were invited to participate in the study through their head nurse, and 20 nurses declared their interest to participate in the study. Because the schedule of the data collection period was strictly set to follow the participants for individual interviews every week for 5 weeks, the nurses had to be working their normal shifts for five weeks in a row in order to be included as participants. Nurses who had a break in their working schedule because of holidays or other commitments were not able to take part. Because of these limitations in the inclusion criteria, nine of these 20 nurses were chosen. In addition, the selection of these nine participants adhered to the principles set out in the strategic sampling method that aimed to include a broad representation of the different levels of nurses’ proficiency (Benner, & Wrubel, 1982). The participants received verbal information about the study and were informed of the planned dates of the interviews, which were conducted every week over a 5-week period during the study, and gave their consent to participate. The nine informants comprised six female and three male nurses, ranging in age from 22 to 50 years (median 25 years) and in surgical ward experience from 2 to 29 years. Six of the participants had undergone specific training in pain management.

This study used a semi-structured interview consisting of three open-ended questions: (1) please describe a situation in the last week where you were able to successfully reduce a patient’s level of pain after surgery, (2) please tell me about a situation in the last week where you were not able to reduce a patient’s level of pain after surgery, and (3) please explain what happened during that event. These open-ended questions were followed up by more probing questions, focusing on the informants’ personal experiences of situations while working in a surgical ward. Each interview lasted between 10 and 30 minutes, and was tape-recorded and later transcribed verbatim.
Data analysis

The data analysis in the thesis was conducted using an inductive analysis approach. The reason that the inductive approach was chosen is because of its suitability in relation to the aims of the research: the premises of inductive research are considered to provide evidence based on the inferences gained from the analysis of information that include an element of critical reflection and sharing based on the trustworthiness principles situated between the researcher’s own experiences and their viewpoint. Inductive analysis is suitable for qualitative research because it allows for multiple and complex possibilities to exist in the outcome and does not assume that there is any one ‘true’ conclusion that can be made in the findings of the research. This method of analysis is distinguished from the pathway analysis approach, where a deductive analysis approach is crucial for seeking a ‘true’ premise, and where an existing hypothesis is tested. In contrast, the inductive approach assumes that new insights will emerge from the data by way of a form of inference, and is underpinned by interrelated theories of discourse (Grant, & Giddings, 2002; Maxwell, 2012; Krippendorff, 2013). The different sub-studies have been presented previously in scientific journals. However, the descriptions within this summary have added an abstract analysis of all sub-studies that has provided additional interpretation of the data as part of my ethnographic understanding in order to help to answer the overall aim of the thesis.
Qualitative content analysis (Studies I and III)

A qualitative content analysis method was used (Studies I and III) and followed the process of analysis as described by Graneheim and Lundman (2004). The analysis started by reading the all of verbatim transcripts several times to gain a comprehensive understanding of the whole transcript. Data saturation determined the number of participants, as the recruitment of participants to the study continued until the point that no new content came up in the interviews. Thereafter, codes were identified related to the specific aims of study. The texts were condensed to extract the underlying meaning of both the latent and manifest content. These descriptions were subsequently merged and consolidated into abstract sentences. These sentences were then organized and labeled as sub-themes (Study I) or categories (Study III), depending on the aim of the study. Finally, these sub-themes or categories were represented as emerging themes.

With regard to the principles of trustworthiness associated with qualitative research, these were ensured by conducting the research by following the guidance provided by Lincoln and Guba (1985). The first author initially conducted the analysis process, which was later discussed and reviewed with all of the co-authors. The trustworthiness principles that were adhered to included: credibility, dependability, confirmability and transferability. These are important elements that each contributed equally to the research that was conducted within this study. The studies were conducted carefully, taking great care to adhere to these principles, for example, by discussing the analysis of the data with several co-authors and debating their structure until an agreement was reached.

The credibility of these studies was also ensured by testing the interview guide through a pilot interview, conducted with a similar group. Thereafter, the dependability of these studies was ensured by having the complete set of interviews transcribed in the Thai language by the second author, who is an expert in qualitative methodology and Thai nursing. During the analysis process, we read and discussed the collected data and its analysis in our mother tongue, in order to ensure that the analysis of the descriptive data was validated. Prior to the translation process of converting the transcripts from Thai to English, the accuracy of the transcripts was confirmed by the second author together with the first. In addition, the analysis processes followed in
these studies were discussed at every step and was verified by all four researchers, including the summary of content, assignment of codes, condensed meaning units, sub-themes (Study I), categories (Study III), and the themes. Confirmability of the findings of these studies was assured as the authors agreed and accepted the final presentation of the reporting of the findings, which involved discussing the appropriate way to present and answer the aims of each of the studies. As the findings of these studies were discussed and consolidated among the whole group to determine whether they were representative and suitable to similar healthcare settings, the principle of transferability was also addressed.
Ethnographic analysis (Study II)

In the ethnographic methodology study (Study II), Spradley’s 12-step ethnographic methodology (1980) was employed to study cultures embedded in pain management practices. The analysis process described in steps 6-12 for analyzing data and writing up the ethnography was guided by a processual perspective, which is concerned with the consistency of meaning of cultural relevance in pain management. This analysis was performed in collaboration between myself and the co-authors. Firstly, each of field notes, memos, and transcribed interviews were entered into NVivo 10, in order to improve the coherence of the data and to discover patterns in the data in terms of word frequency and semantic relationship relating to pain management. Then, systematic data analysis was used to identify matching terms which were sorted into at least 30 words, particularly those words that related to an understanding of the meaning of field notes, memos, observations, and interviews. After reading the words, the initial captured texts were analyzed, focusing on the meaning of the culture in relation to pain management, then these were generated and sorted into potential subgroups that were classified logically. These subgroups, representing the terms classified with the same meaning unit, were then sorted into broader domains. These domains were further discussed between the co-authors and were subsequently divided into three groups using Microsoft Excel 2010. Altogether, about 226 terms in the Thai language were included in the three domains identified in the analysis: communication, the essence of Thainess, and a passive approach to pain management. Each domain was considered in relation to its credibility, with the co-authors discussing them in depth and constantly reflecting on their relevance in relation to the domains by using structured questions (e.g., “What is the Thai nurses’ approach in pain management practices, and how it is distinctly the general approach?”) Thereafter, we deliberated several times to determine the interconnected attributes between the domain and the aims of the study, and with the analysis of the terms associated with the selected domains. The method employed to organize the data into taxonomies and to classify each into either the first, second, or third category, was typical of semantic relationship analysis (see Table 2). Finally, the analysis process was mostly concerned with and dedicated to identifying the complexity of the dimensions of post-operative pain management in nursing practices and the various ways of communicating
within these dimensions, and, for this reason, the most important themes emerging within this context were to written up as an ethnography for presenting the cultural themes of the findings.

**Table 2** Example from the taxonomic analysis

<table>
<thead>
<tr>
<th>Domain</th>
<th>Sub-groups</th>
<th>Is a kind of</th>
<th>Is a way of</th>
<th>Is a reason for</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication:</strong> <em>Ineffective communication</em></td>
<td>The routine for recording pain combined with monitoring of the vital signs every 4 hours</td>
<td>Pain record: Checking pain scores of the patients combined with the vital signs</td>
<td>Pain score assessment</td>
<td>Monitoring the patients’ pain</td>
</tr>
<tr>
<td></td>
<td>Route of communication with regards to the patient’s pain</td>
<td>The routing of the response to the patient’s pain</td>
<td>Knowing the patient’s pain</td>
<td>Helping patients deal with their pain and reducing the level of pain experienced</td>
</tr>
<tr>
<td></td>
<td>Visiting the patients for a short period, task–oriented: by in-charge nurse, physician</td>
<td>Looking at the progress of the patients during every shift</td>
<td>The main function of nursing care</td>
<td></td>
</tr>
</tbody>
</table>

Source: The manuscript of paper II (©Chatchumni, et al., 2016, p.6)
CIT analysis (Study IV)

Individual interviews with the nurses describing critical incidents in pain management (Study IV) were conducted in the same way as described in the qualitative design studies (Studies I and III) and the analysis was performed by using an inductive analysis approach in accordance with the principles of CIT as guided by Flanagan (1954). The analysis process focused on critical incidents or the events pertaining to the management of the patients’ pain levels by nurses. The transcripts of the interviews describing each incident or event were read line by line several times and the incidents were clustered and then classified into two categories: successful and non-successful pain management in practices.

