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## **Nurses' Perceptions of the Pharmacological Management of Acute Pain Experienced by Patients Hospitalised in the General Ward Setting**

Susan Slatyer  
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**NURSES' PERCEPTIONS OF THE PHARMACOLOGICAL MANAGEMENT  
OF ACUTE PAIN EXPERIENCED BY PATIENTS HOSPITALISED IN THE  
GENERAL WARD SETTING**

**Susan Slatyer  
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**This thesis is presented in fulfilment of the requirements for the degree of Bachelor  
of Nursing (Honours)**

**Faculty of Computing, Health and Science  
Edith Cowan University**

**January, 2005.**

## USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.

## ABSTRACT

This study explored and described the experiences and perceptions of nurses managing acute pain in a Western Australian public hospital. The focus was nurses practising in the general ward setting and using current prescribing guidelines. The aim of this research was to explore nurses' attitudes, beliefs and knowledge about pain and pain pharmacology and how this practice setting influences efficient pain management. Qualitative methodology was selected for its ability to explore complex issues in order to build nursing knowledge and guide nursing practice. This study used a descriptive, exploratory design based on a phenomenological approach. The sample comprised ten Registered Nurses who were working on general surgical wards in an acute care public hospital. Data were collected from tape recorded semi-structured interviews. Analysis encompassed transcription, coding and categorising of data that enabled concepts and themes to emerge. Nurses' attitudes, beliefs and knowledge were examined. Nurses were found to accept the subjectivity of pain, to believe patients' self reports of pain and to be generally supportive of numerical pain rating scales. Elderly patients and patients with a history of intravenous drug use were identified as groups that might be disadvantaged in regard to pain management in the general ward setting. Nurses' roles as patient advocates and independent managers of pain at the bedside were highlighted and the lack of consistent pain management across nursing shifts was identified as a problem that is potentially widespread. Continuing difficulties were acknowledged when analgesic medications were prescribed to be given as required, rather than on fixed time regimes. In recognition of this, nurses were supportive of the administration of regular analgesia. The hospital's Acute Pain Service was perceived to be a valuable resource and non-pharmacological pain management strategies were recognised as an effective adjunct to analgesic medication and important to nurses' independent practice. Effective pain management is a humane response to suffering, as well as being cost-effective for the health system in terms of reducing inpatient complications. This study provided an indication of current issues in acute pain management from the perspective of nurses in the ward setting. Implications for clinical practice and directions for future research are provided.

## DECLARATION

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# CHAPTER 1

## INTRODUCTION

### Background

Advances in the treatment of pain have given clinicians the knowledge and resources to provide effective pain relief to the majority of all people experiencing pain, yet hospitalised patients continue to suffer unnecessarily (McCaffery & Pasero, 1999). Progress in the understanding of pain and its pharmacological management has led to the development of internationally recognised guidelines for the clinical management of pain (Dalton & Youngblood, 2000). However this does not appear to have translated to the provision of better pain relief for hospitalised patients (McCaffery & Pasero, 1999).

In their landmark study, Marks and Sachar (1973) described the under-management of pain in 37 postoperative patients, finding that 73% remained in moderate to severe distress from pain. Numerous studies have documented continuing under-management of pain with hospitalised patients reporting high levels of pain (Carr, 1990; Carr & Thomas 1997; Cohen, 1980; Paice, Mahon & Faut-Callahan, 1991; Ward & Gordon, 1996; Watt-Watson, Stevens, Garfinkel, Streiner & Gallop, 2001). Twenty seven years after Marks and Sachars' report, a study of 185 elective surgical patients reported that 88% had experienced moderate to severe pain in the first 24 hours postoperatively and 41% claimed to have unbearable pain at some time (Svensson, Sjorstrom & Haljamae, 2000). The authors of this study claimed that despite improvements in pain management, the probability of moderate to severe postoperative pain remained high in the clinical setting. Evidence of under-management of pain is extensive in the international literature and a relatively recent study suggested that a similar state of affairs exists in Australia. Yates et al. (1998) sampled 205 medical-surgical inpatients at a major Brisbane hospital and found that 78.6% had experienced pain in the previous 24 hours and 33.5% described their pain as "... excruciating, horrible or distressing..." (p. 524). Patients reported that pain affected their sleep, mobility and general well being.

Nurses are often the first point of contact for the hospitalised patient experiencing pain and are recognised as having a major responsibility to assess and intervene to provide pain relief (Watt-Watson et al., 2001). Available treatment options encompass pharmacological and non-pharmacological interventions, however the pharmacological approach (i.e., the administration of analgesic medication) is regarded as the cornerstone of pain treatment (McCaffery & Pasero, 1999). With reference to the doctor's medication order, the role of the Registered Nurse in the pharmacological management of pain encompasses assessment of the patient's individual pain experience, and then selection of the most appropriate analgesic, titration of the medication dosage and timing of the administration of analgesia to be effective (McCaffery & Pasero, 1999).

Current guidelines for the pharmacological management of pain direct clinicians to select and combine analgesics to be administered according to the patient's individual needs (Dalton & Youngblood, 2000). When pain is predictable, the physician may prescribe analgesia to be given at regular predetermined intervals (McCaffery & Pasero, 1999). However, the unpredictability of pain and analgesic effectiveness demands flexibility in analgesic administration, so there is also provision for medication to be prescribed to be administered as needed by the patient. In these circumstances, the physician will prescribe the medication to be given "prn", which Galbraith, Bullock and Manias (2001) explain is a contraction of the Latin term *pro re nata*, meaning whenever necessary. McCaffery and Pasero (1999) recommended that prn dosing be used to facilitate a preventative approach to effective pain management, with analgesia given before the previous dose wears off. In recognition of the need for flexibility in clinical pain management, in the general ward it is the bedside nurse who is best placed to take the central role of assessing the patient's pain experience and administering analgesia appropriately within the medically prescribed framework (McCaffery & Pasero, 1999). Indeed, many authors recognise nurses' critical role in managing pain in hospitalised patients (Closs, 1990; Ferrell, McCaffery & Grant, 1991; Mac Lellan, 1997). Australian nurses have also highlighted the crucial role they play in pain management (Nash et al., 1999).

Analgesic prescription and administration in Western Australian hospitals must comply with the Poisons Act 1964 and Poisons Regulations 1965, which specify the conditions of supply of medication for therapeutic use (Galbraith et al., 2001). This legislation is interpreted by hospitals to provide practice guidelines for nurses. In

compliance with the legislation, the study hospital's nursing practice guidelines require that each inpatient have a medication chart onto which the patient's doctor clearly writes orders for the administration of the patient's medication. This serves as the doctor's prescription and the nurse's authority to administer. When a nurse selects and prepares medication for administration, the medication name, dose, route of administration, time and frequency of administration must comply with the doctor's order.

Nurses must practice within legislative requirements and hospital protocol. In the context of current pharmacological approaches to pain relief, efficient pain management is dependent on prescribing practice and the ability of the nurse to practice independently within a medically prescribed analgesic framework to administer safe and effective pain relief. Marks and Sachar (1973) implied nurses' role in the under-management of pain when they commented that the amount of analgesia administered (presumably by nurses) was "substantially" less than prescribed (p. 175). Linking the under-management of pain to nurses' practice, prompts enquiry into the extent to which nurses integrate understanding of pain and current pharmacological approaches and how nurses select and implement strategies for pain relief for their general ward patients.

### **Significance**

Controlling pain is cost effective. Unrelieved pain has been linked to a range of adverse physical outcomes. Nagman (cited in Carr, 1990, p. 90) linked postoperative pain to delayed recovery, primarily because pain is exacerbated by movement and promotes immobility and the development of pressure sores, deep vein thrombosis, hypostatic pneumonia, urinary retention and constipation. Ross and Perumbeti (1988) reported that patients whose pain was managed by more effective modes of analgesia, such as epidural and patient-controlled intravenous analgesia, were discharged from hospital 2 - 4 days sooner than those being given intramuscular analgesia as required. Apart from the personal costs of unrelieved suffering, delayed recovery results in lengthened inpatient stays putting pressure on an already strained health system.

Efficient pain management is a humane response to suffering. In addition, there is an ethical requirement for nurses to provide competent care (Parkes, 1983). Ferrell et al. (1991) reported that the majority of nurses they surveyed felt an ethical/professional conflict about inadequate pain relief and the problem of under-medication. Understanding the perceptions and experiences of nurses managing acute pain in the

general ward is essential to improve the quality of nursing care and to nurture the clinical leaders of the future.

This study will help explain the findings of other research and provide a greater understanding of why the literature documents evidence of nurses' deficits in pain management practice. Much of the enquiry into nurses' knowledge and attitudes has been conducted using instruments that quantify deficits. Arguably, these approaches have limited the opportunity for those living the problem to be heard. This study was designed to give nurses a voice. It was considered that directions for improving the management of pain would be more effective if guided by the perceptions of those who practice in the day-to-day reality of today's health system. The focus of this study was to provide a greater understanding of how nurses in Western Australia perceived the pharmacological management of acute pain within the current prescribing guidelines and in the hospital general ward setting. Additionally, it was expected that issues nurses sensed facilitated or constrained efficient pain management might be brought into focus. As such, this study was to provide a basis for interventions that might address barriers to efficient pain management in the general ward, and support and develop nurses' pain management skills.

### **Research Objectives**

The aim of this study was to explore nurses' experiences and perceptions about managing acute pain in hospitalised patients in the general ward setting. This enquiry focused on nurses' understanding of factors that influence their pharmacological pain management and how strategies to relieve acute pain are selected and implemented in this context. Additionally, nurses' perceptions of constraints to efficient pain management were explored.

The specific objectives were to explore and describe:

Nurses' attitudes, beliefs and knowledge about acute pain and pain pharmacology in hospitalised patients.

Nurses' perceptions about the realities of managing acute pain in the general ward setting of a Western Australian public hospital.

Nurses' selection of analgesics from an overarching medically prescribed framework. The choice of dose and the frequency of administration for patients experiencing acute pain.

Western Australian nurses' perceptions of the types of interventions that would develop skills in the management of acute pain in the general ward setting.

## **CHAPTER 2**

### **LITERATURE REVIEW**

Chapter Two examines published literature related to current definitions of pain and guidelines for the management of pain, the prevalence of pain under-management in hospitalised patients and barriers to efficient pain management. Databases used to locate relevant literature were CINAHL and Medline from 1973 to 2003.

#### **Pain Experienced by Hospitalised Patients**

McCaffery and Pasero (1999) choose to use the definition of pain that has been adopted by the American Pain Society and the International Association for the Study of Pain, which they consider the most widely accepted, "... Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage ..." (p. 16). In their view, pain can be classified as "acute", "cancer" or "chronic non-malignant". Acute pain is either somatic (arising from bone, joint, muscle, skin), visceral (arising from internal organs) or nociceptive, which is stimuli that damages or has the potential to damage tissue and includes surgical pain from traumatised structures (McCaffery & Pasero, 1999). Acute pain has a relatively brief duration, subsiding as healing occurs. In contrast, McCaffery and Pasero (1999) recognise that cancer pain and chronic non-malignant pain may have elements of both nociceptive and neuropathic pain, which arises from abnormal nerve transmission. Davis (2000) discussed three types of pain; pain from injury, which included surgery, and acute and chronic pain from disease. In his view, pain from injury and acute pain from disease are similar in that both are localised to the area in or near the affected organ, related to damage, stretching or pressure on tissues and can be intense causing shock and severe incapacitation (Davis, 2000). When an acute disease is not cured pain may become chronic, which Davis (2000) defined as persisting beyond three months. He commented on the meaning that sufferers attach to pain, acknowledging that the site and intensity of acute pain may lead to a perceived threat to life whereas chronic pain tends to be more associated with life limiting conditions and a threat to quality of life. McCaffery and Pasero (1999) also differentiated acute pain from chronic non-malignant

pain on the basis of treatment, noting that efforts to treat acute pain are likely to be aggressive with opioid analgesia used more freely. This study focused on the acute component of pain that results from the normal processing of stimuli from damaged or potentially damaged structures and includes pain from injury, surgery and acute disease.

### **Pharmacological Management of Pain**

World Health Organisation (WHO) guidelines, known as the analgesic ladder, represent the current level of knowledge about the pharmacological management of pain and are considered as the standard approach for any pain (Dalton & Youngblood, 2000). These guidelines provide for the selection of analgesic medication from three classes of drugs that are administered alone or in combination, according to the intensity of pain being experienced (Dalton & Youngblood, 2000). These classes of analgesics are opioids, non-opioids and adjuvants. Opioids refer to morphine and morphine-like analgesics (e.g., codeine and oxycodone) that act on the opioid receptors in the central nervous system. Non-opioids include paracetamol and non-steroidal anti-inflammatory drugs (NSAIDS) (e.g., naproxen and ibuprofen). Adjuvants (e.g., anti-depressants and anti-convulsants) are a diverse group of drugs that are primarily used for other conditions, but have been found to be useful for the treatment of neuropathic pain (McCaffery & Pasero, 1999).

Application of the analgesic ladder involves a steplike progression of analgesics when pain persists or increases (Dalton & Youngblood, 2000).

Step 1: non-opioid with/without an adjuvant.

Step 2: opioid for mild to moderate pain (e.g. codeine, oxycodone) with/without a non-opioid and with/without an adjuvant drug.

Step 3: opioid for strong pain (e.g. morphine) with/without non-opioid and with/without an adjuvant.

Each step of the ladder guides the selection of analgesics based on pain intensity and builds on the previous step by adding to rather than replacing an analgesic that does not completely relieve pain (McCaffery & Pasero, 1999).



## **Under-management of Pain**

Many studies that have reported the prevalence of pain have also found that despite patients being in pain, less analgesia has been administered than ordered (Closs, 1990; Clarke et al., 1996; Mac Lellan, 1997; Marks & Sachar, 1973; Paice et al., 1991). Cohen (1980) found that only 4 of 40 patients with marked distress were given analgesia equivalent to that ordered. Carr (1990) examined 21 surgical patients' preoperative expectations and postoperative experiences of pain and judged that patients experienced significant pain and were under-medicated despite the availability of analgesia. This quantitative study surveyed patients, correlated pain scores with analgesia dosing and relied on patient recall to supply information about nursing activities. The investigator found little correlation between administration of analgesia and pain relief, noting that doses were relatively small with no-one receiving the number of doses allowable according to doctor's prescription (Carr, 1990). Ferrell et al. (1991) found that 76% of the 53 nurses they surveyed had reported an ethical/professional conflict from "... the feeling that the patient did not get adequate pain relief ..." (p. 294). When Mac Lellan (1997) reviewed medical and nursing notes, she reported between 4% and 41% of the amount of analgesic allowable was administered. More recently, in a Canadian study of 225 patients and 104 nurses, patients reported moderate to severe pain yet an audit of patient medication charts revealed that only 47% of prescribed analgesia had been administered (Watt-Watson et al., 2001).

In 1998 an Australian quantitative study reported that 84.5% of 205 patients sampled mentioned that pain management strategies had been used, leading to the disturbing conclusion that 15.8% did not perceive the use of any pain management strategy (Yates et al., 1998). Heath (1998) was able to comment on the administration of analgesia when she explored nurses' decision-making when managing pain. She found that nurses tended to under-administer opioids, with more than half reluctant to give an increased dose even though the previous dose was ineffective.

## **Barriers to Effective Pain Management**

Research exploring the persistent under-management of pain in the general ward setting has described various factors at work. Broadly, barriers to effective pain management can be discussed as they relate to the patient, the caregiver or the organisational structure that encompasses both.

### *The Role of the Patient*

Comparisons of patients' preoperative expectations with postoperative experiences of pain have shown that patients expect to have pain, yet the intensity of pain is often underestimated (Carr, 1990; Carr & Thomas, 1997). The impact that patients' expectations of pain have on subsequent pain management is unclear. Mac Lellan (1997) suggested that having an expectation of pain can lead to less reporting of pain and less demand for analgesia, whilst Carr and Thomas (1997) believed that the underestimation of pain leads to ineffective pain control due to a lack of information. Ward and Gordon (1996) reported patients in their study had a high expectation of experiencing pain and a low expectation of pain relief.

Research investigating pain management has demonstrated reluctance by patients to report pain. Carr (1990) observed this when patients rated their postoperative pain intensity as severe on a written pain assessment tool, yet made no verbal request for analgesia. Carr and Thomas (1997) linked this reluctance to a desire not to bother nurses with a request for analgesia or be a nuisance to nurses, whom patients perceived to be busy. This premise was also advanced by Manias, Botti and Bucknall (2002) when they observed nurses managing pain in a Melbourne hospital. They noted that the effect of multiple interruptions to nurses was that patients tended not to ask for pain relief, but rather were observed to wait to be asked about pain. Nurses have also reported a perception that patients' reluctance to report pain is a major barrier to effective pain management (Clarke et al., 1996; Vortherms, Ryan & Ward, 1992; Brunier, Carson & Harrison, 1995). Fifty seven percent of the nurses surveyed by Ferrell et al. (1991) reported encountering ethical dilemmas arising from knowing that a patient is in pain, when the patient would not admit it.

In an interesting paradox, it has been suggested that nurses may expect patients to communicate their need for analgesia, whilst patients expect the nurse to know when they require it (Carr, 1990; Vortherms et al., 1992; Watt-Watson et al., 2001). Additionally, nurses have identified patients' reluctance to take medication as a barrier to efficient pain management (Brunier et al., 1995; Clarke et al., 1996; Ferrell et al., 1991; Schafheutle, Cantrill & Noyce, 2000). Drayer, Henderson and Reidenberg (1999) asked patients in pain why they would not ask for more analgesia and found that responses were varied and included a fear of addiction and a desire to limit the other effects of the medication.

### ***The Role of the Nurse***

When Ferrell et al. (1991) explored clinical decision-making and pain management, nurses reported frequently being involved in decisions about the pharmacological management of pain. Nurses described making decisions about the presence and intensity of patients' pain, choosing which medication to administer and when to administer it, and the majority also described their role in contacting the patient's physician to discuss an increase in analgesia. Additionally, a third of nurses reported contacting the physician to discuss a change in the patient's pain, or a need to change analgesia. The authors of this study concluded that nurses were aware of the implications of such decisions, particularly in regard to the potential for physical harm from oversedation and respiratory depression, as well as psychological harm of unrelieved suffering and often experienced ethical and professional conflict.

Cohen's (1980) seminal study directly linked the under-management of pain to nurses' knowledge gaps and a failure to assess pain adequately. More recently it has been postulated that whilst prn dosing gives opportunity for patients to receive more analgesia, in reality it may be the reason that hospitalised patients continue to suffer pain, implying inadequacies in the central role of the nurse assessing pain and delivering pain relief (Carr & Thomas, 1997; Closs, 1990; Mac Lellan, 1997).

Studies that evaluate the role of nursing in the continuing under-management of pain have reported a range of inadequacies in pain assessment and knowledge about pain pharmacology. Several major themes have emerged.

#### ***Many Nurses do not have the Goal of Total Pain Relief***

Only 3.3% of the 121 nurses surveyed by Cohen (1980) administered analgesics in order to completely relieve pain, whilst 57.5% aimed to relieve "... as much pain as possible ..." and 38.3% aimed "... to relieve pain just enough to function ..." (p. 269). These findings have been reflected in later studies (Brunier et al., 1995; Poice et al., 1991; Schafheutle et al., 2001; Watt-Watson, 1987). In addition, the majority of nurses surveyed by Watt-Watson (1987) expected patients to increase their level of pain tolerance. In a recent Australian study, nurses were observed to question patients as to whether they were coping with the pain, and at least one participant verbalised an expectation that patients tolerate pain during specific activities (Manias et al., 2002). The implications of nurses' goals for pain relief became evident when Watt-Watson et al. (2001) correlated nurses' attitudes to patients' experience of pain management and

found that nurses whose goal was lower pain ratings for their patients, had patients who were more likely to report pain and have pain relief.

### *Inadequacies in Nurses' Assessments of Pain*

Watt-Watson (1987) cited the most difficult issue for nurses as "... judging intensity of pain and the real need for analgesics ..." (p. 208). Mac Lellan (1997) believed that the inherent flexibility of prn dosing might have caused patients to continue to suffer pain because it relies upon the patients' pain experience being accurately communicated to the nurse at the bedside. Indeed, inadequacies in the assessment of pain by nurses are widely documented and have emerged as a major barrier to pain management (Carr, 1990; Carr & Thomas, 1997; Cohen, 1980; Drayer et al., 1999; Paice et al., 1991; Schafheutle et al., 2000; Watt-Watson, 1987; Watt-Watson et al., 2001; Zalon, 1993).

The most striking theme that emerges from the literature is that nurses' assessments of pain intensity rarely correspond to patients' self-reports. Carr (1990) suggested reasons for the under-medication that she observed. However she did not observe nurses so could only hypothesise, suggesting that nurses underestimate pain and expect patients to verbalise their pain requirements. Zalon (1993) also investigated nurses' pain assessment in a quantitative study that correlated patient reports of pain intensity with assessments made by their assigned nurse. Manias et al. (2002) question this approach as possibly simplistic and one that may fall prey to the subjective nature of such scales, however Zalon's (1993) study reported significant discrepancies between patients' and nurses' ratings of the severity of patients' pain and has been widely referred to by other authors.

Inadequacies in pain assessment have been linked to a tendency for nurses to disbelieve their patients' self-reports of pain (Brunier et al., 1995; Ryan, Vortherms & Ward., 1994; Watt-Watson et al., 2001). Ferrell et al. (1991) reported that 22% of the nurses they studied experienced professional conflict because they were "... sometimes concerned that the pain is real ..." (p. 296) and only 45% regarded the patient's self-report of pain as the most influential factor in their assessment of pain. Nurses in this study described observing patients' activity and behaviour to assess pain. When Zalon (1993) noted large differences between nurses' and patients' pain assessments, she reported that often the nurse made comments disputing the reliability of patient self-report. Schafheutle et al. (2000) set out to determine barriers to efficient pain

management in a qualitative study that was strengthened by method triangulation. In that study nurses were found to regard patient behaviour as a more important indication of the intensity of the pain than a self-report.

Australian nurses have demonstrated similar views. Nurses have reported that they tend to give most weight to data collected by physical assessment (e.g., vital signs) when making pain management decisions and some nurses have expressed ambivalence about whether to believe patients' reports of pain (Nash et al., 1999). In 2001, 92% of Tasmanian nurses surveyed reported a belief that the patient is the best judge of his/her own pain intensity, yet 21% believed that some patients overestimate pain (Van Niekerk & Martin, 2001). Although this quantitative study had a relatively large sample size of 1,015 nurses, it was limited by a 38% response rate to its mailed survey. Notwithstanding this limitation, this was an interesting paradox and suggests that Australian nurses may have held similar attitudes about pain assessment to those documented in the international literature.

### ***Nurses' Lack of Knowledge***

A search of the CINAHL and Medline databases found no studies that focus on nurses' knowledge of the WHO analgesic ladder. However, research has reported a range of general inadequacies in knowledge about the nature of pain and pain pharmacology (Brunier et al., 1995; Clarke et al., 1996; Ferrell et al., 1991; Hamilton & Edgar, 1992; Vortherms et al., 1992; Van Niekerk & Martin, 2001; Watt-Watson, 1987). Unlike other authors, Watt-Watson et al. (2001) correlated nurses' knowledge of pain management with patient outcomes. To give background to this, the authors surveyed nurses' knowledge and beliefs using a peer reviewed instrument developed for the study. This study may have been limited by a lack of internal validity relating to the study instrument or an acknowledged lack of independence in the variables as in some instances the same nurse cared for two to three patients in the study. Nevertheless 21 years after Cohen's findings, nurses displayed only moderate pain knowledge and interestingly, nurses' higher pain knowledge scores were not associated with less pain in assigned patients.

Australian nurses perform similarly to their international counterparts. Heath (1998) surveyed 42 nurses at an Australian hospital with a questionnaire previously used extensively in North America and reported an average of 71% correct answers to pain knowledge testing, closely reflecting the findings of Clarke et al. (1996) and Watt-

Watson et al. (2001). A 47% response rate to her survey may have introduced some selection bias, however this study described a poor understanding of and under-administration of opioid analgesia by nurses. Sloman, Ahern, Wright & Brown (2001) studied 174 nurses' knowledge of pain in the elderly. They used a questionnaire developed for the study and also reported an average of 71% correct answers to pain knowledge testing. These authors took their investigation a step further, enquiring how nurses working in various clinical areas differed. Those working in palliative care scored highest and nurses working on general wards scored lowest. Reflecting these findings, Tasmanian nurses also obtained a mean correct score of 71% to knowledge testing (Van Niekerk & Martin, 2001). The limitation of this study has already been discussed. (See p. 12)

In a recent study, the pain knowledge of 81 final year nursing students in Australia was compared to that of 69 final year nursing students in the Philippines (Chui, Trinca, Lim & Tuazon, 2003). The mean correct score of this sample of Australian students was 39.3%. This finding is disturbing until the study instrument is evaluated. Developed by Trinca (cited in Chui et al., 2003, p. 100), its original aim was to test factual pain knowledge of medical students. Although there were some items in the instrument that tested nurses' knowledge of opioids and other classes of analgesics recommended in the WHO analgesic ladder, many of the items refer to pain syndromes that, arguably, are not amenable to nursing care.

Nurses learn about managing pain from undergraduate courses, continuing education (in-service), hospital orientation and informal sources such as experience and colleagues (Clarke et al., 1996). The literature presents conflicting views about the contribution of clinical experience to pain management expertise. Some authors believed that experience is the main source of knowledge (Cohen, 1980; Vortherms et al., 1992). Other studies have found that years of clinical practice made no difference to knowledge test scores (Hamilton & Edgar, 1992; Watt-Watson, 1987; Watt-Watson, 2001). Brunier et al. (1995) reported the "unexpected" (p. 442) finding of an inverse relationship between knowledge scores and the frequency of caring for patients in pain. In explanation, the authors suggested that nurses who care for patients in pain "rarely" may be educators and more experienced nurses in management positions (Brunier et al., 1995). Australian nurses discussing pain management suggested that clinical experience developed more sophisticated decision-making and more confidence in their decisions (Nash et al., 1999).

### ***Nurses' Poor Understanding of Opioids***

Nurses' poor understanding of opioid medication emerges as a particular and persistent problem. This is disturbing, as opioid medication is considered integral to the effective management of pain as demonstrated by its place in the WHO analgesic ladder (Dalton & Youngblood, 2000). Nurses have been reported to have an exaggerated fear of the addictive potential of opioids that limits their use in the clinical setting (Brunier et al., 1995; Clarke et al., 1996; Drayer et al., 1999; Hamilton & Edgar, 1992; Vortherms et al., 1992; Watt-Watson et al., 2001). Australian researchers detected anxieties about the effect of opioid addiction on their decision-making when focus groups of nurses discussed the issue (Nash et al., 1999). Despite the limitations of their study, a relevant finding of Chui et al. (2003) was that only 40% of Australian final year nursing students were aware of the concept of using opioids freely for acute pain.

### ***Organisational Constraints***

Organisational constraints include lack of access to specialised staff, or treatment modalities and lack of equipment (Ryan et al., 1994; Schafheutle et al., 2000). The major finding of a recent Australian study that observed nurses practising in a surgical ward was that multiple interruptions to nursing staff can force pain management lower down the nurse's priorities (Manias et al., 2002). The investigators concluded that these interruptions delayed formal pain assessment and the provision of analgesia. This environment was thought to have reduced patients' willingness to communicate a need for pain relief. Manias et al. (2002) reported that nurses must contend with competing demands from doctors, patients and other nurses. Nurses were observed to have interrupted nursing care to act as patient advocates, supporting patients in their dealings with medical staff, and also to have chosen to interrupt delivery of patient care to comply with doctors' requests (Manias et al., 2002). Australian nurses have also identified that the health care team influenced decision-making and pain management practice. Sources of frustration had been experienced because of a lack of peer support and difficulties collaborating with medical staff responsible for prescribing the analgesic framework (Nash et al., 1999).

### ***The Australian Perspective***

The majority of studies that have evaluated Australian nurses' roles in pain management have used quantitative methodology to determine knowledge and attitudes (Chui et al., 2003; Heath, 1998; Sloman et al., 2001; Van Niekerk & Martin, 2001). As

discussed, findings of these studies reflect evidence of deficits in nurses' attitudes and knowledge of pain and pain pharmacology that have been demonstrated in the international literature.

Two recent Australian studies, however, have used qualitative approaches to explore nurses' pain management in hospitalised patients. In Queensland, research to determine nurses' perceptions about pain and opioid analgesia was conducted using three focus group discussions (Nash et al., 1999). This study sampled 19 nurses in metropolitan Brisbane. Thirteen were Registered Nurses practising in public or private hospitals and six were Bachelor of Nursing students. Four major themes emerged from these focus groups.

Firstly, nurses confirmed their pivotal role in pain management highlighting the importance of acting as a patient advocate to change ineffective medication orders. Implicit in this theme was an understanding of the complexity of the pain experience and the holistic benefits of efficient pain management. Secondly, although nurses highlighted the importance of pain assessment, they displayed ambivalence toward patients' self-reports of pain, giving more weight to behavioural cues, physical signs or their own expectations of the patient's medical condition.

Thirdly, nurses described attributes that influenced the efficiency of pain management practice. They highlighted knowledge of pain and current practice as well as confidence and experience in dealing with patients in pain. Lack of knowledge was perceived to be a frustration to other nurses. They acknowledged the importance of ongoing education and the increased confidence in decision-making that comes with experience, particularly in regard to narcotic administration.

Lastly, nurses described how interpersonal factors impacted on pain management decisions and brought out two key issues. These were the importance of good teamwork and the impact of peers and other health professionals on decision-making. Nurses expressed feeling a lack of support for their pain management practices and a frustration with lack of initiative displayed by other nurses, particularly in analgesic administration. The authors recognised the need to empower nurses' relationships with each other in order to facilitate access to pain management knowledge. Additionally, nurses expressed frustration with difficulties cooperating with medical staff and constraints that medical prescribing had on nurses' decision-making.



There was also an underlying anxiety about opioid analgesics in regard to potential for addiction.

This study by Nash et al. (1999) brought out an issue of the conventions that influence nurses' pain management practices, both obvious and covert. The authors suggested that patients whose behaviour does not conform to the nurses' expectations may receive inadequate pain relief, because such behaviours are viewed as negative and problematic. The findings of this study may be limited because participants were recruited voluntarily and may arguably have had a greater interest in pain management than the general population of practising nurses. However, many of the key issues reflected previous research findings, particularly nurses' tendency to doubt patient self-reports of pain, and suggested factors that may be operating in Australian hospital settings that constrain efficient pain management.