Continuation of the analysis was mainly concerned with the nurses’ activities in providing pain management to their patients, which identified and captured incidents which were then coded/decoded and the content was labeled in relation to the event described in the situation. Each code was grouped according to familiar context codes, and these were merged into groups. The presentation of the situations were followed in consideration of the trustworthiness principles according to the guidance of Lincoln and Guba (1985). The principle of confirmability was ensured by the process of having the first author translate the transcripts from Thai into English and having the translations confirmed by the second author. Moreover, the meanings of the minor and major incidents appropriate to nursing practice were fully discussed among the authors. Then, the co-authors and I discussed all 69 situations gathered from the interviews throughout the analysis process, in order to identify those coded incidents that are representative of the situation of nursing care in pain management as presented in the findings of this thesis.
Ethical considerations

All of the sub-studies included in this thesis were approved by the ethics committee of a public hospital in Thailand (Code: 16/2555) and by the Uppsala Ethical Vetting Board, Sweden (EPN: Dnr 2012/383). All of the authors/researchers in this project were aware of the power relations that exist between the researcher and the participants, and for me, particularly in my work as an instructor on the ward. For instance, as the first researcher, I introduced myself to the head nurse and to the sub-head nurse, as well as to all of the nursing staff members, and informed them about the researcher’s position, emphasizing that the presence of the researcher would not place any pressure on them in terms of power. It was also important to be cautious with any personal information that the nurses provided. Invitations to attend information sessions about the topic of each study in pain management were posted on the notice boards of the hospital where the research took place. All participants were fully informed of all aspects of the study, about their rights as research participants and about the aim and design of the study. In addition, all participants signed a written consent form. All data gathered for each study were treated confidentially.
Findings: Current situation of pain management practice

This section will present a summary of the findings from the four studies. Previous research has indicated that the complexity of the communication between nurses, physicians and patients in pain management may cause delays in treating the patients’ pain. The interaction between the nurses and the patients is hindered by cultural sensitivities, which influence the ways in which nurses identify pain and achieve pain management practice in meeting the patients’ needs and in engaging their nursing approaches effectively. These findings can serve to challenge existing guidelines and facilitate the development of new nursing guidelines and/or policies in pain management, including the improvement of nursing skills and education programs in pain management settings.

These cultural issues also hinder the positive elements of nursing practice that have an influence on the achievement of effective post-operative pain management. These hindrances can be categorized into three main issues. The first issue is the complexity of communication when addressing pain and in responding to the patient’s pain, for which the nurse uses a double/triple method of assessing the intensity of their patients’ pain. By communicating with the care team through documents and records instead of using nurses’ own experiences in pain assessment, the nurses were missing much of the patients’ self-reported pain. The second issue is that the nurses’ perceptions of patients in pain and pain management are often missed due to the influence of their cultural sensitivities. In particular, a fundamental element of Thai-ness in Thai culture, kreng jai, is particularly influential. This relates to the custom of prioritizing others’ feelings above your own to avoid displeasing them. This cultural sensitivity is a concern for the patients who feel that it is inappropriate for them to request an analgesic. Despite their own knowledge of this culturally sensitive issue, the nurses allowed the patient in pain to feel uncomfortable, have re-
stricted mobility and a change in mood. In contrast with their prescribed nursing practices of pain management, they determined how intolerable pain might be identified and managed through their own experiences instead of considering the patient’s own experience. Because they relied on many documents and various methods of scoring, they could not fully meet the patients’ care needs, and it seemed to be an important assumption within their profession that not conducting evidence-based practice is inadequate for patients’ post-operative care. The third issue is the passive approach that nurses adopt in relation to pain management. The nurses use only prescription medication to treat their patients’ pain, while at the same time relying on their own experiences. The nurses often wait for the patient to request pain medication, relying on previous anecdotal engagement with pain management strategies in determining the level of pain their patient experiences, who should be helped instead of relying on evidence-based practice guidelines or the recommendations of research-based practice.

There are positive aspects, however, in encompassing Thai culture in the nurses’ approach to pain management practices where there is a combination of the two nursing approaches, an example of which would be the empowerment of continuity in nursing care. Mee num jai can be described as the essence of Thai-ness in Thai culture that is a good way to promote continuity within teams. For instance, the nurses offering to help others are seen to be compassionate, while at the same time, they do not make requests to be helped. Likewise, these offers of help can be seen as an expression of kindness and a desire to help other people. This offers an engaging approach to the patients’ pain that is conducive to a trustful nurse-patient relationship. This is one of the nursing strategies that is used to interact with the patients and their relatives in relation to pain relief to inform them about the availability of pain medication and nursing care when needed. It is important that physicians provide the standing order of a strong opioid such as a morphine injection every four or six hours in the acute post-operative period (24 to 48 hours after surgery), which the nurse is able to administer in managing the patients’ pain themselves within the prescribed doses.
Nurses’ perceptions of patients in pain and pain management (Study I)

Nurses’ perceptions of patients in pain and pain management were explored. The main themes emerging from the focus group discussions related to the nurses’ perceptions of the patients in pain and nurses’ perceptions of pain management. Two themes revolved around nurses’ own perceptions of the patients in pain, including recognizing when patients are uncomfortable and when they have restricted mobility and changes in mood. A further two themes were composed of how intolerable pain would be managed and that managing the patients’ pain involved drawing on nurses’ own experiences (see Table 3).

The findings also illustrated that the nurses’ assessments of pain were conveyed by the nurses’ own previous experiences, especially in clinical judgment, and only their own experiences were drawn upon. Attention was also given to scheduling time to attend meetings and seminars for reflection related to pain management. Nurses were made aware of the importance of embedding evidence-based protocols in their practice as key messages for pain management. The way in which the most important decisions within managing pain were made was to use the medication prescribed according to the physician’s orders. At the same time, the nurses believed that pain was a natural part of the after-effects of the post-operative experience and that patients should be able to tolerate pain without treatment. In response, the nurses would often not administer medication or would tell the patient to wait and then try non-pharmacological approaches such as positioning, talking, and listening to music. Likewise, the nurses who had more experience, such as the expert nurses, would often base their decisions to treat intolerable pain by drawing on their own nursing experiences. The nurses were able to decide when and what kind of medication would be given to the patients and they tended to prefer to offer non-pharmacological methods for patients’ pain management needs. Therefore, the nurses’ perceptions of the patients in pain and their ideas of pain management seem to be important to their professional assumptions. In relation to these perceptions is effectiveness of the nurses’ acts and their attitudes towards practice. These perceptions of pain and pain management of the patient in pain, might contribute to
delays in providing treatment. Consequently, the treatments provided were inadequate for the patients’ post-operative level of pain.

**Table 3** Nurses’ perceptions of patients’ pain and pain management themes, and sub-themes emerging from focus group discussion (N=18)

<table>
<thead>
<tr>
<th>Theme</th>
<th>Sub-theme</th>
</tr>
</thead>
</table>
| Uncomfortable patient | - Being irritable  
- Feeling anxious  
- Discomfort |
| Restricted mobility and changed mood | - Avoiding activities  
- Mood change caused by pain |
| Intolerable pain would be managed | - Using medication prescribed by the physician  
- Non-pharmacological approaches |
| Managing the patients’ pain by drawing on their own experiences | - Pharmacological and non-pharmacological approach  
- Clinical judgment in pain management |

Source: The article of paper I (©Chatchumi, et al., 2015, p.169)
Pain management practice within a Thai context (Study II)

The pain management practices within a Thai surgical ward were described through an ethnographic approach that illustrated three themes: (1) there is a complex communication system in place to assess pain and to respond to it, (2) the essence of Thai-ness, and (3) a passive approach to pain management.