Researchers in Victoria studied nurse-patient interactions in the context of pain management by observing twelve registered nurses practising in a surgical ward (Manias et al., 2002). These authors criticised the simplistic nature of quantitative instruments being used to explore such a complex phenomenon as pain. Twelve nurses were each observed for a two-hour period, scheduled at various times of the day, evening and night shifts. Four major themes emerged from observation of nurses managing pain at the bedside.

The theme that emerged most strongly in the study by Manias et al. (2002) was that of multiple interruptions to nurses' practice. Patient care was interrupted to complete routine tasks, assist other staff, search for equipment and answer telephone calls and this resulted in delays between requests for analgesia and its administration. Additionally, nurses were found to have varying responses to patients' verbal, non-verbal and behavioural cues that expressed pain. These differed depending on what the nurse was doing with the patient at the time of assessment. Inherent in this was the suggestion that nurses were not so much interested in whether patients experienced pain, but whether the pain was at a level that could be tolerated. Reflecting the findings of other research, the third theme that emerged was that nurses tended to assess and interpret pain according to preconceptions about the medical condition of the patient, assessing for incisional pain, but not looking for other possible causes. The investigators observed that other potential sources of pain were often only explored after persistent prompting from patients. Lastly, nurses were observed attempting to deal with

competing demands of other nurses, patients and doctors and Manias et al. (2002) suggested that this, combined with multiple interruptions to patient care, forced nurses to prioritise nursing activities as far as “interruptible” (p. 731) status is concerned. The investigators observed that activities such as those that assisted other nurses assumed a higher priority than activities concerned with patient comfort.

Certainly the observations of Manias et al. (2002) have elicited information on practice and nurse-patient interactions. What is less clear is how these authors determined that “... this method considers individual’s experiences, feelings and expectations about pain ...” (p. 732). They acknowledged that the “Hawthorne effect” may have influenced the outcome of this study. As Polit and Hungler (1997) explain, this occurs when the behaviour of participants is influenced by the knowledge of inclusion in a study. Nevertheless, this study provided a valuable insight into the factors in nurses’ working environment that constrain effective pain management, many of which nurses take for granted. Recommendations for change that are reported in this study have value as they are based on chronicles of actual nursing practice but they are not informed by the perceptions of those living the problem. No studies were identified that described how Western Australian nurses manage pain in their hospitalised patients.

### **Summary**

In summary, the literature documents barriers to efficient pain management inherent in patients’ knowledge and attitudes about pain and analgesics, as well as the organisational structure that encompasses nurse-patient interactions. Additionally, significant and persisting deficiencies in pain management by nurses have been consistently documented in research exploring the under-management of pain in hospitalised patients, where the role of the nurse is considered critical. There are two striking themes that emerge. Firstly, there are widespread inadequacies in nurses’ pain assessments, most commonly linked to a tendency to disbelieve their patient’s self-reports of pain. Secondly, most nurses have significant knowledge deficits about pain pharmacology and in particular an exaggerated fear of opioid addiction. There is conflicting evidence about the association between clinical experience and nurses’ knowledge about pain management as assessed with quantitative instruments. However, it has been reported that nurses working in oncology, tend to have more knowledge about pain and analgesia, than nurses working in the general ward setting.

## **CHAPTER 3**

### **METHODOLOGY**

Chapter Three describes the qualitative methodology used to explore nurses' experience of managing acute pain in the general ward setting using the current prescribing guidelines. Selection of this methodology enabled collection of rich narrative data that brought out the perspectives and understanding of participants about the problem under investigation. An advantage of using qualitative research was the ability to explore complex issues and the flexibility to follow emerging themes during data collection.

#### **Research Method**

The design of this study was based upon a phenomenological approach, which focuses on people who are living the issue under investigation and how they interpret and give meaning to their experiences (Polit & Hungler, 1997). The methodology was underpinned by the philosophy of Martin Heidegger, who believed that one could only interpret something from the perspective of lived experience (Walters, 1995). Heidegger argued that each person has their own world defined by meaningful relationships, practices and language as a consequence of culture. Therefore a person's body, world and concerns are unique and form the context in which each person can be understood (Burns & Grove, 1993). He stressed human understanding and interpretation through language, history and culture (Lowes & Prowse, 2001). As Walters (1995) explains, Heideggerian phenomenology explores knowledge that is rooted in day-to-day experiences and considers that an "... understanding of a person cannot occur in isolation from the person's world ..." (p. 794). Heidegger's philosophy has implications for the interview process and for the concept of the researcher's subjectivity in the research process.

Lowes and Prowse (2001) described the interview in phenomenological research as "... a purposeful data generating activity ..." (p. 471), that will be characterised by the philosophical position adopted by the researcher. Furthermore, Heidegger emphasises that interpreting human experience through intuitive language, history and

culture translates to an understanding that participants' experiences of "... being in the world ..." (p. 474) and can only be understood by another being in the world, who is the researcher. In contrast to other phenomenological philosophers, Heidegger believed that it is impossible to put aside one's presuppositions about being in the world, and accordingly the researcher's beliefs and experiences are a part of the research process (Lowes & Prowse, 2001).

Phenomenology focuses on participants' lived experiences and values individuals as "self-interpreting" (Burns & Grove, 1993) and so is the only reliable source of information. Wimpenny and Gass (2000) believe that interviewing is the predominant method of data collection in phenomenological studies, with the researcher remaining centred on the experience of participants. They also describe the need for some structure to guide the enquiry. Further, these authors view the interview process from the Heideggerian viewpoint as a co-creation of the participant and researcher that enables a deep understanding of the phenomenon under study. Lowes and Prowse' (2001) own research was underpinned by Heidegger's philosophy. They described using reflective journals throughout the research process to acknowledge preconceptions about the phenomenon under investigation, with reflection ensuring transparency about their contribution to the researcher's interpretations. Indeed, Lowes and Prowse (2001) viewed such transparency as a defining characteristic of Heideggerian phenomenology. They cautioned however that interview questions should be structured as open-ended questions to allow data generation and interpretation from the participant's point of view rather than the researcher's.

### **Research Setting**

The sample for this study was drawn from a major teaching hospital in Western Australia. The study hospital services a cross-section of the community providing medical, surgical and 'specialty care that is likely to reflect the current levels of knowledge among nurses. Considering both McCaffery and Paseres' (1999) and Davis's (2000) views on the definition of acute pain, the research setting for this study was restricted to general surgical wards that are likely to have a large proportion of inpatients being treated for surgical and trauma conditions.

In the study hospital, medical care for hospital inpatients was provided by a team of physicians. A consultant specialist headed the team, however day-to-day care was provided by house officers, namely an intern or resident supervised by the more senior

team registrar. House officers were responsible for the prescription of analgesics that provide the pharmacological framework within which Registered Nurses on the general wards managed their patients' acute pain. Although the hospital had an onsite Acute Pain Service that provided specialty pain management to inpatients in select postoperative and trauma circumstances, these services did not routinely extend to general ward inpatients. Nurses who cared for these patients were required to manage pain independently. As such, this hospital provided a setting in which Registered Nurses working in its general surgical wards were managing acute pain independently within current prescribing guidelines.

### **Research Sample**

Purposive sampling was used to select informants who were living the issues under investigation. As Burns and Grove (1993) explain, purposive sampling involves the researcher selecting subjects with certain characteristics who might be expected to be typical of the phenomenon under investigation and to be information rich sources of data. In consideration of the complexity of the research problem and to facilitate an in-depth exploration, a sample of ten participants was drawn from the nursing population working on the hospital's four general surgical wards. The inclusion criteria for participation was Registered Nurses who had been working on a general surgical ward for a period of at least three months, who agreed to be included in the study.

Following approval of the study by the hospital's nursing research committee, the Director of Surgical Services forwarded to the researcher a list of nurses who met the inclusion criteria and were working on each of the four surgical wards. The researcher met with the four relevant ward Clinical Nurse Managers and informed each about the study. All were supportive of the study and suggested that participants be interviewed during rostered shifts. Two to three nurses from each ward were approached in order to provide a broad coverage of the surgical experience and to reduce the effect of individual ward idiosyncrasies. Potential participants were approached personally on the wards by the researcher and informed of the purpose and nature of the study, provided with an Information Letter (Appendix A), and invited to take part in the study. One nurse declined to be interviewed. Nurses who consented to be included were interviewed at a subsequently appointed time in a private meeting room adjacent to the ward. One participant requested to be included upon hearing that two of her colleagues were about to be interviewed.

A total of ten participants were interviewed. The demographic profile of the sample is presented in Table 1.

**Table 1: Demographic profile of participants (n = 10)**

Characteristics	Number
<u>Age (years)</u>	
20-29	5
30-39	0
40-49	3
50-59	1
60-+	1
<u>Gender</u>	
Female	9
Male	1
<u>Undergraduate Education</u>	
Hospital Based	5
Tertiary Based	5
<u>Qualification</u>	
Hospital based Diploma	2
Bachelor Degree	8
<u>RN Seniority Level</u>	
Level One	5
Level Two	5
<u>No of years total clinical experience</u>	
0-5	3
6-10	3
11-15	0
16-20	0
21-25	2
26-30	2
<u>No of years employed in study hospital</u>	
0-5	7
6-10	2
11-15	0
16-20	1
21-25	0
26-30	0
<u>No of years employed in current ward</u>	
0-2	6
3-5	2
6+	2

Of the ten participants, nine were female and one was male. Ages ranged from 20 years to 60 + years with half of the sample aged 20 to 29 years. The number of years of clinical experience ranged from 2 years to 30 years. Four nurses had more than 25 years clinical experience. Five of the participants were Level Two nurses (expert Registered Nurses) and the rest were Level One (competent Registered Nurses). One participant was employed on night duty. The length of time employed in the study hospital ranged from 6 months to 20 years with the majority employed on their current ward for 2 years or less. Three nurses had received their initial education in a tertiary education setting and five had received a hospital based education, one in the mental health setting. Of these, three had subsequently obtained Bachelor degrees and one was in the process of completing this qualification. Two participants were previously Enrolled Nurses who had subsequently completed Bachelor of Nursing qualifications to become Registered Nurses.

One nurse had a certificate in Midwifery and one was currently studying towards this qualification. All participants had general surgical experience. In addition, all had specialty surgical experience including orthopaedic, vascular, gastrointestinal, plastics, urological and gynaecological specialties. No participant had formal qualifications in pain management, but all had attended hospital in-service study days that addressed issues in pain management.

### **Data Collection**

Data was collected through tape recorded semi-structured interviews that lasted approximately thirty minutes and were guided by open-ended questions, designed to elicit information about the experience of assessing and managing acute pain on a day-to-day basis (Appendix B). Demographic information was collected, encompassing participants' gender, age, length and type of previous clinical experience and of level of education (Appendix C). All participants were interviewed in a private meeting room adjacent to ward areas. These rooms were quiet, which facilitated tape recording of the interviews, and the chairs were arranged in comfortable speaking positions with the door closed. One interview was interrupted. In this instance the tape recorder was turned off and when recommenced, the researcher refocused the participant by recapping what had just been said.

The loose structure underlying the interviews reflected major themes that had emerged in the literature. Data collection became increasingly focussed during

interviews as concepts became apparent. Later interviews were informed by previous interviews and included questioning designed to explore emerging themes. The interview technique that was used allowed topics to be explored in detail using open-ended questioning. All interviews started with the question "What do you see as your role as a nurse managing acute pain in patients not under the care of the Acute Pain Service in the general ward?" From this starting point, the form of each interview was influenced by the expressed experiences of the participant. Tangents were followed until a topic was explored in full and then another question from the guide was used. If participants made pertinent points that required clarification or warranted exploration, they were allowed to continue on a tangent and not interrupted, but were brought back later to focus on these when other topics were fully explored.

When Taylor (1995) used a phenomenological approach to investigate aspects of nurse-patient interaction she followed Gadamer's (cited in Taylor, 1995, p. 70) suggestion and explored the phenomenon with "... open-mindedness and a willingness to be surprised and informed by what emerged ..." (p. 70). As a practising Registered Nurse with experience in surgical nursing and pain management, this researcher came to the study with preconceptions about the challenges and inherent difficulties of pain management. Indeed, the researcher expected that her knowledge of the issues involved would have facilitated candid and in-depth discussions during the interview process. This was found to be true.

### **Data Analysis**

Demographic information was analysed to describe the profile of the sample. An inductive approach was used in the tape recorded data, in which the researcher draws generalised conclusions from specific observations (Polit & Hungler, 1997). Analysis commenced from the first interview and informed subsequent data collection. Each interview was transcribed verbatim from the tape recording by the researcher.

As Polit and Hungler (1997) explain, qualitative analysis commences with a search for themes in the data. Analysis of the data proceeded through a number of stages. Open coding is the first of these and identifies key concepts from words or phrases in the data (Polit & Hungler, 1997). The interview transcripts were examined line by line to identify concepts and patterns in the data. Significant statements in the transcripts were highlighted, categorised to reflect meaning and labelled using memos in



the transcript margins. Some examples were: “advocacy”, “lack of choice”, “listening to nurses”.

The next stage in the process is referred to as axial coding which involves reconnecting categories and subcategories to create a more abstract reflection of themes emerging from the data (Polit & Hungler, 1997). Coded data were compiled into a list of thirty seven categories (Appendix D). These categories were then examined, reflected upon, clustered and collapsed to formulate eight broad overarching categories. These categories were: “Nurses”, “Doctors”, “Patients”, “Assessment”, “Analgesics”, “Acute Pain Service”, “Non-pharmacological” and “Supporting Nurses.”

At this point, data was reorganised and coded statements grouped under these overarching named categories. The texts relating to each category were then able to be re-read in this context. Sub-categories were then integrated to facilitate description of the categories and to determine relationships and influences between them. Data was scanned to identify examples and cases that illustrated emerging concepts and themes. Reflection at this point determined that these broad categories could be further clustered into three major categories that facilitate the presentation of the study’s findings. These major categories were: “Influences on Pain Management Practice”, “Nurses’ Decision-making”, and “Directions for Improving Pain Management.”

In order to evaluate the findings of this study in the context of current literature, the body of literature gathered in preparation for undertaking the study was again examined in detail with a renewed focus, being the themes and concepts that had emerged from these interviews. Additionally, a further literature search was performed. The purpose of this was to detect relevant studies published since the initial review, as well as those relating to themes that came into focus in these interviews. The CINAHL and Medline databases were searched. The years 2003 to 2005 were searched using the keywords “pain”, “acute”, “analgesic”, “assessment”, “nursing” and “postoperative.” Additionally, keywords: “elderly”, “nursing”, “postoperative pain”, “pain”, “nurses’ attitudes” and “substance abuse” were searched, with no year limit. A further ten studies were identified that were relevant to the findings of this study.

### **Trustworthiness and Rigour**

Burns and Grove (1993) associate rigour in qualitative research as a congruence with the philosophical perspective of the study as well as openness and thoroughness in

data collection. Additionally, they counsel that all the data collected should be incorporated into the interpretations and emerging themes (Burns & Grove, 1993). One of the strengths of qualitative research is the reduced distance between researcher and the subjects of the study. This study adhered to the philosophy of Heidegger and acknowledged the presence of the researcher's being in the world. The strategy of keeping a reflective diary ensured transparency of preconceptions and their contribution to the research process. Continual reflection brought preconceptions about acute pain and its pharmacological management into view. A reflective journal was kept to explicate the researcher's own assumptions throughout the research process, and the researcher's thoughts about interview questions and responses were recorded in field notes. To avoid bias in data collection, the researcher was careful to avoid the introduction of her own preconceptions by basing the interview on the open-ended questions developed prior to commencing the interviews, and by following only the tangents introduced by the participants. Additionally, in line with the phenomenological standpoint, interviews centred on participants' experiences of acute pain and its pharmacological management to reveal the phenomenon under study, rather than emerging theories (Wimpenny & Gass, 2000).

Lincoln and Guba (cited in Polit & Hungler, 1997, p. 304) suggested other strategies that might enhance the likelihood that a phenomenon is being efficiently measured. Of these, member checks and peer review were incorporated into the study. To implement member checks, a description of tentative findings was given to two of the participants for review and feedback when the analysis process was nearing completion. This course of action is based on the experience of Lynch-Sauer (1985) who gave participants verbatim interview transcripts to review for clarity of meaning, and found them unable to extract meaning from the fragmented appearance of the spoken word in written form. Following this attempt, she found it more productive to provide feedback about the analysis. Accordingly, rather than give transcribed interviews, formulated tentative findings were referred back to the two participants for comment. Both responded positively, with one commenting that reading this report made her really think about her own practice. To obtain a peer review, the interview transcripts were referred to a university colleague versed in qualitative research, and the coding categories were verified and confirmed.

In Walters' (1995) view, participants should be included at every stage of the research process and this contributes to the overall interpretation. After the initial

formulation of the findings, all but one of the participants were able to be contacted and verbally apprised of the emerging concepts and themes. Comments were elicited from some participants on the overview of the findings and some of the stronger themes to emerge. These are included in the "Discussion" chapter of this thesis (see p. 91). Walters (1995) also agrees with the concept of openness as a component of rigour and advocates the researcher providing enough information for the research consumers to make their own interpretations, as the researcher's interpretations can only be regarded as tentative. This has been taken into account and the presentation and discussion of findings are accordingly comprehensive.

### **Limitations**

This study necessarily used a small sample and purposive sampling to obtain in-depth, rich data. Considering that idiosyncrasies may exist in the nursing curriculum in Western Australia, at the study hospital, or on these particular wards, it is debatable whether the findings of this study could be generalised to nurses in other settings. Therefore, it will be dependent on consumers of this research to determine its applicability to their own setting.

The findings of this study may have been influenced by the inclusion of five Level Two nurses in the sample. Although there is no clear direction in the literature on the influence that length of clinical experience has on nurses' knowledge or attitudes, these nurses were likely to have held leadership positions on their wards, which may have influenced their perceptions about junior colleagues and liaising with medical staff.

A weakness of self-report methods of data collection, such as interviewing, is that participants may not act and feel the way they say they do (Polit & Hungler, 1997). Therefore, it is possible that nurses presented information in these interviews in order to be viewed in a certain light. However Polit & Hungler (1997) explain that there is no other option than to assume that they have been frank. These interviews were conducted in a non-threatening setting with the researcher using non-verbal cues that ensured participants felt that their responses were accepted and validated. Further research using larger samples, would be needed to quantify the extent of the perceptions expressed by the participants in this study.

## **Ethical Considerations**

This study was conducted in accordance with ethical guidelines published by Edith Cowan University, obtained from the internet (Edith Cowan University, 1999). The researcher adhered to the accepted ethical principles outlined on this website: integrity, respect, beneficence and justice. Ethics approval for the study was obtained from Human Research Ethics Committee at Edith Cowan University as the supporting educational institution for this research. Approval was also obtained from the Nursing Research Committee at the study hospital to conduct the study.

Informed consent was obtained from all participants in this study. Potential participants were provided with an Information Letter (Appendix A) detailing the aims, procedures, risks and benefits of participation in this study. Participants were made aware that participation was voluntary and that they could have withdrawn consent and left the study at any time. Prior to commencing the interview, each participant signed two copies of the Informed Consent Form (Appendix E) with one copy retained by the participant for their own records.

In order that no sensitive information was disclosed, all data collected in the course of this study was kept strictly confidential. No information about participants was divulged to any hospital staff members in the clinical or management setting. No information was given to the Clinical Nurse Managers about who had participated in the study. No names of participants, patients or staff were recorded in the data.

To protect the identity of participants, each was allocated a code number and only this was used to identify interview transcripts. The record book containing information identifying participants and their corresponding codes was kept separately locked in the study supervisor's office. The names of any staff or patients used in the interviews were removed in the process of transcription. During the process of data collection and analysis, all tapes and papers that held data were stored in a locked filing cabinet in the researcher's office, with the key on her person. In accordance with Edith Cowan University requirements, all data will be securely stored for a period of five years in the university archives and then destroyed. Tape recordings will be erased at the end of the study and paper documents shredded.

## Summary

This study used qualitative methodology based on a phenomenological approach to explore and describe nurses' perceptions and experiences about pain and pain management. Nurses' interactions with patients, doctors and colleagues were examined along with decision making, constraints to effective practice and directions for skill development.

A total of ten Registered Nurses were interviewed from four surgical wards at a Western Australian public hospital. Following ethical approval, purposive sampling was used to select participants. Data was collected from ten tape recorded, semi-structured interviews, conducted in a private meeting room adjacent to ward areas. Prior to being included in the study, nurses were informed of the aims and nature of the project and a consent form was signed before each interview was commenced. Data was organised manually and analysed using three levels of coding. Coded data was presented in three major categories and a number of sub-categories. The findings of these interviews were related to relevant published literature. This study was limited by a necessarily small sample and the inclusion of five Level Two nurses. At all times in this study, the researcher adhered to ethical principles and employed strategies to protect participants' human rights.

The findings of this study are outlined in Chapter Four. Direct quotes from the interview transcripts are used to illustrate emerging concepts. Quotes exceeding forty words are blocked and single spaced, whilst all others are included in text paragraphs within quotation marks. To give clarity to these excerpts, editing of repetitive or irrelevant speech was necessary and indicated in the text by three dots ... . In quotes where the spoken word was thought to be unclear for the reader, the researcher has added explanatory information in brackets [like this] to facilitate understanding. To assist the reader, a definition of terms and an explanation of abbreviations is included (Appendix F).

## **CHAPTER 4**

### **FINDINGS**

Chapter Four presents the findings of the study. Analysis of these interview transcripts revealed nurses' perspectives on the factors that influence bedside pain management practice, the specifics of assessment and analgesic administration and how nurses' practice might be improved. These findings are presented in these three major categories. Although divided, links between them exist.

#### **Influences on Pain Management Practice**

This is the first of the three major categories that were generated by analysis of the interview transcripts. In these interviews, nurses indicated how their pain management practice was influenced by factors internal to themselves, and also in the environment in which they practice. In this section, three further categories have been generated that correspond to the major players influencing pain management; the patient whose pain is being treated, the prescribing doctor and the nurses themselves. This section describes the role of each of these in pain management from the nurses' perspective. As each is complex, further sub-categories have been generated for clarity.

#### ***The Role of the Patient***

Throughout these interviews, nurses described and commented upon patients' expression of pain and behaviour. The suggestion that patients themselves have an influence on the management of their pain came through clearly in the analysis of nurses' texts. This section presents nurses' perceptions about how patients' beliefs, attitudes and behaviour affect the outcome of their pain management. Analysis of nurses' texts generated three sub-categories. Two of these relate to patients' attitudes to analgesics; reluctance to accept analgesia and patient preferences. The third encompasses a theme that emerged strongly in the analysis of these interviews; managing pain in the elderly.

### ***Reluctance to Accept Analgesia***

Regardless of how much pain patients were experiencing, nurses reported various factors that they believed affected patients' willingness to request or accept analgesic medication. Most commonly patients displayed a reluctance to take opioid medication, and in particular morphine. Nurses perceived that two major concerns were widespread amongst patients. The first was the potential for addiction: "a lot of patients get worried about using morphine as well, they worry that they are going to get addicted and so you need to talk patients through that" (RN01). Additionally, patients expressed fear about the about the risk of overdose: "they feel scared that they could overdose or morphine ... is not a safe drug ... as long as they are reassured that they are not going to die of it" (RN09). When nurses perceived that these concerns were affecting patients' willingness to accept analgesia they responded with reassurance:

People are quite hesitant when it comes to morphine. They automatically ... think "Oooh ..." because of the abuse that its had ... in the past ... they think its such a big thing ... sometimes they don't want to have the morphine because they think ... they don't want to become addicted to it ... [I] explained to him "No ... morphine is a good ... analgesic if you need it ... its well controlled within the hospital environment ... there are side effects but ... there's nothing to worry about, you're not going to become addicted to it" ... that sort of calmed him down and he really needed it because he was in a lot of pain ... he needed that reassurance ... people just have that mindset about very strong analgesia. (RN07)

It was suggested that older patients might be less likely to express their reservations about opioid medication:

Some of the younger patients often will ask ... "Oh, I don't know if I want to have morphine" ... because they're scared of what it does. I think older patients tend to ask less because they've probably been in hospital more and they just get used to everything being done to them and don't ask. (RN09)

As nurses reported responding to fears that were voiced, it was unclear to what extent overall these fears were addressed or what impact they might have had on patients' willingness to express pain and accept analgesia.

Apart from widespread fears about opioids, patients also voiced concerns about the amount of medication that they were taking in general. Nurses perceived that patients' desire to reduce the numbers of medications being taken might have led to refusals of analgesia:

[I would ask] if they wanted something ... and if they say “No” you say “Why is that?” because a lot of patients don’t like taking tablets ... They’ll get out of it if they can, well not get out of it but if they don’t have to take them, they won’t ... patients [say] ... “Oh, another tablet” ... when you take tablets to combat side effects of tablets ... there’s so many. (RN06)

Sometimes it was the side effects of the medications that patients wanted to avoid: “... they [medications] can be [a challenge] ... and a patient will hold off asking for analgesia if they know that they are going to get sick on them” (RN06).

In summary, nurses perceived that their patients took a close interest in the medications and that ingrained attitudes and beliefs affected the amount of analgesia that patients would request or accept. When nurses were aware of these concerns they were addressed, however there was a suggestion that the full impact of patients’ preconceptions was unknown.

### ***Patient Preferences***

This relates to the preferences that patients expressed about how and when analgesia was administered. Nurses tended to accommodate these and adjust their pain management practice accordingly. For example:

I ask them whether they want Panadol [paracetamol] or Panadeine Forte [stronger analgesic containing paracetamol and codeine] ... and then they tell me ... I had a patient yesterday who only takes one in the morning and two later on if he needs it ... so I followed ... that was his little request, that was his little thing even though it was written on the [medication] chart QID prn [to be given 6 hourly as necessary] ... . (RN07)

This regard that nurses displayed for their patients’ analgesic preferences can also be linked to nurses’ acceptance of patients’ self-reports of pain; a theme that emerged and is discussed with nurses’ assessment of pain.

Nurses perceived that the route by which medication is given may be an important determinate of whether patients will accept medication. It was observed that patients might find medication ordered to be given by intramuscular injection was less acceptable and put up with high levels of pain as a result. Again, nurses were able to respond to their patients fears when they were aware of them:



Today there was a young girl on the ward. She's got pancreatitis and she's in a bit of discomfort and she'll sit there. She's got a fear of injections so she's got this dilemma of wanting some pain relief but doesn't want the injection ... a fairly rational sort of fear I think ... trying to encourage her ... say to her "... we can only respond to what your needs are and if you would like to have an injection at the time it is due, you can have it ... there's no point in having any great discomfort. In fact it's better that you don't" ... just encourage her to have it. (RN10)

In contrast, nurses perceived that oral medication was readily acceptable to patients as evidenced by the effectiveness of the approach to analgesia known as the "hourly protocol". This involved oral opioid medication given hourly until pain is effectively relieved. It is regarded as a step down from intravenous analgesia and an alternative to injected opioid medication:

Actually I think they work quite well ... I even find them better than morphine [intravenous] infusions ... I think that covers their pain more than those ... I don't know [why]. Maybe ... the patients are more comfortable with tablets. (RN08).

In general, nurses respected patients' preferences for the administration of their analgesia and in doing so allowed these preferences to direct their pain management practice to a certain extent. However, these nurses indicated that they were aware that patients' preferences about analgesia impacted on compliance with analgesic regimes and therefore the effectiveness of different approaches to analgesia.

### ***Elderly Patients***

A theme that emerged very strongly from the analysis of these interview transcripts was that of elderly patients being disadvantaged in regard to pain management in the ward setting. Most commonly, this related to the difficulties the elderly experienced in communicating their analgesic requirements. One nurse's comment was typical of her colleagues:

With the elderly I find that post-op [postoperatively] people are not assessing their pain properly. They're not giving them analgesia and these poor people ... when I come on they haven't had anything all day, even Panadol, because they can't tell you, because they can't communicate. (RN08)

Nurses often suggested reasons that might underlie the problems they perceived that many elderly patients experienced, and these mainly related to these patients not

reporting their pain. Either elderly patients seemed reluctant to complain of pain, or they were unable to communicate about pain due to impaired cognitive skills.

Nurses often perceived that elderly patients' reluctance to complain of pain seemed to stem from an inherently stoic outlook. Some nurses interpreted this as consequence of socialisation and being part of an earlier generation:

Sometimes you have an elderly patient who's broken a leg and they don't seem to be expressing their pain as much as a 30 year old who's just had a small [injury] ... it could be a cultural thing ... back in those days they were harder workers ... labour workers and they had to work no matter what ... if they had a sore back they still went out into the farm ... I think they are quite tolerant to pain. I hear old ladies saying "Oh, I'll just have to put up with it" or "It's just a bit of pain" ... and they've got a broken arm. (RN07)

Along with socialisation, it was also suggested that fear of addiction to analgesics may potentiate elderly patients' reluctance to complain of pain:

They're quite stoical [sic], the elderly patients are quite stoical and will put up with a lot of pain because that's how they were brought up ... not to complain and not to ask ... they are quite stoical and put up with a lot before they sort of succumb and with the drug situation as it is they are all a bit scared that they are going to get hooked. (RN03)

That elderly patients are most likely to have a stoic outlook was a widely expressed perception. However one nurse expressed a contrasting view, suggesting that patients of any age may be socialised to put up with pain not just the elderly:

I don't know that I would separate it with ages ... I don't know that I'd really notice a difference treating the eld[erly] ... pain is pain ... some people don't like to have analgesia because they think that they should be able to tough it out ... that's across the board, young people can do that and old people can do that ... maybe its their upbringing ... some people don't even take a Panadol if they've got a headache ... think "I shouldn't need to take analgesia". (RN09)

In addition to being inherently stoic, nurses believed that some elderly patients felt themselves to be a nuisance should they interrupt busy ward staff to complain of pain: "Older people, they always say 'I'm sorry to bother you dear, I know you're busy' and it makes you feel really bad" (RN05). From nurses' perspectives, these factors presented a potent force that prevented elderly patients from making nurses aware of their analgesic requirements

Nurses' texts identified cognitive impairment as a major problem for patients when it prevented patients from conveying the need for analgesia. Nurses perceived such impairment as confusion or dementia, which they associated frequently with their elderly patients. When caring for elderly patients with confusion or dementia, nurses understood that these patients might have difficulty communicating the presence or intensity of their pain: "They're elderly ... a lot of them have dementia or confusion and its hard to assess pain in these circumstances" (RN05). Nurses felt that the inability of these patients to communicate their needs compromised the pain management they received: "They're [patients] demented. They can't tell you about it and no-one [nurses] even thinks about it and they've got a fractured hip" (RN04). Consequently nurses perceived that these confused or demented patients were disadvantaged in the ward setting:

I think particularly in older people they don't get as much pain relief as you or I would get ... I just remember one person in particular and he was in a very busy four bed room with other dementia [sic] people and you're just running all the time ... they just sit there, they don't ask for anything ... I can remember coming on and the man hadn't had anything [analgesia] and he was only one or two days post-op [post-operative] ... he wasn't able to ask for it ... maybe the nurse just didn't think about it ... she was too busy. (RN05)

Nurses also acknowledged that these patients required extra contact time to build rapport and communication and that, again, ward organisation may disadvantage these patients:

If you get somebody who's a bit demented ... they're a bit more incapacitated then you've got to be a bit more ... aware of that [caring for confused and demented patients]. Well that's really difficult to determine whether they're in pain or not ... so sometimes they miss out on some analgesia because its hard to determine if they are in pain or not ... the fact is that they can't express themselves. Some nurses might be a little more tuned into ... their needs but if you're looking after a patient ... you might have Rooms 1 to 5 one day [and then] Rooms 6 and 7 the next ... you might see one person, a demented person, for one shift ... it takes a few shifts to get to know a person and what their responses are ... sometimes its pretty obvious when someone's rocking in bed and moaning ... obviously looking uncomfortable ... definitely in pain you would assume ... you've sometimes got to go on your gut feeling ... give them something and hopefully get a response that's positive ... they don't look so agitated. (RN10)

Nurses perceived that elderly patients' difficulties communicating their analgesic needs led to inadequate assessment of pain that compromised the delivery of effective pain management. However even when they were aware of their patients'

analgesic requirements, nurses' perceptions about the physiological status of the elderly impacted on the amount and type of analgesia they were prepared to administer.