The first of the three main themes that were described shows that a complex communications network exists in nurses’ practices that included the direct participants in pain management (nurses, patients, physicians) and intermediaries (relatives and nurses’ aides). These findings also illustrate that there was no direct communication between patient and nurse, but rather, messages were relayed by an intermediary. In the same way, the nurse-patient communication was the approach used to convey these interactions among all the players and the participating intermediaries, who might be one or many in number (see Figure 4).

Figure 4 Illustration of the complex flow of communication
Source: The manuscript of paper II (©Chatchumni, et al., 2016, p.13)

The second theme identified was the essence of Thainess. The findings described how the nurses responded to the discomfort and pain of the patients. The implication of most importance was an individual’s “cultural arena” (the history of traditional aspects) as understood through the observations. For example, the majority of the informants understood the impact of Buddhist traditions when providing care to
their patients, which involves merit-making, and involves being compassionate and dedicated to help others. The merit-making seems to be a consequence of the nurse’s desire to help relieve her patient’s pain as well as the expectation of managing that pain. Moreover, a crucial cultural aspect employed was the use of language. For example, the tradition of *mee nam jai*, which means “offering to help others”, rather than “asking for help” within the nursing team. Specifically, this aspect of Thai-ness was integrated into the general management system related to teamwork, communication and collaboration skills, as well as being an expression of kindness and a desire to help other people. For this reason, the communication component of the *mee nam jai* feature can be seen as an interesting way of conducting their nursing practices in relation to promoting the development of a functional ward. In addition, the term *kreng jai* in Thai culture was used. This finding illustrates that this concept was conveyed in nursing care, and, although precisely what *kreng jai* entails can be hard to describe, it can become a concern for the patients who feel uncertain about asking for pain relief or they may become distanced from the nurses. In contrast, the nurses believed in helping the other nurses without waiting for a request. In fact, not requesting help was often beneficial in terms of receiving more assistance.

The third theme identified was a passive approach to pain management. Responses and observations in the field revealed that the nurses mostly adopted a formal approach to practice in response to the documentation. This meant that the nurses spent much of their time completing the documentation, more so than in attending to their patients’ pain, and included medical records, nurses’ notes, and physicians’ progress notes. Routine work in pain assessment was conducted every four hours and involved taking measurements of the pain level and charting them on both the bedside charts and in the patients’ journals. The nurses considered this process as being valuable time lost to complete the documentation on every shift. Even so, the routine monitoring of pain level in the patients was assessed every four hours. They took these measurements by collecting the scores from the documents (i.e., medical records and nurses’ notes) and recording them on the patient’s record. However, they might instead have used this time for bedside care to actually speak to the patients to see how they were feeling, which was an example of how the ward culture of collecting documented information creates barriers for quality care. This ward culture promotes the prioritizing of the task of the nurses collecting
documented information above providing bedside nursing care. These cultural issues get in the way of good nursing practice. In addition, cultural aspects influenced the way in which the patients did not ask the nurses for analgesics and, instead, waited to be offered help. There were risks involved in this practice, causing the delaying of providing timely and effective treatment to the patients in pain. This risk indicates the challenge of improving care by moving from a task-oriented structure to one that responds with person-centered care.

Overall, these components of the pain management practices indicated that the nurses did respond to discomfort and pain, but their responses were not sufficient to meet the patients’ care management needs. To put it differently, nurses’ pain management practices will be influenced positively if there is a shift in practice from functional to person-centered care.
Patient-evidence paradigm (Study III)

This study described the nurses’ experiences of pain assessment in the surgical ward. Responses from the interviews revealed that the care was provided in terms of “patient-evidence assessment in clinical practice”. Similar to Study II, three categories emerged from the interviews exploring descriptions of pain assessment in combination with monitoring the patient’s vital signs according to the routines in the surgical ward (see Table 4).

The first of the three main categories was the double/triple check system. The nurses often assessed patients’ pain by using a double/triple check system, a multi-method approach to pain assessment. The involvement of their procedure was a three-method approach, including (1) using a verbal scale to assess pain, 2) judging patients’ pain based on appearance and mobility, and (3) consulting the patients’ documentation. Both the face scales and a numeric scale were used as tools to measure pain by the nurses and nurses’ aides in their routine practice. Although the face scale and numeric scales are completed in direct contact with the patient, surprisingly, the nurses and the nurses’ aides did not expand on the responses to the scale and ask the patients whether they were in pain or if they could provide any help. The pain assessment process relied on routines and structure, and the nurses’ aides recorded the pain scores every four hours. The nurses would often re-assess all of those patients with pain scores of higher than five according to the hospital protocol for pain management. Coupled with these scales, the nurses judged patients’ pain based on their appearance and mobility. They investigated the possibility of complications (i.e., bleeding from the wound or full bladder) by conducting physical examinations in order to clarify and determine the causes of the pain and suffering. Subsequently, the nurses would also check and record the scores in the documentation as stated in the hospital’s protocol for pain management.

The second category was communication via records and protocols. In the same way, the documentation of pain assessment was recorded and communicated among the members of the team in order to provide the treatment of pain as continuity of care. In theory, the pain assessment scores were plotted on the graphic sheet every 4 hours and given to the physician, who should then select appropriate pain medi-
cation. However, in practice, the nurses explained that the normal procedure relating to the physicians’ orders was that the physicians often prescribed medication according to the patients’ expressions and not necessarily with regard to the nurses’ documentation of pain assessment.

Finally, the third category was *using skills and experience*. This category illustrated that the individual nurses’ experience in the quality of pain assessment depended on their level of knowledge and competence. As a result, the outcome of pain assessment was affected by two issues: (1) variation in pain assessment skills, and (2) differences between the interpretations of patients in pain. For instance, one of the interviewees indicated that the nurses’ aides have a limited amount of pain assessment knowledge when compared to nurses, but the routine assessment of pain is carried out by the nurses’ aides. Likewise, the accuracy and interpretation of pain assessment varied between novice and expert nurses, in relation to their decision-making practices. For this reason, the novice nurses often worked under the supervision of an advanced beginner or competent level and/or expert nurse, which sometimes delayed the pain treatment for their patients’ pain.

**Table 4** Overview of codes, categories and a theme developed from the content analysis of pain assessment the Thai nurses in surgical wards

<table>
<thead>
<tr>
<th>Theme</th>
<th>Patient evidence assessment in clinical practice</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Double/triple check system</td>
</tr>
<tr>
<td><strong>Category</strong></td>
<td>- Using visual and analogue scales to assess pain</td>
</tr>
<tr>
<td><strong>Codes</strong></td>
<td>- Judging patients’ pain based on appearance and mobility</td>
</tr>
<tr>
<td></td>
<td>- Consulting patients’ documentation</td>
</tr>
</tbody>
</table>

Source: the article of paper III (Chatchumni, et al., 2016, p.4)
Thai nursing approaches in pain management (Study IV)

Situations in post-operative pain management practice were described. The main finding in the study illustrated that there are three situations within both the successful and unsuccessful approaches (see Table 5). These included the pain management experiences of surgical nurses explored through critical incidents in caring for post-operative pain management.

The first of the three situations identified was *engagement* in a trustful nurse-patient relationship. The nurses used three engagement approaches, including conversations in social contexts, sharing their own experience, and offering advice on pain management and post-operative rehabilitation. These approaches would allow the nurses to maintain contact with their patients and family members and provide a channel through which they could advise them regarding the pain management steps throughout the post-operative phase of recovery. The nurses often made social contact by using conversation in a social context with their patients, in order to build trust and establish a good relationship. This engagement approach was one of the nursing strategies adopted in order to interact with the patients and the relatives in relation to pain relief. The nurses emphasized that the nursing strategies they used were related to the non-pharmacological treatment of pain, such as advising patients to engage in deep breathing and/or to change position. However, this approach may be considered inappropriate in relation to the standards of quality of care, for example, if a patient was treated with non-pharmacological treatment but still complained of their levels of pain and requested pain medication.