Nurses catered for the altered physiological function that they perceived was a safety issue when administering analgesics. Of particular concern were opioids, particularly morphine:

Morphine in the elderly, scary again. Watch your doses, in fact they're little, they're tiny. They metabolise drugs a lot slower than when we were young ... they hold on to the morphine and you can find you'll be looking at the chart going "Ooh, this is the fifth dose of morphine and maybe they haven't got rid of the first four doses yet" ... so I always check pupils and check where they are going with their narc [side effects of narcotic analgesics] scheme of things. (RN04)

Nurses conveyed their perceptions of heightened risks of opioid use in the elderly by describing their approach to the problem:

I suppose I'm scared too ... there's nothing wrong with having a healthy fear of overdosing people ... if you're sensible ... with an elderly person if they're 100 [years of age] ... give the smaller dose and then you can give them a little bit more ... assessing them prior to giving them the drug ... their conscious state ... make sure you've done their obs [observations] ... I would most likely give the smaller dose for an ... elderly frail person. (RN05)

Apart from the physical side effects of opioids, morphine was also understood to have other effects in elderly patients. This presented a dilemma for nurses who wanted their patients' pain to be effectively managed but were aware of the distress that may arise:

Something with the elderly is often they hallucinate ... more than the younger ones but usually if they're hallucinating and they're aware of it and they actually say 'I can see black spiders walking across here' ... but they know that it is happening and if their pain is still managed, normally we keep it going ... unless they're getting distressed by it. (RN09)

Analysis of these interview transcripts revealed that managing pain in the elderly was of particular concern to nurses. This was due to difficulties they experienced ascertaining the presence and intensity of pain, as well as nurses' own perceptions about heightened risks when using analgesics in these patients. As a consequence, nurses suggested that the elderly were disadvantaged in the general ward setting. In these interviews, all nurses expressed awareness of this concept to some degree indicating that this is probably a widespread issue in general wards.

## ***The Role of Doctors***

Nurses' texts revealed that doctors have an impact on nurses' pain management because they construct the pharmacological framework, within which nurses' are able to practice. This section presents nurses' perceptions about these pharmacological frameworks and their interaction with doctors in the ward setting. Analysis of the interview transcripts generated three categories. The first of these relates to nurses' perceptions of the pharmacological choices offered to them by doctors' prescribing practice. The other categories relate to nurses' interactions with doctors in regard to being listened to and having access to them.

### ***Prescribing***

Doctors' role in pharmacological pain management in the ward setting was described by nurses as prescribing a number of analgesic options from which they could then choose. Nurses recognised that their pharmacological options are dependent on doctors' prescribing. This section relates to nurses' opinions on the adequacy of prescribing practice and describes their experiences managing pain with the choices available to them.

One nurse described the manner in which the pharmacological framework was constructed with a number of options available for analgesia: "The doctor, when patients are admitted ... will generally write up ... a regime of pain relief starting with the Panadol, perhaps tramadol, depending on the patients' condition ... and maybe morphine if necessary" (RN03). In regard to Panadol, the direction to give this medication regularly was thought to be effective:

Panadol [is] given on a regular basis ... generally the doctor will write it down, prn ... if it's post-op [patient is postoperative] ... or the patient has got a lot of pain they will write it QID [to be given 6 hourly] or 8 hourly. So we just put the times in. (RN03)

However, nurses expressed frustration when doctors' prescribing offered them a lack of choice of analgesics. Some examples were:

We only had on his medication chart ... Panadol and morphine and the morphine was 3 to 4 hourly ... and it was a really small dose and he was a large boy and it just wasn't adequate ... . (RN01)

I actually find that most med [medication] charts are pretty good because there are quite a few options there ... there's always a box saying Panadol or Panadeine Forte ... one or the other and then they've got morphine prn. I find that quite a lot of patients, especially postoperative patients, have that option there ... in most cases, but sometimes someone's only written up for Panadol and that's not enough for them, so ... you have to take the time to go and see what you can do about it. (RN07)

Analgesic prescribing on medication charts accompanying patients from the Emergency Department was highlighted as a specific problem. Nurses described such prescribing as commonly being inadequate: "Often they'll come up from ED [Emergency Department] and they'll have Panadol charted or tramadol or something like that and there's not really any room to move with a limited prescription like that" (RN09). In fact, a number of nurses related having experience of this problem: "They've come up from ED with such a low dose of morphine that it's not even covering their pain. They've come up and they're in agony" (RN08). For some nurses, perusal of the medication chart and initiation of a review of analgesic prescription was a priority of care when patients arrived on the ward:

That example of someone who's just got Panadol and morphine is quite a common one. They come up from ED so we always just grab our medication chart, [go] straight to the doctor and say "give us some more options." (RN01)

... especially when a patient comes up from ED as well. We always make sure they've been charted adequate analgesia, depending on their condition, what's wrong with them, oral or i.m. [intramuscular] ... especially if a patient is being transferred from ED ... that's one of the first things we check ... to make sure they've been charted adequate analgesia. (RN06)

Nurses perceived that inadequate prescribing was related to the limited contact doctors have within the ward setting:

... a lot of patients you find don't get charted for adequate analgesia ... I'm not sure whether its just that doctors don't actually look at the patient in pain ... because we're the ones looking after them ... sometimes they don't listen to what the patient says. (RN06)

Nurses perceived that the doctors' role, which requires that patients are visited only periodically, could be contrasted to the more intensive contact that nurses have in providing hands-on care: "I think a lot of the doctors overlook the pain side of things because they're not the ones who see them trying to get out of bed or trying to cough when they've got pain" (RN09). Nurses implied that this perception instilled in them a

confidence that they have a better understanding of patients' needs. This understanding links to nurses' sense of themselves as independent practitioners and as advocates in the ward setting, both of which are discussed in the section related to the role of the nurse.

Nurses also perceived that inadequate prescribing might have been due to doctors' lack of clinical experience. They suggested that junior doctors lacked the confidence to initiate or change analgesic prescriptions to options that nurses considered might be more appropriate for their patients:

... [the patient] was admitted from a hospice and he already had a med [medication] chart that was being used in the hospice. When he was admitted to the ward, on-call cover [doctor] wasn't really happy to change the order and ... it's a really difficult situation ... I think he needed more as a palliative patient but the doctor was probably too junior to increase it any more than he was charted ... because he was already getting enough analgesia but ... it obviously wasn't enough because he was in pain still. (RN09)

In fact, one senior nurse felt that the less experienced doctors appreciated her input. "I find them very good up here on the ward, that they do listen ... the younger doctors, the newer ones, are only too pleased to have a little bit of guidance" (RN03).

Although a doctor's responsibility, nurses expressed contrasting views about the need for them to initiate invasive pain relieving measures. Nurses' perspectives in this area are of interest because such treatments impact on analgesic use. They also indicate the requirement for nurses to become involved in facilitating medical intervention in their patient's pain management. One nurse related having to initiate medical reviews to consider femoral nerve blocks for preoperative fracture patients:

Often on the ward, though, RMOs [Resident Medical Officers] don't know how to give femoral nerve blocks ... they're a little afraid to give femoral nerve blocks if they're not sure how to do it ... I don't know, they're not aware of that? That's just the current thinking ... you definitely have to initiate ... because we have RMOs for three months ... maybe by the end of the three months in orthopaedics some will initiate that themselves but it's usually something we would ask for. (RN05)

Conversely, however, another nurse expressed satisfaction with RMOs performing nerve blocks. "I'm quite impressed with residents [RMOs] doing nerve blocks and how quickly you can get someone to give the nerve block ... which is great" (RN04).

## *Listening to Nurses*

As discussed in the previous section, nurses' texts revealed that their perceptions of inadequate prescribing were linked to a sense of being close to their patients. Nurses believed that this enabled them to judge whether the available analgesic options were adequate for the patient's clinical condition. This section explores the concept from another angle and relates to the extent to which nurses believe doctors value their unique perspective, and incorporate their views into analgesic prescribing.

The concept of doctors being receptive to nurses' suggestions also tied in with nurses' perceived role as a patient advocate. The most common experiences that nurses related were concerned with initiating medical reviews to adjust analgesia prescription. In general, doctors were receptive to nurses' requests. One nurse described a recent experience managing pain in an obese patient:

We recently had a 175kg lad come back from surgery ... who was written up for 5mg morphine, 4th hourly. Its not going to do anything to a 175kg guy ... with morphine ... the doctors get so used to writing 5mg, or 2.5 [mg] to 5 [mg], so you have to really work out whether your dose is going to be effective for the size of the patient ... [I] rang the doctor and said "This is a bit of a joke. He's 175kg. I think he deserves a bit more than 5mg" ... we got the order changed ... They basically said "Yeah, we didn't even think about it." (RN04)

The reaction of these doctors reflected other nurses' experiences: "... if I'm concerned about a patient I'll just go and see the doctor and I say, "So and so requires something" and they write it up. They're pretty good ... they just need to be informed" (RN03). Frustration was expressed, however, when dealing with doctors who were not part of the normal ward teams:

[describing patient who experienced acute pain] ... the reason why he sticks in my head is that it [his pain] was poorly managed and I think our pain control on this ward is very well managed. He was poorly managed I think because his doctors weren't part of our ward doctors ... the doctors didn't have time to come up and review the pain and his pain got well out of control ... the doctors weren't part of our ward doctors so they are [sic] never on the ward and didn't really listen to what we were saying about his pain ... when they finally did review him they went "We have got a problem here." [later in interview] ... with the doctors who are based on our ward we get a quick response and they're very good. They respect us as nurses but whenever there's an outlier patient ... we tend to have issues because they don't seem to trust our nursing assessment ... never have time to come and review the patients and things like that. (RN01)



In contrast, other nurses reported no difference in the manner in which ward team doctors and outlier team doctors received nurses' input into pain management. This was attributed to the system of rotating junior medical staff through the various wards that constituted their training:

... the same across the board ... [the way doctors from other wards manage pain] the residents, basically are the people doing it and all the residents graduated at the same time and ... they rotate through their paces ... you don't find much difference. (RN04)

With contrasting perceptions, it was unclear how widespread nurses' feelings of "not being listened to" were, however when these were expressed they related strongly to doctors assigned to wards other than those that the aggrieved nurses were working on.

### ***Access to Doctors***

This category relates to the ease with which nurses were able to contact doctors when they believed analgesia prescription required adjustment. Nurses' reliance on doctors' prescribing meant that they experienced difficulties at the bedside when managing a patient in pain whilst being dependent on a doctor who was difficult to contact:

I had a patient; she had quite severe ear pain. It was going right into the back of her head and she was crying ... I'd given her icepacks and she had analgesia ... she couldn't have any more codeine ... I phoned the doctor ... she didn't get back to me straight away and I was going up there and saying "Look, we'll get you something for the pain" ... the doctor when she did phone back ... came to the ward, she didn't even go and see the patient. (RN06)

Another nurse related an experience that occurred on the day of the interview that illustrated the reality of this situation for patients:

[this patient had] advanced gastric cancer ... waiting for a common bile duct obstruction to be stented ... you could tell [he was in pain] the minute you walked into his room ... he said that his pain had been a problem all night ... I don't think it was reviewed properly last night ... overnight he'd had everything that he could have and ... he'd had a horrible night. He hadn't slept at all ... [asked about prescription of analgesics when patient reviewed by doctors] Well I'm still waiting for him to be reviewed (time of interview 3pm) ... in the meantime he went down to have a procedure done so he was given his morphine before that because he was due it ... I would hope that this afternoon before I leave I would have some sort of plan in place. (RN09)

Many of the nurses interviewed made comments about the relative accessibility of doctors. However, nurses made positive comments about a protocol recently introduced into this hospital that guided them to contact various levels of the medical team when such a situation arose:

It varies. During the day ... sometimes you get a fast response, sometimes you don't. Sometimes they don't page [sic] back for an hour or two hours and they can't do anything for a while ... we've actually got a protocol out now if they don't return a page by a certain time ... there is a protocol that we follow if we get no response ... I've had a lot of instances where I've had to page someone two or three times ... waited three hours ... pretty hard because you know sometimes you have to get phone order ... it is hard to chase up doctors ... [to] view the patient and write something up for stronger pain if they need stronger pain relief. (RN07)

Access to doctors during the night could be a problem with reduced staff levels. The night duty nurse who was interviewed highlighted this problem, albeit an understandable one, when asked a general question about the difficulties inherent in managing pain at night:

... access to doctors and anaesthetists. Sometimes it can be a bit difficult to get an anaesthetist, although I never [sic] had any trouble tonight. ... [if there's] something major going in Theatre, then we can't get an anaesthetist. There's [sic] usually two of them ... if they've got an emergency ... we only used to have one doctor to covering the whole hospital. Now they've got two ... a bit easier to get someone ... if I need to get anything extra for pain relief I often have to get a phone order, if I'm desperate. (RN08)

Generally, nurses perceived that their reliance on the doctor's role as prescriber caused difficulty when analgesia was perceived to be inadequate and the doctor was not accessible, or not amenable, to adjusting the analgesic prescription. Although most nurses reported that doctors were responsive to their input, some felt that doctors, particularly those who usually worked on different wards, might not value nurses' opinions. On a positive note, nurses perceived that the introduction of a protocol to increase their accessibility to medical input had contributed to a resolution of the problem of contacting doctors in this hospital.

### ***The Role of the Nurse***

Nurses' voices in these interviews revealed that the role of the nurse in pain management on a general ward is a complex one. Analysis of the interview transcripts brought a number of concepts into focus, including those to which nurses referred directly as well as those of which they may have been unaware.

At the commencement of each interview, nurses were asked directly what they saw as being their role as a nurse managing acute pain in the ward setting. The manner in which this question was answered gave an overview of how nurses perceived themselves functioning. From this point, questioning explored more specific aspects of pain management practice. From all of these questions, four major categories were generated that relate to nurses' perceptions of their role. The most dominant of these was "the nurse as an independent practitioner" which was a thread that ran through every aspect of pain management that nurses discussed. The other categories were "the nurse as an advocate", "the nurse as an educator" and "the nurse as a gatekeeper." Where these themes were particularly complex, sub-categories were generated. This section explores nurses' perceptions of themselves in these aspects of their role managing pain in the general ward setting.