The second situation identified was *availability* of pain medication and nursing care when needed. The most important pain treatments are approaches with effective analgesics. The nurses illustrated that they provided drug administration under the physicians’ prescriptions. In the acute post-operative period (24 to 48 hours after surgery), the physician’s order was to provide a strong opioid such as morphine every four to six hours. The drug administration was mainly given by the nurses, a process which is believed to have a positive effect on their patients’ progress during the recovery phase of post-operative pain management. However, the routine activities assigned to perform these functions were organized in such a way that it was considered in relation to the physician’s order that pain medication was prescribed.
for pain as needed. The way in which the nurses waited for their patients to request medication, meant that the patient’s pain was not controlled. Therefore, these prescriptions were actually obstacles to achieving adequate pain management. Furthermore, the nurses did not have enough time to provide bedside nursing care, which was an inappropriate nursing strategy in pain management according to the patient’s condition. For example, a patient being treated for cancer may have experienced post-operative pain and their condition in palliative or end-of-life care may often cause critical events that involve the patients and their relatives. These individuals also need the support of nurses and physicians.

The third situation identified was an imbalance between meeting the patient’s needs and completing routine nursing duties. In practice, however, the nurses revealed that more emphasis is placed on the difficulty in making a balance between their responsibility to respond to the patients’ needs and their own needs. Therefore, the way in which they achieved their role as a nurse was obstructed, as the nursing staff felt overworked. The inadequate control of pain caused delays in treating the patients’ pain, as the nurses often spent too much time completing the documentation rather than providing bedside nursing care. Likewise, the nurses’ routine interaction with patients was focused on the administration of the pain medication form, while nursing staff should respond to signs of pain and discomfort in their patients even if only to provide them with information about their pain management. The nurses indicated that, as a consequence, the patients who had requested pain medication often complained of receiving pain medication too late.

Participants referred to situations when the nursing approach was employed to manage pain, however, this promoted the negative effects of rehabilitation under the physician’s orders through the administration of pain medication as needed. These situations were considered by the nurses to be examples of when they were unsuccessful in helping the patients to manage their pain levels. Pain levels were insufficiently managed by providing inappropriate nursing care in varying methods to the patients, for example, in dealing with cancer pain and post-neurosurgery pain.
**Table 5** Examples of the situations and codes, including the number of the critical incidents extracted from the data analysis

<table>
<thead>
<tr>
<th>Situations</th>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engagement</td>
<td>To manage the situation using conversations in social context with the patient and/or their relatives to maintain good relationships (n=3)</td>
</tr>
<tr>
<td>(n=30)</td>
<td>To manage the situation by sharing their own experience (n=3)</td>
</tr>
<tr>
<td></td>
<td>To manage the situation by offering advice on pain management and post-operative rehabilitation (n=13)</td>
</tr>
<tr>
<td></td>
<td>To mismanage the situation using inappropriate action with regard to the patients’ condition (n=11)</td>
</tr>
<tr>
<td>Availability</td>
<td>To manage the situation using regular morphine (MO) injections over the first 24 to 48 hours to control pain levels (n=12)</td>
</tr>
<tr>
<td>(n=30)</td>
<td>To manage the situation by way of the physician’s orders through administration of pain medication PRN (pro re nata, unscheduled dose of prescribed medicine administered as needed) (n=7)</td>
</tr>
<tr>
<td></td>
<td>To mismanage the situation using inappropriate nursing care in a different manner (i.e., cancer pain, trauma pain, and neuro-surgery pain) to the patient’s needs (n=11)</td>
</tr>
<tr>
<td>Imbalance</td>
<td>To mismanage the situation by visiting the patient for only a very short time without considering the patients' needs (n=5)</td>
</tr>
<tr>
<td>(n=9)</td>
<td>To mismanage the situation by focusing on completing documents rather than providing nursing care at the patients’ bedside (n=4)</td>
</tr>
</tbody>
</table>

Source: the manuscript of paper IV (©Chatchumni, et al., 2016, p.6)
Discussion: Challenges in nursing post-operative pain management practice, and suggestions based on descriptions in the findings

Because the patient’s recovery after surgery is one of the most important health processes in planned hospital healthcare and has a direct impact on welfare and welfare systems, what nurses do in the very immediate post-operative period of the surgery is of vital importance. This thesis has addressed the question of how nurses work in post-operative pain management within their nursing practice and some of these aspects have been described. Because this is a qualitative study, the findings cannot be generalized, but some patterns of importance will be discussed.

The findings show that even if there is a clearly defined approach to pain management, the response system followed by the nurses to address patients’ pain is complex and includes a lot of lead time between assessing patients’ pain and the nurses responding to the pain. Furthermore, nurses are caught in what was labeled a ‘patient paradigm’, where evidence of pain often is double- and triple-checked by scoring and recording signs that are then subject to a process of confirmation from a third party. In relation to the culture of nursing that has an impact on the pain management cultivated by the nurses, first and foremost rests a tension between the nurses’ own experiences and a working/professional task where nurses offer each other practical help in urgent situations. However, nurses seldom discuss these event-based strategies together. Nevertheless, when nurses described situations when they were successful in their work in practicing pain management, their own engagement and availability of time and therapeutic options were considered to be important.

The findings of Studies I to IV have the potential to fill the gap or to provide a bridge between Thai nursing culture and the beliefs and practices that make up their professional value systems. Thai nursing
culture includes assumptions such as the Thai-ness aspect about Buddhist traditions and Thai language emerged inside of a particular cultural context (i.e., mee nam jai, and kreueng jai) in pain management practice. Furthermore, the general discussion among the findings of these four studies in this thesis considered health professionals involved in the treatment of acute pain in hospital and the implementation of the interventions are discussed in relation to previous research. Therefore, this thesis presents overall themes from sub-studies comprising five features: complex response to pain; the patient-evidence paradigm versus evidence-based nursing paradigm; culture of nurses’ experiences in and of urgencies; success in engagement and availability; and nursing as a key-knowledge in addressing pain.

The first feature, complex response to pain, highlights the influences of the clinical implications on the practice of pain management in regard to the hindrances in the communication system and the barriers in the existing nursing approaches to the practice of pain management by an individual nurse. The communication system was too complex to allow the nurses to assess and respond to patients’ pain. The nurses devised many ways of communicating messages about their patients’ pain intensity, but it worked best when it was conveyed directly, for example, among the nursing staff, or between an individual nurse and a patient and/or their relatives. Nurses, nurses’ aides and physicians all followed the set protocols to assess and respond to the patients’ pain in the hospital, but often this created a barrier to providing effective assessment and treatment of patients’ pain. The national standardized implementation of pain management strategies in Thailand was published and implemented by The Royal College of Anesthesiologists of Thailand and the TASP (2011). These guidelines typically cover chronic pain and acute pain management implementation across all the hospitals in Thailand. Moreover, TASP (2011) has made improvements in the pain management guidelines for hospitals achieving accreditation, as pain levels are defined as the fifth vital sign and are to be assessed every four hours for post-operative patients in surgical wards. However, the fifth vital signs strategy alone does not improve the quality of managing pain as the evidence-based practice guidelines do not recognize the nurses’ contributions to care and these are not reflected in practice. The complexity of the communication process was revealed in several ways, for example, it was found that the nurse-patient relationship focuses on the impact of the presence of the patient’s relatives to help communicate opinions. Likewise, they are seen to be
intermediates and to establish trust, and to serve as an agent of change in the practice of pain management within a given context.

While nurses were considered to be powerful individuals and opinion leaders, able to respond to the complexities of pain management, they were also seen as the ones who could actually facilitate functional change in the practice environment (Jongudomkarn, Forgeron, Siripul, & Finley, 2012; Aziato, & Adejumo, 2015a,b). One of the issues revealed in this thesis is that the nurses could devote little time to sitting and listening to their patients because of the added workload of recording pain assessment documentation. This has been seen as one of the most common reasons for inadequate communication between patients and nurses and for assessing pain and in delivering pain management (Aziato, & Adejumo, 2015a,b; Clendon, & Gibbons, 2015; Booker, 2016). However, these issues should be raised and investigated in a particular context by employing a quantitative study, as well as by analyzing and evaluating accumulated data, aimed at developing an evidence-based approach to encourage and promote nursing guidelines, and to develop nursing interventions relating to pain management (Rejeh, et al., 2008; Abdalrahim, et al., 2011). In addition, this thesis revealed that the nursing staff spent much time completing the documentation. This practice was designed to promote the achievement of pain management, however, it might instead be reflecting the ideals of the health policy maker and adjustments are needed to set priorities in the interaction between patients and healthcare providers. The problem of nurses being overburdened with documentation tasks still contributes to providing less available time for nurses to support and care for the discomfort of patients who are in pain and who are demanding better pain management practice in Thai hospitals to match current international practices.

The patient-evidence paradigm versus evidence-based nursing paradigm feature was represented from the findings of Study III, which emerged through the nurses’ sharing of their experiences based on the patients’ voices. Nursing education is always learning from the nursing strategies that influence practice in the nature and qualities of caring (Benner, & Wrubel, 1989). From the present findings in this thesis, in addressing the nurses’ management of the primary care of the post-operative pain, the nurses are not expected to reach the level of expert as defined in Benner’s acquisition model (2001). However,
they will strive to attain proficiency in their ability to provide the patient with the suitable assessment, planning, and interventions needed to achieve pain control, and continuously work toward the goal of making patients feel comfortable if not pain-free during their hospital stay. However, Benner’s theory (2001) has proposed that nursing expertise, categorized into five comprehensive stages, refers to expert intuition in nursing skill, which describes how intuitive, perceptual decision-making is linked to their decisions related to problem-solving. Benner’s theory (2001) does not suggest that each nurse caring for a patient who is experiencing pain should become an expert. Instead, Benner implies that novice nurses become increasingly proficient by way of the nurse’s progression from possessing a mere base knowledge of pain assessment to the development of strong assessment skills and situational knowledge related to the cause and recognition of pain, and available resources for pain control.

The level of nursing competency in post-operative pain management should be considered within nursing skills, a notion which was illustrated in the findings of this thesis. In relation to the variety in the accuracy of pain scores that were used to assess the patient’s pain, these discrepancies were caused by using the multi-person system of communication (Study II). Further, the differences observed in nurses’ abilities were awareness in relation to the accuracy of the pain assessment and their decision-making processes between novices and expert nurses together with the method of pain assessment (Study III). This level of nursing skill is distinct from those of the novice, who are powerless to negotiate within this clinical context. In contrast, an expert nurse is seen as an intuitive context-driven thinker who is able to engage in more powerful decision-making activities than the novice, and illustrates the nurses’ role in pain management practices. Despite this assumption, the nurses still face challenges to improve their skills in assessing and managing pain in order to close the gap between sufficient and insufficient treatment of patients’ pain. According to Benner and colleagues’ (2009) nursing competence theory, professional competency is a feature that motivates practicing nurses to produce quality care in the caring sciences. This feature may be the foundation of their professional role, and it is relevant to pain management in the daily routine, which influences the day-to-day practice of dealing with their patients. Thus, highlighting this knowledge-based approach within a patient-evidence paradigm might be a movement towards an evidence-based nursing paradigm. This means that best practice would
be developed according to the literature, including research-based strategies, person-centered care, and collegial competence development to encourage implementation of the agency of nurses in pain management practice in order to improve patient outcomes.

**Culture of nurses’ experiences in and of urgencies:** The cultural norm was considered in relation to the nursing practice in the ways that it might influence the decision-making processes by the nurses in post-operative pain management. Within the essence of Thai-ness in nursing care, there is an important recognition of the issue of ineffective pain management practices. These issues are problematic for health professionals who are expected to manage the patient’s existing levels of pain effectively. These issues are quite distinct; ‘the essence of Thai-ness’ themes identified in Study II appeared to encourage the nurses to aspire to practice sustainable pain management methods within the given context of Thai culture, while playing an important role in assessing and treating patients’ pain.

Consequently, the Thai cultural beliefs were considered as a way of increasing trust through establishing a stronger relationship between the patient and the healthcare provider, with an acknowledgement of the concept of *mee mam jai* as a way of ‘offering to help others’. Thai nurses are willing to ask how to or will offer help to the patients more often than they actually do. Because the nurses do not provide prompt delivery in treating and providing strategies to manage their patients’ pain, this culture underpins the delay in providing pain relief in the pain management process. However, more direct communication should be encouraged with the patient (i.e., not having to go through several interplayers). Further, it is important that Thai people consider the influences of local culture in understanding the day-to-day pain management practices of nursing, the reality of workplace management, and the organization that has been set in place for the patients’ post-operative pain management phase of recovery in the surgical ward. According to a publication of parents’ experiences, a study conducted in 2012 revealed that Thai cultural beliefs had an influence on what the parents believed that their child needed to be treated for acute pain in Northeastern (Isan) Thailand (Jongudomkarn, Forgeron, Siripul, & Finley, 2012). Their findings emerged in two themes: “Understanding my child’s pain: its *sic* karma” and “maintaining kreng jai”. These themes illustrate how cultural sensitivity influenced parents’ beliefs about the effect of assessing pain and treating pain, and
how it can be considered to be one of the perceived barriers for treating their children in the pain management process. As a consequence, the parents perceived that pain was an unavoidable part of life as well as emphasizing their preference for their child to be referred to the traditional therapies. Other factors contributing to the hindrance issues were that the parents experienced an “inner struggle in providing pain care” (Jongudomkarn, Forgeron, Siripul, & Finley, 2012), which caused the parents to feel a fear of coming into conflict with the healthcare professionals (Eriksson, et al., 2016).

Nurses should consider the optimal treatment possibilities based on the patient’s experiences of their needs, as they describe their pain after surgery. Otherwise, the nurses are unsuccessful in providing adequate pain relief. In addition, the pain management practices in assessing and treating the patients’ pain should be considered alongside the essence of Thai-ness, as it may affect providing pain care for the patients and relatives by nurses in relation to their individual level of competency. The influences of Buddhism and Thai culture have been emphasized in guidelines providing relevant person-centered care, referring to the compassionate relationships and equanimity between nurses, patients, and relatives. However, these might also be considered when involving the relatives in the care and should be promoted and encouraged in actual nursing practice (Chinnawong, 2007). Pain management relies on beliefs, culture and religious practices such as good deeds in Buddhism and affects both dimensions as treatment-seeking and asking health personnel for help. However, this important aspect of Thai culture might actually influence the barriers and facilitators of using the evidence based-practices related to pain assessment and pain management in Thailand. This issue needs further exploration in relation to the effectiveness of nurses in managing pain (Burdnard, & Naiyapatana, 2004; Suwanraj, 2010).

**Success in engagement and availability:** The findings of Study IV highlight situations that were important in the successful management of pain and have an impact on effective post-operative pain management through the nurses’ experiences: engagement in a trustful nurse-patient relationship, availability of appropriately timed pain medication, and imbalance between patients’ needs and maintaining existing nursing routines. Because Benner and Wrubel’s theoretical (1982) approach emphasizes that the nurse-patient relationship is influenced by
patients’ verbal complaints of pain, in order to promote more successful nursing practices, nurses must consider the patients’ own perceptions of pain levels by dealing with other existing signs of pain (Benner, & Wrubel, 1982, 1989). Therefore, the effective nurse-patient communication should be a two-way communication based on mutual engagement. For instance, the empowerment of patients can be promoted by their self-reporting of pain, and their requests to receive rapid assessment and treatment. Therefore, it is necessary that nurses are also influenced by their own practice experiences (Hoffman, Aitken, & Duffield, 2009; Abdalrahim, et al., 2011; Hayes, & Gordon, 2015).