#### ***The Nurse as an Independent Practitioner***

This category relates to the theme that emerged most strongly from these interview transcripts; that of nurses practising with a measure of independence at the bedside. Several concepts emerged that paid testament to nurses' perceptions of themselves as independent practitioners. Analysis of nurses' texts generated several sub-categories that reflect these concepts and they are presented in this section.

Nurses' descriptions of their experiences managing pain conveyed a clear sense that they function independently within the framework of analgesia prescription and ward organisation. The strongest indicator of this was the ownership that nurses displayed of their clinical decision-making in regard to pain management. Further, they reported endeavouring to modify the framework when they deemed it necessary.

#### ***Closeness to the patient.***

This category relates to the quantity of time nurses spent with their patients, as well as the nature of the assistance they provided. Accordingly, at the bedside nurses felt that they had a unique vantage point from which to view their patients' pain and

analgesic requirements. As referred to previously (see p. 37), nurses were able to contrast this with the limited contact that they perceived doctors had with their patients: “They [doctors] go into the patients and ‘How have you been? How is your pain?’ ‘Oh yeah, not bad doctor’ but you know different ... because you’re there all the time” (RN03). The relevance of this is that nurses implied that this perspective underpinned clinical decision-making and imbued in them a justification that they have input into amending analgesic prescription when necessary:

... because you’re there at the bedside and looking at the patients, you can ... tell whether they’re in pain ... they express it ... I find that, as one of the priorities, to ... get on top of it ... check in the med [medication] chart to see what relief they can have and give it to them or if they don’t have anything that’s strong enough or appropriate, then to chase it up by paging an RMO. (RN07)

### ***Management of analgesic administration.***

This category relates to the manner in which nurses perceived themselves as independently managing the administration of their patients’ analgesia. Nurses’ texts revealed that they took responsibility for providing effective pain relief. For example: “... if they’re in pain I sort it out straight away ... I don’t like to see anyone in pain and I don’t judge their pain as well” (RN08). It was inherent in all nurses’ descriptions of their clinical role that they shouldered such responsibility:

... ensuring that they’re as comfortable and pain free as possible, by doing what you can ... ask them what their pain levels are ... giving them appropriate medications on time ... and intermittent meds [medications] if necessary. (RN10)

As a consequence of assuming this responsibility, nurses related that they must make a variety of choices from prescribed medications in order to tailor analgesia to the clinical situation. They described the complexity of this process and perceived themselves to be in the central role of integrating clinical assessment, selection of analgesics and patient advocacy:

... assessing their pain management needs, seeing what the doctor’s written up ... also looking at their clinical status ... how much can they take with their ages [sic], assessing their physical status and following it up, getting something that’s suitable. (RN05)

Contributing to the impression that nurses gave of practicing independently, they also reported being proactive when required. This concept linked to an awareness of the role of the patient in pain management:

If they don't say anything but ... I have a feeling that they could be ... in pain ... they've gotten up for a shower and I saw that their face was like "Oooh" ... I'd put Panadol in ... their little pill [cup] at lunchtime and I say "Here I've got some Panadol here for you" and they say "Oh, OK, is that for me to take now?" and I say "Yeah, if you want to" and they say "Mmm" and take it. (RN07)

Additionally, being proactive as independent practitioners linked to the nurse's perceptions of their role as patient advocate. Commonly, nurses reported that they acted to initiate adjustment of analgesic prescribing:

There have been various times when patients have just been on something oral, it might be Panadol or Panadeine and I have felt that they required something a little stronger ... and I've indicated this to the doctors and got them to write up maybe a stat [one-off] dose or a prn dose ... because the doctors don't know unless you tell them. (RN03)

Nurses had little choice but to practice independently when working on night duty when medical staff were less accessible:

... such a low dose of morphine that it's not even covering their pain ... and they're in agony ... I check them out to see if its [sic] any other problems and I just ring up and see if I can get a order changed or just a bit of extra morphine just to cover their pain ... but if I think there's something wrong that needs checking out I'll get the doctor up ... if they're busy the only thing is to rely on my assessment skills and get an interim [phone] order [for a medication dose]. (RN08)

However the very essence of independent decision-making was contained in the manner in which nurses strongly implied that they owned their decisions:

I would try to assess the pain ... if it's knee pain then I'm going to want to use anti-inflammatories.... if its spasmodic ... if its just acute, if they've had some surgical operation then ... I'm quite a fan of tramadol actually, so Panadol then on to tramadol then ... on to opioids ... . (RN01)

Regardless of where or when nurses were working, they described the decisions that they made without reference to doctors or other nurses. They articulated their own opinions and described having preferences for particular analgesic approaches. As such these nurses could be seen clearly to be independently managing pain at the bedside.

### ***Lack of choice.***

This category relates to nurses' perceptions of the framework of analgesic prescribing that they were required to operate within. Analysis of these transcripts revealed that nurses' "ownership" of their decisions in this setting strongly flavoured these interviews. Reinforcing the perception of independence, they expressed frustration when the choices offered by doctors' medication prescriptions reduced their capacity to make the decisions they felt were necessary: "... often they'll ... have Panadol charted, or tramadol ... and there's not really room to move with a limited prescription like that" (RN09). As testament to their perceptions of independent practice, nurses expected to have adequate choices available to them: "... someone who's just got Panadol and morphine [prescribed] is not really ideal because you like to have something a little bit more in between ..." (RN01). When nurses perceived that analgesic prescribing offered them a lack of choice, they believed their capacity to deliver quality effective pain management was affected. Apart from the implications for practice, such comments emphasise how nurses perceive themselves independently managing pain. Further, linking to nurses' perceptions of themselves as advocates, they reported a willingness to initiate a review of analgesic prescription when they perceived that they required more choices:

I ... start with my Panadol, have a look at what I've got next, whether it's a narcotic or whether there's something along the lines of tramadol and see if I can give them that. I then reassess twenty to thirty minutes later and see where they're at with their pain scores and whether it's improving or not. If it's not improving I may actually wait up to an hour before I'd actually ring that doctor and say "Look I've given this, given this. Their pain is still out of control you need to give me another order or come and review the patient." (RN04)

A telling point in these descriptions is the manner in which nurses display a confidence in, or arguably even a degree of ownership of, the choices available to them. As such, this reinforces the extent to which nurses perceive themselves as independent when practising at the bedside.

### ***Non-pharmacological pain management.***

This category relates to pain management strategies that don't involve the administration of analgesia. The specifics of how nurses utilise non-pharmacological strategies are explored in greater depth in the section on nurses' decision-making. However, an overview is included here to illustrate the place of this approach for nurses

managing pain independently. Analysis of nurses' texts revealed that such non-pharmacological pain management strategies were important to nurses managing pain independently because they can be instituted without a doctor's prescription.

All nurses reported using non-pharmacological strategies and implied that their value lay partly in this freedom from medical constraints: "There's a warm hot plate already with warm towels on it and that's something we could go for. That's something we can do on our own already" (RN07). Further, when the capacity to practice independently was limited by a doctor being unavailable to adjust analgesic prescribing, nurses were able to initiate non-pharmacological interventions: "And also looking at maybe alternative therapy [sic] that may help the patient like hot towels ... anything in the meantime waiting for the medical staff to review the patient" (RN02). In summary, the capacity to institute pain relieving measures without reference to a medical prescription was important to nurses managing pain independently.

### *Sources of conflict.*

This category relates to conflict between the nurse's independent role and constraints to independence that exists in the practice environment. Nurses reported that dilemmas arose when they were exercising the independence that allowed them to tailor analgesia to their patients' needs, whilst dependent upon doctors' prescribing and organisational constraints. This section describes nurses' perspectives on this conflict and its resolution.

Nurses described situations when analgesic prescribing prevented them from instituting the pain management strategies that they perceived were appropriate. In such circumstances, some nurses accepted the doctor's ultimate authority as prescriber: "You try and talk to the doctor and encourage them to give what you think, but basically you have to do what the doctor orders" (RN06). Conflict also arose for nurses when they were faced with a patient asking for more pain relief than they deemed was appropriate. Again, for some this was resolved by accepting that the doctor's prescription and patient preference overrode their own decision-making:

I tend ... I can't say no ... so you just have to go and do it I suppose ... if its written up and they can have something ... you just have to go ahead and give it to them. (RN07)

When faced with these dilemmas, nurses resolved the conflict by accepting limitations to their independence.

Nurses also saw their capacity for independent practice limited by ward organisation. In these interviews, reports of conflict emanating from this source were more widespread. In particular, frustration was expressed with the time consuming nature of the checking procedures required for opioid medications:

... well if someone's written up for it [morphine] ... I do have ... not a hesitancy but the ward is very, very busy at times and something like morphine ... or oxycodone ... you do need to find another nurse and you do need to find the red keys. It does take time to give it but ... that's nothing compared to what the patient needs when they're in pain so ... I don't know, I just go ahead and do it. It's my job so if the doctor's written [the patient] up for it and they're in pain then you go ahead and do it. (RN07)

Reflecting her earlier comments, this nurse ultimately accepted that frustration with the ward environment was of little consequence and her responsibility to provide analgesia took precedence. Another nurse also described how lack of time and the protocols concerned with medication administration affected the quality of pain management:

Maybe because it takes time to walk out to the DD [Dangerous Drugs] cupboard ... sometimes when it is really, really hectic they have to come and write it up and then they have to try and find a nurse who's got time as well to come ... that man ... this morning the nurse who was looking after him was so flat tack with a patient who was going to Theatre and another patient who was quite sick and ... she probably managed to get his obs done and his med[ications]s done and then didn't go near him for another hour so didn't even get the chance. (RN09)

In fact, lack of time was a common theme that arose in these interviews. It was considered to impact on the extent to which nurses could assess patients and prioritise pain management:

... sometimes it not a priority to the nurses and the doctors as well because there's sometimes so many other things going on as well that the last thing they think about is actually "has this patient got pain?" ... and I just think its awareness ... sometimes nurses just don't have time and that's such a shame because there's always plenty of things available. (RN09)

From another perspective, one nurse described how nurses' capacity to practice independently could negatively impact patients when organisational constraints put pressure on nurses. Although this example concerns pain treatments overseen by the



Acute Pain Service, it is included to illustrate how nurses who are limited by ward organisation and pressed for time can have input into modifying pain management regimes:

... people on PCAs [Patient Controlled Analgesia intravenous medication] and epidurals ... they still have to go down for Xrays ... but they've still got the PCA ... epidural so a Registered Nurse has to go down with them to Xray ... so that takes you away from the ward for at least half an hour. Sometimes people have been down there for two hours in Xray, so for two hours none of your work is being done. If you've got two patients with PCAs, there's no way they can have their Xrays done on the same day or in the same shift because you're not going to get your work done. Everybody else is still sitting there waiting for their shower ... after lunch and it's just totally ... awful. (RN05)

This nurse recognised that the safety protocol requiring nurses to accompany patients having opioid infusions when they left the ward setting, presented a dilemma. Nurses were aware of their patients' safety needs yet were unable to implement the required action without impacting on the care that they were able to deliver to other patients. With the safety requirement being inflexible and no support provided to assist nurses, the problem could be resolved by removing the opioid infusion and therefore the safety protocol:

So a lot of the time ... people don't keep their PCAs for long enough ... [they were] removed quickly which is more of a convenience for staff than it is for treating their pain ... part of the time ... we're saying "Well look, they're not using it much. Let's get them onto oral," which is not such a bad thing but then the patient's not in control of their own pain ... and quite often they won't get an hourly protocol unless they ask for it because we're busy again ... so they're not in control of their pain which is the intention in the first place ... it would often be initiated by us. Sometimes the APS [Acute Pain Service] staff will say "Oh, no we'll leave it till tomorrow" but often they'll say "Oh yeah they haven't used it that much, take it down." ... we often take them out because it's convenient for us. (RN05)

### *Lack of Consistency*

A theme that emerged in analysis of these interview transcripts was that of a lack of consistency between nurses in the manner in which they managed pain. This related to the inherent independence of nurses' practice that gave scope for each nurse to assume her own pain management approach. Some of the more senior nurses expressed frustration when they perceived that other nurses had allowed pain management to lapse whilst they were off duty:

The biggest thing that lets you down is nurses before and after you. Pain relief has got to be a 24-hour thing. If you come on your shift and no-one's given pain relief before you, you've already missed the whole peak and trough thing. You're right at the top again and then you're going to spend your next eight hours trying to get that person's pain back down again to a decent level. If the person on the next shift doesn't carry on with good pain relief then it's all very sad for the patient again ... they've peaked again, gone right up to the top and they're in pain ... it's a disappointment in nursing staff if we don't all act with the appropriate measures to keep pain at that happy medium ... and that makes it hard for everyone. (RN04)

It was suggested that this lack of consistency might emanate from nurses' differences in the priority given to pain as a problem for patients:

[lack of consistent pain relief] well I wouldn't say common but I do think pain could be managed a lot better on our ward ... I think sometimes that it is not a priority to some of the nurses ... because there's sometimes so many other things going on that the last thing that they think about is actually "has this patient got pain?" ... I just think it's awareness ... sometimes the nurses just don't have time. (RN09)

However, one nurse expressed frustration with the lack of consistent practice and attributed this to nurses' attitudes:

Lazy nurses don't give pain relief ... and that's because of the hassle that goes with it ... you have to watch someone if you're giving a little old 92 year old 5mg of morphine, you're keeping a bit of a closer eye on them. It's much easier just to roll them over and pop two ... PR [per rectal] Panadol in ... but the PR Panadol may not be enough every time but you'll notice you can come on a shift and they haven't had any morphine for the past twenty two hours, when you looked after them. (RN04)

In summary, the theme of nurses' independently managing pain in the general ward was one of the strongest to emerge in these interviews. The concept of making independent decisions was inherent in nurses' descriptions of all aspects of bedside pain management and seemed to be fundamental to them being able to tailor analgesia to patients' individual needs.

### ***The Nurse as an Advocate***

This category relates to nurses' perceptions of themselves as practitioners who act on their patient's behalf to ensure that pain is effectively managed. Analysis of the interview transcripts revealed that nurses considered patient advocacy to be of primary importance in their role as a nurse managing pain in the ward setting.

When asked to describe their role in pain management, the majority of nurses first considered themselves to be patient advocates. Some stated directly that this was their role:

[role as nurse managing pain] Definitely as an advocate ... you want them to be pain free at least ... comfortable ... as the nurse, you're the one who needs to tell the doctor and inform them of their pain. (RN01)

Some nurses saw themselves as advocates because they took the responsibility to be initiate pain management strategies:

... patients' advocate on the ward with pain ... I think it's ... our main aim is to keep the patient pain free so it's one of the most important things that we make sure that the patients are comfortable and have adequate pain relief. (RN03)

Others considered that patient advocacy in pain management was more specifically concerned with liaising with medical staff to alter analgesic prescribing when analgesia was ineffective: "Well if I feel that their analgesia's not good enough or it's not covering their pain, I'll actually contact either the anaesthetist or the doctor ... to sort it out" (RN08).

... not ... as a generalisation but it does happen that they're not charted adequate analgesia ... You've got to make sure because you're the one ... you've got to be ringing them up to say you need more analgesia for patients. (RN06)

It emerged clearly in these interviews that nurses consider patient advocacy to be of prime importance in their role as pain managers. An integral part of this was contacting doctors, "My role is to liaise with the medical staff ... if the pain is not well managed ... to inform the medical staff if pain is not relieved" (RN02). In fact even if they did not directly refer to being a patient advocate, all nurses reported that they initiated such reviews if analgesics were not proving to be effective.