**Nursing as a key-knowledge in addressing pain:** The Thai nurses’ perspective of pain as a form of the perceptions of suffering involved both physical and psychological aspects. The nurses’ perceptions of patients in pain and pain management were based within a Thai context and the patients’ perspectives in this thesis (Study I). In relation to the importance of nurses’ perceptions in managing post-operative pain, this thesis has found that there was inadequate understanding of pain assessment and pain management among the nurses. These findings are supported by examples in the literature, for instance, underestimating the patients’ pain, a lack of education about the side effects of medications, such as the risk of addiction and respiratory depression, and a lack of interaction between the nurses and the patients (Igier, Mullet, & Sorum, 2007; Al Samaraee, et al., 2010; Zoëga, et al., 2014). The nurses’ perceptions of the patients in pain are provided by a nursing approach that is focused on routine practices in relation to pain management. Likewise, the previous study by Igier, Mullet, and Sorum (2007) found varying pain scores in their comparison of the assessment of patients’ pain between nurses, student nurses, and nurses’ aides in judging their patients’ pain. Therefore, an adequate method of pain assessment and pain management must be considered in contributing to improve the competency of a healthcare provider. The competencies of these healthcare providers is important in assessing and treating patients’ pain effectively, such as providing opportunities to improve therapeutic nursing strategies for pain management (Tilley, 2008; Hoffman, Aitken, & Duffield, 2009; Abdalrahim, et al., 2011).

In actual practice, however, consistent with previous studies of the nurse-patient communication, this thesis found that more effective
strategies are needed. The effectiveness of assessing and treating pain depending on the patients’ demands should be evaluated so that the healthcare provider can respond to the patients’ pain. In addition, such an evaluation strategy would require an awareness of pain care within the context of the underlying complexities that exist in the religious and cultural perspective and the pre-existing social attitudes (Lovering, 2006; Jongudomkarn, Forgeron, Siripul, & Finley, 2012; Hayes, & Gordon, 2015; Aziato, & Adejumo, 2015b). One of the goals in post-operative pain management is that the hospital accreditation was to be included in the national pain management protocol by TASP (2011), along with efforts to adopt a multi-modal approach to pain management. These guidelines apply a biopsychosocial perspective to pain management. Recognizing the importance of making a commitment to a broad response to pain beyond a strictly functional one, however, will aid in achieving the goal of effective pain management, and promote the movement toward approaching person-centered care. The achievement of person-centered care in Thai hospitals within post-operative pain management should involve patients and other professionals (i.e., physicians, pharmacists, and physiotherapists) in the recovery phases. Further, the nurses must function collaboratively with other professionals within a multidisciplinary team. Because the nurses play a key role in this process, there is a need for them to improve their own practices, including nursing skills in pain assessment and pain management in relation to the field of practice-based approaches in terms of the knowledge and skills required for post-operative pain management that are necessary in nursing science. Nursing science is a global academic field in the education of nurses to prepare them to become healthcare professionals who work in both hospital and community settings. Also, nursing science must also be recognized for its contribution to the health and welfare of all individuals in society. It is therefore important to bring about a change in nursing practices that in turn will influence the protocol process, the cost of providing healthcare, and improvement trends in the surgical field, such as decreasing complications, decreasing the average length of stay in hospital, and meeting the increasing demands of the flexibility and efficiency that patients need.
Strengths and limitations

This thesis has both strengths and limitations. Generally, the findings of a qualitative study cannot be generalized, instead, its purpose is to provide a deep understanding of a particular phenomenon through research; however, the importance of some patterns can be revealed. For instance, these qualitative studies can help to understand the nursing practice in pain management in a similar context to that of this study. This thesis employed a variety of qualitative research methods to present a multidimensional view of the nursing professionals’ pain management practice. These four different qualitative research approaches allowed the research outcomes to be achieved and provided a deep understanding of the knowledge within each strategy for each of the studies.

Participants: Throughout each of the studies, the participants were mostly women, because women dominate nursing positions within the public hospital. The sampling strategies employed in the studies used a theoretical sampling method based on Benner’s nursing theory (2001), and throughout the thesis, the aim was to include participants who had been recruited through contact with the head nurse in three surgical wards.

Further, within the data collection process and the data analysis, the integrity of the data was ensured in relation to consideration of data saturation and in obtaining rich data (Studies I, III). In addition to employing a purposive sampling strategy, we determined the optimum number of participants throughout the studies by continuing the recruitment of participants until the point where no new content came up in the interviews.

In the FGDs (Study I), nurse professionals were represented to allow the nurses’ perspective on how to deal with pain perceptions and pain management in a surgical ward to emerge. We appreciated that FGDs (Barbour, & Kitzinger, 1999) gave us access to even more participants in relation to the purpose of this study. While this method of data collection might be affected by the dominance of individual members within the group, we took steps to prevent the risk of member domination during FGDs. In our FGDs, all participants were encouraged to
speak throughout the procedure. Although it was clear in the trans-
cripts and the field notes that some participants were more vocal than
others, all participants regularly contributed to the discussion. The
participants who were recruited to the study were grouped together
with those of the same competency levels for each focus group. Focus
Group 1 (G1) comprised those nurses with novice skill levels of prac-
tice. Each of groups 2 (G2) and 3 (G3) included advanced beginners,
or were proficient or expert nurses.

In addition, Study II was strengthened by the ethnographic approach
that was applied in this study with regard to cultural appropriateness,
as well as the process of data collection that was completed in accord-
ance with Spradley (1979, 1980). The ethnographic approach was
used to illuminate the pain management strategy, while acknowledg-
ing that the nursing practice is shaped by the specific Thai context in
which it occurs. The 100 hours of observations might be a limitation
of the ethnographic approach, as it has been previously identified and
debated that effective observation research should include at least 200
hours of observation in order to gain the most value (Polit, & Beck,
2014). However, my experience as a nursing teacher with experience
of working in a surgical ward may also have contributed to greater
depth of the observations and interviews with participants as it made
me suitable for conducting the data collection. Furthermore, the many
similarities observed between the experiences of the participants in
this study demonstrate that the data collected provided rich material
for the analysis process.

Further, Study III was focused on describing Thai nurses’ experiences
of pain assessment. The process of analysis employed, according to
Graneheim and Lundman (2004), easily identifies aspects of the tex-
tual content of both the manifest and latent contents. Content analysis
was suitable for the unique needs of the aim of the study (Marsh, &

The CIT method was applied in the fourth study. The data collection
was designed to catch a series of participants’ interviews focusing on
nursing approaches to pain management techniques. This analysis pro-
cess is considered suitable for analyzing critical incidents, which typi-
cally comprise approximately 50 to 100 incidents and involve inter-
views with a small number of people, as each person can describe
multiple incidents (Flanagan, 1954; Polit & Beck, 2014). In Study IV,
nine participants were recruited. For reasons of time issues, the subsequent interviews were conducted every week over a 5-week period. Because, the data collection process related to nurses’ experience, in order for them to remember more details and add to the richness of the situations, it was reasonable to follow the nurses every week. A total of 69 critical incidents were explored in this study, which is well within the recommended amount. Further, the trustworthiness principles were considered with great care and caution in using the CIT method (Gremler, 2004; Schluter, Seaton, & Chaboyer, 2008), addressing such issues as dependability and confirmability by being aware of the consistency of each incident. Because each incident could have been misinterpreted or misunderstood, these considerations were discussed fully among all of the authors.

The findings of the qualitative studies (Studies I–IV) referred to in this thesis might be particularly applicable to nurses in any clinical situations, therefore they may also benefit other healthcare providers working within the same context. All of the collected data were gathered in a Thailand context in the Thai language. This is a sensitive step that was aided by the language perspective where researchers were very familiar with the existing data. We have reduced the possibility of bias by involving a co-researcher who has expertise in qualitative methodology in the Thai nursing context. She read all of the Thai transcriptions and their translations to English, and took part in discussions afterwards with a team of researchers until an agreement was reached in relation to the resulting presentation.
Conclusions and implications

The findings have shown that the combination of two nursing approaches comprise mee num jai as an element of Thai-ness and engagement and the availability of pain medication and nursing care. These should be encountered as empowerment that is suitable in nursing care and in providing continuity in pain management practices. Understanding the actual nursing care practices in pain management that influence effective pain management from the nurses’ viewpoints will contribute to a body of knowledge of nursing practice in order to increase the positive patient outcomes and promote the quality of nursing care. All findings identified the importance of pain management in the surgical field, and illustrated how this care could be improved more comprehensively by nurses’ explorations in evaluating pain management. Therefore, nurses should be aware of individualized pain management strategies, and these must be added to their routine practice and to improve their standard guidelines.

An implication of all of the findings of the thesis is how it profits knowledge in relation to culturally sensitive factors that influence the nurses’ post-operative pain management. The nurses can contribute to thinking together in order to seek ways to effectively manage patients’ pain in the complex surgical ward environment. They can provide a bridge between the culture of nursing and the beliefs and practices that make up nursing systems in pain management and patients’ value systems. The findings suggest that the challenges of organizing the nurse’s pain management should move towards person-centered care, particularly because the pain management that was conducted relied on the nurses’ own experiences and individual anecdotal engagement rather than shared evidence-based collegial strategies. These findings could potentially have implications for a shift towards person-centered care as it becomes of greater importance. In relation to the nursing patterns, these require further investigation to understand how the level of competency of individual nurses can be developed.

In this way, the challenge will be to set priorities in relation to improving policies and/or protocols related to post-operative care, as far as possible. Therefore, the ultimate goal could potentially be to contribute to best practice policies and/or protocols, to help nurses to assess pain and to provide the most appropriate treatment for their patients’
pain. A shift towards person-centered care also entails collegial strategies that endorses nurses’ competencies and nurses’ skills so that they can constantly have their attention directed towards the individual patient’s specific needs.

Future studies

Future studies need to focus on beginning to contribute knowledge to education programs in pain management aimed at increasing the skills among professional nurses. In addition, the studies should be evaluated in terms of nurses’ competencies, and the feasibility and effects of an educational intervention on nursing in pain management in surgical wards.

Studies focused on nursing competency and nursing skill could be of importance to an education program, especially those elements aimed at pain assessment and pain management that are appropriate within person-centered care.

The patient-evidence paradigm revealed here addresses the issues presented in this thesis along with the patient perspective to ensure that nursing science learns and reflects on the basis of providing care from the patient perspective. Further, considering the learning process from the patients’ experiences requires further study in order to explore person-centered care from the perspective of both patients and healthcare providers.

This thesis showed that it is important to recognize that nurse-patient communication is a complex communication, and that it should integrate ways of communicating that improve the effectiveness of that communication, which will in turn lead to a better quality of care. In addition, the relationship between perception of pain and pain management due to the culture of nursing, along with the values, beliefs and knowledge among the nursing profession, needs to be investigated in further studies.
Leaving the field

Looking back, as I mentioned, this thesis involved an intense period of conducting this research. Inside, I embraced that. I realize how much that I myself have in common with the novice who is working towards developing expert competencies. I had not only gone through the requisite training required in the doctoral program, but I had actually learned and been given the chance to manage a study and setting by myself. I even entered the field of nurses’ pain management. I started myself as a novice in both qualitative methodology, nursing theory and also working with science in an international environment.

There are things I would have done and learned differently, knowing what I know today. As a starting point, I think that the nurses who managed the day-to-day duties should be considered experts in how to improve the quality of care provided to patients in pain. For instance, it became evident that nurses can make valuable contributions to care above and beyond those outlined in the guidelines and protocols if their knowledge of typical non-pharmacological approaches are used in the appropriate and effective control of mild to moderate pain. While I learned to know about their practices, they probably also went through a process of evolution within their own competencies since I first met them. As a doctoral student, I have learned both from my successes as well as when I had probably let myself down, flawed and defeated at some points along the road, but in the end it has broadened my knowledge and insight into what pain management practice is and how I attempted to present it in this thesis.

My journey along this learning process has given me the ability to qualify to fill roles as both a scholar and a researcher in the doctoral program for the purpose of making a unique contribution towards achieving the collaboration of both national and international research. Within qualitative research studies, it is important to discuss with our team researchers the implications of the principles of trustworthiness that have been suggested by Lincoln and Guba (1985, 1999). This thesis has discussed the trustworthiness principles, which comprise: credibility, transferability, dependability, and confirmability in each study. The studies involved the contribution of co-researchers that included two researchers from Sweden and one of researcher from Thailand to ensure that all of the original transcriptions were reviewed and to con-
firm as accuracy of their translation from Thai to English by a co-researcher from Thailand. Furthermore, we engaged in comprehensive discussions until we reached data saturation and to agree on the appropriate means of analyzing and representing the findings for each study.

As I mentioned, my role as researcher involved all the aspects of the process of conducting qualitative research, and this methodology was employed in 100% of the data collection. For each study, I wrote the first draft of the manuscript. Within the data analysis and revisions, it was important that the intellectual content was reviewed and discussed until the final manuscript was approved by all authors. While the progress of my competency as a researcher is evident within Papers I and III, it was more suitable and beneficial to report the findings in relation to a Thai context and also to present it where it would be easier for Thai nurses to access and read, therefore, this paper was published in the journal of the Thailand Nursing and Midwifery Council. In Study I, I was a novice in conducting the qualitative research. I see a clear progress in my understanding of the research, in my interpretation of the findings and in how I presented them, which is apparent in my leaning journey from paper one to writing up the dissertation. However, whenever any issues concerned me along the way, I was able to engage in several discussions with the co-authors at each step. In Study II, I was able to improve the qualitative approach in what was conducted as an ethnography approach. I was successful in publishing the findings of this study in a high quality journal. For Studies II and IV, these manuscripts have currently been submitted to the journal and have qualified as being suitable quality for publication. Therefore, I am also proud to have been able to move toward becoming a competent researcher.
Patienters återhämtning efter operationer är en av de viktigaste hälsoprocesser i planerad sjukhusvård. Det har en direkt inverkan på välfärd och välfärdsystem eftersom adekvat rehabilitering möjliggör återgång till arbets- och vardagsliv samt att patienter återfår sittvälbefinnande. Vad sjuksköterskor gör i den första perioden efter operationen gällande smärtlindring är avgörande för att dessa hälsoprocesser snabbt ska komma igång. I denna avhandling har sjuksköterskor arbete med postoperativ smärtbehandling efter planerad bukkirurgi undersöks.

Projektet har tillämpat kvalitativa metoder där sjuksköterskor uppfattningar, kultur och arbete med patienters smärtbehandling har studerats på ett sjukhus i centrala Bangkok. Med hjälp av observationer, fokusgrupps och djupintervyuer och insamlandet av kritiska händelser har frågan undersöks. Sammanlagt genomfördes 100 timmar observationer, 39 intervjuer och 69 beskrivningar av kritiska händelser.