One nurse expressed a strong belief that patient advocacy was part of pain management, liaising not only with doctors but wherever was necessary to get the care patients required. However, she recognised that other nurses might not speak up for their patients to the same extent:

I think I'm a loud mouth and I fight for my patients and you asked before why other people don't do it, because every personality is different in nursing and I believe in advocating for my patients and I will, to the n'th [sic] degree especially when it comes to pain ... and I'll fight for them no matter what, like ringing APS and saying "This isn't acceptable," ringing the doctor saying "This isn't acceptable." (RN04)

Some nurses implied that advocacy extended beyond speaking up for patients to giving patients the confidence to speak up for themselves.

[role in pain management] As an advocate for referring them onto doctors if there is pain ... if they are in pain and ... what they're prescribed just isn't covering them then I would certainly be going and talking to the doctor and making sure that something has been prescribed that's adequate and also ... I tell patients all the time that they ... shouldn't be in pain. They're in a hospital and there is plenty of things that they can have available to them and so they need to tell us straight away. (RN09)

In these interviews, nurses did not directly refer to the role that they assumed as independent practitioners, however this was a thread that ran through all their descriptions of managing pain in the ward setting. In contrast, nurses clearly saw themselves as advocates for their patients and described themselves as speaking up for their patients when required. This usually meant liaising with doctors to alter analgesic prescribing but could extend to other services within the hospital and to encouraging the patients themselves.

### ***The Nurse as an Educator***

This category relates to the manner in which nurses saw themselves as educators who imparted knowledge of analgesics to patients and other nurses. Analysis of nurses' texts generated two sub-categories in this section; "educating patients" and "educating other nurses." Nurses perceived that patients required up to date information about medications and their associated side effects to enhance compliance with effective analgesic regimes. Additionally, some nurses reported needing to mentor their colleagues to improve the consistency of analgesic administration.

#### ***Educating patients.***

A common theme that arose in nurses' texts was that of giving patients information about medications and their side effects as well as current approaches to pain management. All nurses reported that they gave patients information and some

directly referred to this as “educating”. Nurses implied that they educated patients in order to enhance compliance with analgesic regimes. For example:

... they’ll say “Oh, I really don’t like having morphine” or “I’ll get addicted to it.” That’s a shame because if they were properly educated prior to their operation they’d know that their dose is correctly written up for their size and weight and that they can’t possibly overdose. (RN09)

I find that you must educ[ate] ... it’s really hard to educate them [patients] in the fact ... if you’ve got someone you can educate, I always say “Look you’ve got a broken leg. We can’t make this completely painless. We can’t do that but what we can do is, instead of having peaks and troughs, is we can try and make a happy medium in the middle. We can’t get you down here where no pain is ... We don’t want you up here where its excruciating pain but we want to bring you down to this level.” (RN04)

The two most common concepts about which nurses informed their patients were the value of having regular analgesia and the addictive potential of opioid medication. Encouraging patients to take regular analgesics meant explaining the benefits of a proactive rather than a reactive approach to relieving analgesia:

[regular administration of Panadol] A lot of patients will refuse it, you see and then they’ll say “I’ve got pain,” and you explain to them what a good idea it is to have that on a regular basis even if they don’t feel that they desperately needed it at that time. The fact that they are going to need it a bit later is just to keep ... the pain control on a steady level. (RN03)

Most often “regular analgesia” meant the regular administration of Panadol. The majority of nurses in these interviews reported that they informed their patients about the benefits of taking Panadol regularly and that patients were receptive: “I hate people refusing Panadol so I’ll educate my patients first of all on the importance of Panadol. If they’re nil by mouth [fasting] then I’ll tell them “unfortunately it’s got to be PR [administered rectally]” (RN04). Nurses on night duty also reported having input into patient education:

... we have to wake them to do their obs [observations] so often I’ll give the post-ops [postoperative patients] Panadol. I’ll make sure they have it. They’ll try to knock you back but I’ll say “Look ... its really good to have it, you know, it’s good,” and they often will take it. (RN08)

Nurses reported that they commonly corrected patients’ misapprehensions about opioid medication. In particular, they often countered exaggerated fears of addiction:

“... and they’ll often say ‘I don’t want to be dependent’ ... and then you have to explain that if you have the morphine or a narcotic for pain it’s a lot different than just having it for pleasure” (RN03). Alongside this, nurses reassured patients about the potential for overdose when using opioids:

They often think if they’re taking too much morphine, they think they’re going to overdose themselves ... I say “well that’s why I’m here, I’m watching over you ... its not going to happen” ... When you say “Look, I’ll go and get you some analgesia, you’re in pain ... and I’ll go and get you some more,” they say “Oh, I don’t want to take too much of that because I might get addicted to it,” or something like that and so I say “you’re not going to get addicted to them in such a short period. You only need it because you’re post-op”. (RN08)

In summary, nurses described their role in educating patients primarily as that of correcting preconceptions about analgesia that affected patients’ acceptance of analgesia. Alongside this was informing patients about newer and more effective approaches to analgesia.

### *Educating other nurses.*

Nurses perceived that they have a role in educating other nurses about pain management but that not all nurses are prepared to take this role on. They implied that educating nurses improved pain management by increasing the overall amount of analgesia administration and improved the consistency of pain relief being given over a 24 hour period. It was also felt that there was an exaggerated fear of addiction to opioids amongst other nurses similar to that expressed by patients, which could be countered with education:

... a lot of it is education ... I think a lot of nurses always feel that a patient will get addicted to the drug ... so mainly education because really research has shown that a very small percentage of patients are really addicted so I guess mainly education. It’s a lot to do with education and I know that there is still a lot of nursing staff [who] feel that if it’s [an] appendix they shouldn’t have pain as it is a small surgery they had [and] don’t need ... as strong an analgesic as the others. I strongly believe that if they are in pain then give it to them irrespective of what surgery they have gone through ... education is important and if they were more educated ... then I guess there won’t be any underlying fear of giving them analgesics. (RN02)

Some nurses believed that educating younger nurses was an inherent part of their day-to-day ward duties: “I handover and try to educate as much as I can that pain relief is an important thing especially in little old NOFs [patients with fractured neck of

femur]" (RN04). Such education primarily involved highlighting pain management and providing role modelling:

I handover on the tape and I include the last time I gave pain relief. Even though it's recorded on the medication chart I actually verbally hand it over as well and tell them how often they can have it ... people come to me all the time on the shift and ask me to assess their patients and I'll certainly do that. (RN04)

Commonly nurses reported giving their colleagues support and being a resource:

... the more junior staff ... a lot of them haven't got surgical backgrounds. They haven't been on a surgical ward so they can either come to the more senior staff and ask us ... [whether nurses are keen to come and ask] I think it depends on how approachable you are ... some people won't ask some other nurses because the co-ordinators [shift leader] are always really busy ... some of the grad [newly graduated] nurses will come up and ask you "Oh, this patient's got pain. What shall I do for them?" So you're just giving them advice really and I think the more experience they get in surgical areas the more knowledge they'll obtain. (RN06)

One nurse described guiding others through the subtleties of pain assessment in the confused elderly. This nurse acknowledged that not all nurses were so supportive or took on the role of educating more junior staff:

They hand over that they're climbing out of bed ... that "I don't know what's wrong with them" and when you look at their chart they haven't had any analgesia and that has happened to us many a time. And we actually tell them ... you have to give them analgesia ... [asked whether on subsequent nights pain is better controlled] yeah, because I do push it ... but often there are different girls on ... I think a lot of them are not ... going to the senior staff, maybe they stress that they're going to be looked at as being stupid or something ... I know from some of the junior staff with me, they come to me because I'm not too threatening, because a lot of them will say "I'm too busy," some of the senior staff say "I'm too busy" and walk away ... I think they get stressed ... some of them haven't been here [long], I've been here for years so ... (RN08)

Nurses, who commented that not all their colleagues were willing to assume this role, suggested that this might impact not only on the development of individual nurses but also on the overall quality of pain management:

... junior nurses ... which is a learning experience for them but if they're never taught, if they're never told afterwards, which I know as nurses we sometimes do ... We just like to have a bitch and a whinge behind their back and then not actually tell the junior nurse ... "If you'd given a little bit more pain relief it would have been good." If they don't get that information they never learn. They never learn appropriate pain management, [and] then five years down the track

when they're senior nurses they're still not giving it are they? So I do think ... it's a responsibility to teach the juniors what to look for, what to do, what to give. (RN04)

### ***The Nurse as a Gatekeeper***

This category relates to an abstract concept where nurses assumed a protective role that emanated from judgements they made about patients. Generally this was an extension of nurses' awareness of safety and concerned perceptions about the addictive potential of opioid medications and preconceptions about patients' personalities.

It could be discerned from nurses' texts that they made judgments about patients whose behaviour deviated from the expected, most commonly requesting analgesia more frequently than they expected:

... the person who comes in and is continually asking for pain relief ... they could get labelled as somebody who is asking for it all the time ... always on the hour or on the second hour ... they're ringing the bell on the dot ... there are cases where you have to be aware ... asking why are they doing that ... (RN10)

In some instances such judgments prompted nurses to assume a protective role. They sought to control the amount of analgesia a patient received and the independent nature of nurses' pain management practice gave scope for them to do so. Such a response could be seen to have its basis in nurses' regard for patient safety. However, there seemed to be an emotional component in this response and in a sense, nurses assumed the role of a "gatekeeper", limiting analgesia for those patients that they judged did not warrant it.

When nurses observed this behaviour, they reported experiencing ambivalence toward the patient's underlying motivation. Commonly this type of behaviour was ascribed to a known or suspected history of drug abuse. Additionally some nurses expressed the perception that patients with a history of i.v. [intravenous] drug use were at higher risk of opioid addiction. As a result nurses reported that they were reluctant to give opioid analgesics:

You have to also look at their past history ... perhaps patients that have been i.v. drug users, you ... think "Oh, should we be giving them morphine?" ... it is a big thing looking after those kind of patients because they will get addicted to the morphine. (RN06)



Some nurses observed that patients could be labelled as “drug seeking”. One nurse described how such labelling had a negative impact on the assessment and management of pain:

I came on [duty] that night and they [nurses] were complaining that he was a drug addict and he was seeking drugs ... he'd got back from [the operating] theatre and he kept on asking for drugs but he was asking for it pre-op [prior to surgery] as well, and I thought “well I'll go down there and check him” ... and his whole arm was blue so I got onto it straight away and I said “This guy's got compartment syndrome [complication of fracture injury]. He's not seeking drugs.” And because they [the nurses] just labelled him ... once he was fixed ... he went to surgery within an hour, he was fine. Never sought [sic] anything, so I think because they saw that label that he was an i.v. drug user, or ex-i.v. drug user, they just ... labelled him and actually ... he was a good patient ... It was just that he had compartment syndrome. (RN08)

When patients become labelled because of behaviour or known history, some nurses expressed a concern that these labels can persist during the patient's hospitalisation and continue to impact negatively on pain management:

... sometimes people can be a bit quick to say that they [patients] are seeking analgesia ... they often get admitted with a note from ED [Emergency Department] saying “? morphine seeker” ... it's a terrible thing to write because people suddenly go “Ooh, OK that's a little bit dodgy” and are very reluctant to give them analgesia ... it can affect how nurses medicate ... quite mean about giving them analgesia because they think “Well they're an i.v. drug user” ... if someone was handing over to me ... I wouldn't allow the conversation to even start. I'd just say “... just because he's an i.v. drug user ... [he] has just had his bowel resected and is in severe pain” ... usually people are pretty quick to realise that it's not appropriate to say things like that ... people can be very critical of patients ... a family's been difficult and you just get to the end of your tether and you probably just say something that you think afterwards was not a very nice thing to say. (RN09)

One nurse acknowledged this “gatekeeper” role and described having an attitude that had changed with experience:

I think in the past I would have been more questioning in the sense of ... “you shouldn't be having it” ... there's this assumption that the person's going to get addicted to it and you try and ... protect them from this addiction ... I've learnt ... if they're in pain there's a limited chance of them actually becoming addicted to something ... So if pain relief is associated with having the i.m. [intramuscular] injection ... that's what we should be doing. If it's prescribed two hourly it should be ... given.... Maybe he is ... a previous ... i.v. user ... it's not like you want to label anyone in particular but I think we all do ... but at the end of the day I'm one for more believing the patient ... we're all adults and basically he's responsible in some degree for his care. If he's telling me he's got

pain and he's written up for pain relief, we should be ... giving it.... have we got the right to dictate to them when they can have it and when they can't when it's prescribed. (RN10)

Although some nurses were aware of the potential for patients to be labelled and the effects this had on their care, the sentiments expressed by this nurse contrasted with the other nurses interviewed in that there appeared to be some distance from the emotional component of the "gatekeeper" concept. This subtle difference somehow conferred upon patients a sense of dignity that shone through this nurse's text.

In summary, the role of the nurse is pivotal to pain management in the general ward setting. Nurses were aware of some of the elements entailed in this role whilst others, arguably that nurses took for granted, came through in the overall analysis of these interview transcripts. Various aspects of nurses' roles that were described in this section were abstract concepts that contrast with concrete descriptions of the decision-making process that nurses undertake in bedside pain management.

### **Nurses' Decision-Making**

This is the second of the three major categories that were generated from the analysis of the interview transcripts. It relates to the mechanics by which nurses assess and treat pain. Nurses' voices indicated that this is a complex process. Their texts revealed that they make many decisions that encompass the presence of pain, the intensity of pain and determination of the most appropriate analgesia. These findings have been presented in six main categories, ordered to equate to the steps that nurses take in this process from assessment of pain, through formulation of goals, and the selection and titration of analgesic medications. Sub-categories have been generated for clarity when themes were complex.

#### ***Assessment***

This category relates to how nurses determined the presence and intensity of pain in their patients. All nurses were asked to describe how they judged the intensity of their patients' pain and this led to questioning that explored various aspects of the assessment process. Concepts that emerged from nurses' texts were clustered into four categories that encompassed "subjectivity of pain", "measuring pain", "documentation" and "prn dosing". The category of "measuring pain" generated a further five sub-categories.

### *Subjectivity of Pain*

This relates to an understanding that each person experiences pain in their own manner. In these interviews, nurses acknowledged that pain is a subjective experience. They accepted that patients might perceive and express pain differently. For example: “a patient’s perception of pain is quite different ... what you or I might think ‘Oh God that’s a bit uncomfortable’ and have a Panadol, another patient would have excruciating pain from that same thing” (RN03). Nurses incorporated their acceptance of pain as a subjective experience into their pain assessment strategy: “Well I believe that every patient has a different perception of pain. Every patient’s different and you have to get them to describe what type of pain it is that they’re experiencing” (RN05).