Resultaten visar att även om det finns en strategi för smärtlindring så är dess innehåll mycket komplex och inrymmer långa ledtider mellan att bedöma patienters smärta till sjuksköterskors behandling av smärtan. Dessutom visar resultatet att sjuksköterskor arbetar i ett patientbevisnings paradigm, där patientens uttryck för smärta dubbel- och tripel kontrolleras genom poängsättning, dokumentation och bekräftelse av dessa kontroller från en tredje part. Till detta ska läggas en kulturell aspekt där sjuksköterskornas uppfattning av smärta vilar på deras egna erfarenheter och en kultur där sjuksköterskor ofta erbjuder varandra praktisk hjälp i akuta situationer, men sällan diskuterar evidensbaserade strategier tillsammans. När sjuksköterskorna ombads beskriva framgångsrika händelser av smärtlindringsarbete var det deras eget engagemang för patienten samt tillgång till tid, rum och behandlingsalternativ som ansågs vara viktiga för en lyckosam behandling av patienters smärta.
Slutsatserna som dras är att de utmaningarna som finns i sjuksköters-kors smärtlindringarbete ska förstås i dess plats i en funktionell rutino-rionterad organisation, där var en fokuserar på sitt, men kanske inte alltid på patienten. Utvecklandet av en mer personcentrerad vård före-slås vara gynnsam för det postoperativa smärtbehandlingsarbetet. Slut-satsen är också att man bör öka medvetenheten om de kulturella fak- torerna som spelar in i det postoperativ smärtbehandlings arbetet. Adekvata evidensbaserade metoder för smärtbedömning och effektivt patientcentrerat smärtbehandlings arbete av patienters smärta skapas genom att sjuksköterskor ges handlingsutrymme att utveckla evidens-baserade terapeutiska och professionella strategier inom personcentre-rad vård. Sjuksköterskor arbete med patienters postoperativa smärta och dess betydelse för hälsoprocesser hos patienter såsom tidig åter-hämtning och återfående välbefinnande och återgång till ett arbets- och vardagsliv innehåller således en central välfärdsaspekt. Denna av-handling har belyst och gett förslag på konkreta hälso- och välfärdsförbättringar som kan göras inom ramen för detta.
การฟื้นหายหลังผ่าตัดของผู้ป่วย เป็นกระบวนการทางด้านสุขภาพที่สำคัญของแผนการดูแลสุขภาพในโรงพยาบาล และมีผลกระทบโดยตรงต่อสวัสดิภาพและระบบสวัสดิการ สิ่งที่พบบุบบิดต่อผู้ป่วยในระยะแรกหลังการผ่าตัดนั้นมีความสำคัญอย่างสูง ดูญรูปที่พบบิดนั้นตั้งคำถามเกี่ยวกับจัดการความปวดหลังผ่าตัดของพยาบาลในระหว่างการปฏิบัติงาน

โครงการนี้ใช้วิธีการวิจัยเชิงคุณภาพในการศึกษาการจัดการความปวดในบริบทของวัฒนธรรมท้องถิ่นและการปฏิบัติงานเป็นประจำ โดยการสังเกต (Observations) การสนทนากลุ่ม (Focus Groups) การสัมภาษณ์ลึก (In-depth interviews) และการสัมภาษณ์เกี่ยวกับสถานการณ์สำคัญที่เกิดขึ้นกับพยาบาล (Critical Incident Interview) คัดเลือกผู้ให้ข้อมูลจากหอผู้ป่วยศัลยกรรมในโรงพยาบาลของรัฐเขตกรุงเทพมหานคร โดยรวมแล้วใช้วิธีการสังเกต 100 ชั่วโมง สัมภาษณ์พยาบาล 39 ครั้งและรวบรวม 69 สถานการณ์สำคัญ ซึ่งมีความสัมพันธ์ในการจัดการความปวดของพยาบาลในหอผู้ป่วยศัลยกรรม วิเคราะห์ข้อมูลโดยใช้หลักการของการวิจัยเชิงคุณภาพ

ผลการวิจัยแสดงให้เห็นว่า เงื่อนไขเหล่านี้มีการกำหนดวิธีการจัดการความปวดไว้อย่างชัดเจนแต่การปฏิบัติตามระบบของพยาบาลในการจัดการความปวดมีความขัดช่อง รวมทั้งพบว่าระยะเวลาระหว่างการประเมินความปวดกับการจัดการความปวดของพยาบาลใช้เวลาค่อนข้างนาน ยังไงก็ว่าไม่พยาบาลถูกเรียก (Caught in) รวมทั้งต้องตรวจสอบ 2-3 ครั้ง โดยการวัดและบันทึกอาการ เพื่อเป็นหลักฐานว่าผู้ป่วยมีความปวดแล้วนำไปยื่นบันทึกบุคคลที่สาม ซึ่งก็ถูกที่เกิดขึ้นเนื่องจากวัฒนธรรมของการจัดการความปวด

วิชาชีพที่ว่า พยาบาลจะช่วยเหลือกันและกันในสถานการณ์ว่างด่วน แต่พบไม่มีการพูดคุยหรือแลกเปลี่ยนเกี่ยวกับพฤติกรรมที่ใช้ในเหตุการณ์ดังกล่าว อย่างไรก็ตาม พยาบาลได้
ขอสรุปจากการศึกษาระดับนี้ คือความท้าทายในการจัดการความปวดของพยาบาล ต้องเปลี่ยนแปลงจากการทำงานตามหน้าที่เป็นการดูแลโดยยึดบุคคลเป็นศูนย์กลาง นอกจากนี้ยังมีข้อสรุปว่าปัจจัยที่ไวต่อวัฒนธรรมมีอิทธิพลต่อการจัดการความปวดหลังผ่าตัด ดังนั้นการประเมินและการจัดการความปวดที่พอเพียง เพื่อส่งเสริมให้การประเมินและการปรับปรุงการจัดการความปวดให้เป็นไปอย่างมีประสิทธิภาพ ซึ่งจะเป็นการเปิดโอกาสให้พยาบาลได้ปรับปรุงกลยุทธ์ในการจัดการความปวด นับว่าเป็นสิ่งที่สำคัญที่ต้องพิจารณา การจัดการความปวดหลังการผ่าตัดของพยาบาล มีผลกระทบต่อกระบวนการทางด้านสุขภาพของผู้ป่วย อย่างแท้จริงเนื่องจากเป็นสวัสดิภาพของผู้ป่วย
Acknowledgements

This dissertation is a result of a long and fulfilling journey as much as an opportunity to learn a lot. It would not have been possible if I did not have the support of many different people and organizations.

Firstly, I would like to thank the School of Health, Care and Social Welfare, Mälardalen University, Eskilstuna-Västerås, Sweden, and the School of Nursing, Rangsit University, Thailand, who provided a grant to support the research.

I would like to express my sincere gratitude to my advisors, Prof. Henrik Eriksson, Dr. Monir Mazaheri and Assistant professor Ampaporn Namvongprom for their continuous support of my Ph.D. study and related research, for their patience, motivation, and immense knowledge. Their guidance helped me in all the time of research and writing of this thesis. I could not have imagined having a better advisor and mentor for my Ph.D. study.

I would also like to thank all the nurses who participated in these studies and to thank Chirapa Hongtrakul, who was the head of nursing department, and my friend, Thitinun Watthanachi, in the public hospital in Thailand, for all of their support, help and dedication in doing the data collection.

I would like to thank my family: my father and my brothers and nephews for supporting me spiritually throughout the writing of this dissertation and my life in general. To my friend: Dr. Petchpong Kumjornkijjakarn who was director of Eruwan Rescue Center and surgeon. Thank you for all of your love, support, help, and encouragement.

I would like to express my deepest gratitude to Associate Professor Walaiporn Nantsupawat who provided excellent guidance in the collection of the ethnographic material.
My sincere thanks also goes to my friends in the School of Health, Care and Social Welfare, Mälardalen University: Rose-Marie Johansson-Pajala, Anchalee Thitasan, Annelie Gusdal, Atcharawadee Sriyasak, Jiraporn Choowong, Kulnaree Hanpatchaiyakul, Lena Talman, Nuttapol Yuwanich, Pornpun Manasatchakun, and Weerati Pongthippat who provided helpful discussion in my seminars, and Dr. Viktoria Zander who was my room officemate, who were supportive in spiritual matters as well. And Dr. Jessica Holmgren, Dr. Sara Cederbom and Dr. Anne Carnwall whose were the best friend to advise the first time when I am staying in Sweden and also supportive in spiritual together.

Last but not the least, thanks also to all of my Thai friends and Ph.D. students, and to my friend, Antoine Leuzy, who was my classmate from the Department of NVS, Centre for Alzheimer Research, Division of Translational Alzheimer Neurobiology, Karolinska Institutet, who has the patience of a saint. Thank you for all of your support, help and dedication in the preparation and presentation of my dissertation, and for giving me encouragement.
References