It was suggested that patients’ previous experiences of pain might affect how they later express pain:

... some people say they’ve got a pain score of 1 whereas for another person it will be a 6, so every person’s different ... I think it is just the patient’s previous experience with pain. (RN06)

One nurse described taking this into account in the assessment and management of a potentially serious clinical condition:

There was a guy who came in and he had chest pain with scores of 1 out of 10 and ... he was a big beefy sort of fellow, had previously had lots of back pain as well and numerous other complicated surgical interventions and I just wondered if that 1 out of 10 was really ... something to be worried about ... his 1 out of 10, was maybe the equivalent of my 5 out of 10. So, I think ... even though you’re using maybe that score 1 out of 10 you have to be aware ... if it’s indicative of possibly something going on ... chest pain and some ischaemia ... in the sense of his comfort level might be 1 out of 10 but it might be a little bit more serious than that. (RN10)

Nurses had conflicting views about how patients’ expectations of pain influence their expression of pain. Some observed that patients had expressed surprise at the intensity of postoperative pain that they had experienced. For example: “... post-op they can’t understand why they have so much pain. They say ‘I’ve had my operation I shouldn’t have any pain.’ I’ve had a few say that to me” (RN08). A contrasting suggestion, however, was that some patients consider postoperative pain “normal”:

I suppose maybe they think it’s part of the course of the illness ... they just think “well I’m, I’ve got an appendicitis ... I should have some pain” and their pain

tolerance maybe higher than anybody else's ... I wouldn't say they're quite happy to be sitting there in pain but ... they don't seem to maybe feel as if there's any need to express it. (RN10)

Some nurses had observed that young males seem to have a low pain threshold:

... young boys often, young men.... I seem to find that they have a lot more pain ... than sometimes an older person after an operation ... but then you can't ever make a decision like that because every person is different.... and I suppose pain is what each person perceives it to be, so a young boy might say he's in pain and really be in a lot of pain because they just don't tolerate it as well. (RN09)

### ***Measuring Pain***

Analysis of nurses' texts revealed that they used a variety of means to measure the presence and intensity of pain that their patients were suffering. Five sub-categories were generated that related to "patient self-report", "pain scores", "physiological signs", "behavioural cues" and "type of pain".

#### ***Patient self-report.***

Nurses' belief in their patient's self-report of pain was a theme that emerged strongly in the analysis of these interviews. When asked how they assess their patients' pain, all nurses reported that they ask the patient directly. This response was typical when asked how intensity of pain is assessed: "I ask them ... I ask them what their pain score might be ... generally I go by what they say" (RN03). Nurses reported that when patients were able to communicate verbally, this was the preferred method to assess pain:

Most patients can verbalise if it's effective or no so I always ask them. I think it's every second question when I talk to a patient [is] "Are you OK? Are you comfortable? Are you in any pain?" They usually say "Yes" or "No" or "A little bit" ... so I'm always asking. (RN07)

Some nurses expressed a strong belief in the patients' self-report: "Definitely. The pain is what the patient feels it is, it is not for me to judge" (RN02). Such sentiments linked to nurses' general acceptance of the subjectivity of pain.

Although nurses recognised that other sources of information were used to complement direct questioning, or when direct communication was difficult, they still implied that the patient's self-report was the most important tool in pain assessment: "... most important thing is questioning and asking ... finding out if the person is in

pain, using some sort of ... the pain scales, ... but actually asking the person not just assuming" (RN04).

Only one nurse displayed a limited acceptance of the patient's self-report: "... making sure that we're constantly assessing what their pain is like and not just taking what they say to be the right answer, looking at other signs, such as ... increased heart rate ... sweating" (RN09). This nurse directly stated that this evaluation of the patient's self-report was part of the nurse's role in pain management. Interestingly, this nurse also expressed the view that patients' reports of their pain scores were also of limited value and needed to be considered in conjunction with other factors.

### *Pain scores.*

All nurses reported having asked patients to rate their pain against a pain scale as part of obtaining a patient's self-report. Nurses chose to use a numerical scale and patients communicated scores verbally: "... and you get them to describe what type of pain it is that they're experiencing and to give a score ... usually the score from 1 to 10 with 10 being the worst pain imaginable" (RN06). They implied that use of such numerical pain scores was a practice encouraged in this hospital: "Well the measure that's pretty much out now is the pain score out of 10. So I usually use that and ask them what their pain score is ... if zero's none and 10 is the worst imaginable" (RN07).

Despite a general perception that using a pain scale is an effective tool to assess pain intensity, some nurses needed to assist patients to relate their pain experience to a numerical value:

If the person can talk to me I use the scale ... I always say it like this "zero being no pain at all, you're walking along a beach having a good day, ten being a chainsaw cutting you up." Because I find with the numerical values ... people don't understand it ... I try and make it as simple as that. Ten is a chainsaw cutting a limb off ... you can imagine how painful that is. Zero is no pain at all, sitting on a beach enjoying yourself ... where can you put your pain. If they can answer me ... I can get a good value of where they're at [sic]. (RN04)

Additionally, nurses regarded numerical pain scales as inappropriate when patients were elderly, confused or unable to communicate verbally. In these cases they tended to assess physiological or behavioural cues rather than use alternative rating scales:

If someone who can obviously converse well ... I would get him to rate the scale if I can, but in his case ... he is elderly and a different nationality and it is very difficult ... need [to] look at his body language basically. (RN02)

Elderly patients were described as sometimes having difficulty relating pain to a numerical scoring system:

If you get a frail old lady who's basically been OK and she's screaming out in pain ... she can't compare it to anything else and you're trying to get her to give you a score out of ten. She may not even understand what the score 1 out of 10 is so you've got to use other signs as well ... so if she's saying "I've got lots and lots of pain" ... the score is really irrelevant I think ... you've just got to try and relieve it. (RN10).

All nurses expressed an acceptance of their patients' self-reports of pain to some degree, however some questioned whether the subjectivity of pain affected the credibility of numerical pain scales:

I think its good but it can't be the only deciding factor on what analgesia you're giving or the effectiveness because different people rate pain differently. Some people can walk up a hallway and say their pain is 9 out of 10 ... I think you have to look at other factors as well. (RN09)

One nurse suggested the possibility that patients' responses when scoring pain could unwittingly be influenced by nurses:

You want them to be pain-free. You want them to have a lower pain score ... I suppose you've got to be really careful that you don't say to them "What's your pain score?" and they go "Ohhh" so you say "Is it a three?" ... You've got to be really aware of not doing that ... you see people who do that ... they're not trying to ... fudge the figures ... it's just trying to help the patient but by doing that I think you can actually influence them in a sense. Give you a satisfied feeling of thinking "Oh, great, they're fine" but "why are you still writhing around in the bed?" (RN10)

Despite these reservations, nurses reported using pain scores widely to quantify their patients' pain.

### ***Physiological signs.***

Nurses reported that they asked their patients about pain in the first instance, however they also believed that changes in physiological status were reliable indicators of the presence of pain. Most commonly, an increase in blood pressure was regarded as

significant with others being an increase in pulse rate and sweating. For example: “Our biggest indicator in the NOFs [patients with fractured neck of femur] in the elderly is their blood pressure will scoot up when they’ve got pain” (RN04). Also “... and their blood pressure is up and they’re tachycardic [increased pulse rate] and you know everything’s going wrong and you think, ‘They need some analgesia’” (RN08).

Often nurses reported that they accepted patients’ self-reports but supported this with an assessment of physiological changes: “... asking the person not just assuming ... I also look at your physiological signs as well, raised blood pressure ... tachycardia” (RN04). When describing the assessment of a particular patient, one nurse acknowledged that an increase in blood pressure could have indicated pain but felt that this would be a late change and that other earlier signs should be more significant in the clinical management:

It wasn’t certainly by obs [observations], I don’t know, intuition?... it wasn’t obs. Sure the BP [blood pressure] can be up but I don’t think it makes that much of a difference ... I think it would take a while for that to happen. I don’t know. Part of it is by intuition or “is it time for them to have something for pain?” (RN05)

When pain was difficult to treat, nurses were aware that this could suggest the presence of complications. They reported using critical thinking and physical assessment skills to investigate such problems:

... we just kept giving her the regular analgesia ... she kept saying it was her ankle ... she had a POP [plaster of paris cast] on ... we split it and tried moving it ... thinking she may have had some compartment syndrome. (RN06)

Linking to themes of independent practice and patient advocacy, nurses reported that they initiated a medical review if their pain assessment indicated complications in their patients: “They’re in agony ... I check them out to see if its any other problems ... if I think there’s something wrong that needs checking out I’ll get the doctor up” (RN08).

Generally, it appeared that nurses integrated their assessment of patients’ vital signs as supporting evidence of self-reports of pain. Additionally, these indicators were particularly useful when patients were unable or unwilling to report their pain. In these cases, nurses’ use of physiological indicators can be linked to their awareness of the difficulties in assessing pain in the elderly.

### ***Behavioural cues.***

All nurses described behaviours that they believed indicated that their patients were in pain. The most commonly reported was facial expression, such as grimacing. Moaning, crying, clawing hands and restlessness were also considered significant. Often these behaviours were noted when patients were required to move and in this instance were believed to be a strong indicator of pain. For example: "... his facial expression ... a big thing because he was grimacing and when he went to turn, he would moan ... with discomfort" (RN06).

In addition, when nurses observed that patients were reluctant to move they interpreted this as being due to pain. Nurses most commonly reported being aware of patients' responses when they were required to move for pressure area care:

... if they can't answer me then you've got to look at ... grimacing, not being able to roll when you do the pressure area care. If the person is screaming and yelling when you're doing pressure area care then you certainly know they're in pain. (RN04)

Similarly, nurses perceived that pain often prevented patients from breathing deeply:

You can see her physically wincing at times ... this morning she said "I don't think I can breathe too well" and it wasn't anything to do with narcotics ... she was in discomfort and didn't want to take any deep breaths. (RN10)

Along with this disruption to patients' breathing pattern, nurses felt that pain could result in a reluctance to mobilise and to perform activities of daily living [showering and toileting]:

They tend to hold their breath when they're in pain and it makes them less likely to want to do things ... they think "Oh, if I move, if I'm going to get out of bed its going to hurt more" so they are very reluctant to do things. (RN06)

Reinforcing the significance of these behaviours to nurses, patients' ability to function was considered an indicator of the absence of pain

... they are visibly comfortable ... a little bit more relaxed ... in their body ... able to ambulate. ... do all your ADLs [activities of daily living] ... I want someone to be able to perform their normal ADLs. (RN01)



Nurses particularly relied upon behavioural cues when their patients were unable to communicate verbally. In this regard, behavioural cues were considered alongside physiological signs:

I usually judge it with the patient and ask them but if its someone that can't tell you ... an old person that's demented, they usually get restless ... they're usually crying. There's [sic] those little hints. They can't tell you their pain's at a 10 but there's those little hints. (RN08)

Even when patients could communicate verbally, nurses interpreted behavioural cues as supporting evidence of self-reports of pain or as an indicator of pain intensity: “[asked how the intensity of pain was judged] ... well I could see on his face ... he was rating it [the pain] 10 ... the way he was clawing his hand ... definitely looked in pain, he was crying” (RN08). When patients were reluctant or unable to verbalise pain, the recognition of behavioural cues then prompted nurses to take courses of action that encouraged patients to accept analgesia:

Sometimes I could tell by their facial expressions ... if I know the patient well and all of a sudden they've got a cringe on their face if they move ... I can say “Oh, that must be pretty painful” and then do something about it. (RN07)

The only behaviour that nurses differed on was the significance of sleeping as an indicator of whether a patient is not in pain. One nurse believed sleeping indicated that a patient was comfortable: “... you can tell if ... someone's comfortable ... if they're lying or they're sleeping or resting” (RN07). In contrast, another nurse considered that in light of a patient's recent history sleeping may not be a reliable indicator:

They might have been on the floor at home for two days until someone's found them ... they might have been in ED for at least 24 hours. They're going to be exhausted so they sleep whether they're in pain or not. I don't think sleeping is a good indication of whether someone's in pain or not. (RN05)

In these interviews nurses reported that they believed that the behavioural cues discussed were indicators of pain, however some questioned whether such recognition was widespread in the ward setting. In particular, frustration was expressed when colleagues don't always recognise when elderly or confused patients' behaviour indicated pain:

With the elderly, I find that post-op ... people are not assessing their pain properly. They're not giving them analgesia ... when I come on they haven't had anything all day, even Panadol because they can't tell you, because they can't

communicate ... and they're [nurses] wondering why they're crying and out of bed ... I said [sic] "Have they had any analgesia?" (RN08)

The assessment process described by nurses in these interviews appears complex. Inconsistencies between a patient's self report of pain and clinical picture caused them difficulty:

[the patient] was calling out and crying ... I don't know whether she was doing that for attention but she was quite rude to some of the nurses ... saying that we weren't doing anything about her pain but she was having regular opioids ... so she was really hard to judge. (RN06)

This nurse described another situation that was confusing for her:

Just having a look at him ... he'd have the morphine and then go down for a cigarette ... you would be thinking "Oh, OK." ... ask him to describe it ... it was really hard to assess because as soon as he had his pain relief he would go downstairs ... for cigarettes and things ... very difficult ... they're just really hard to assess. (RN06).

Such inconsistencies sometimes led to nurses' questioning of a patient's motives. Nurses' reactions to discrepancies between patients' self-reports of pain and the absence of behavioural indicators of pain could be linked to the origination of patient labelling and the nurses' role as a "gatekeeper":

Taking into consideration other factors as well ... you can look at the patient overall and see if he's sitting up, walking down stairs ... having a jolly old laugh and nipping out every 5 minutes for a fag [cigarette] ... maybe he is a previous ... i.v. user ... its not like you want to label anyone in particular but I think we all do ...so you look at other symptoms ... is his pulse up ... does he look uncomfortable ... you look at all those factors at the end of the day. (RN10)

Nurses believed that behavioural cues were powerful indicators of the presence and intensity of pain in their patients. Along with self-reports of pain and physiological changes, nurses integrated this information in the assessment process. As described earlier, the assessment of behavioural cues was considered particularly useful when patients were unable or unwilling to report pain.

### ***Type of pain.***

Nurses' texts revealed that they made judgments about the intensity of pain that they expected their patients to experience with certain medical conditions. They implied that these judgments might be integrated into an objective assessment of the patient to either support or modify other elements of the nurse's assessment:

Well just looking at him today, he was just sitting over the side table with a pillow on his table and when I asked him how he was this morning he just said he was terrible ... and the cancer that he has ... I know is ... can be very painful. Anything to do with the bile duct is usually quite a painful cancer. (RN09)

One nurse related how she relied on her understanding of the patient's medical condition to determine analgesic requirements when she deemed that the patient was unable to communicate pain:

If the patient can't verbalise ... if they're confused or cannot tell me ... I think of what's happened to them ... have they fractured a bone or something?... I think "OK. That would be pretty painful" then I ... have to make my own decision of what ... pain relief would be appropriate for them. (RN07)

Sometimes nurses allowed their expectations about the painful nature of a particular medical condition to override their impressions gleaned from assessment of the patient. They did not, however, report disbelieving the patient's self-report of pain in favour of a belief that the medical condition that the patient suffered was not painful. Rather, when they believed that the medical condition was painful they provided analgesia to patients even though the patient was not complaining of pain: "I just naturally assume if somebody has, because bone pain is one of the severe types of pain, I just naturally assume that the pain is severe ... even though he's just laying there not doing anything" (RN05).

### ***Documentation***

This category relates to nurses recording information about their pain assessments in the patients' ward based medical records. Some frustration was expressed at the lack of a facility for documentation of pain scores. It was felt that the provision of such a facility might prompt more regular pain assessment:

There should be somewhere that you should be documenting the pain score ... once they're off APS [not under the care of the Acute Pain Service] or if they were never on it, there's no form ... nowhere on your observations [chart] ... that we can score a rating of pain ... I know it's more documentation, but at the end of the day documentation has to be done. So if you had a documentation form of some sort, whether it's at the bottom of the observations [chart], pain score out of 10 ... that prompts people then to ask the patient "Have you got pain?" ... if you're asking the question, if you're talking it out loud and someone comes back at you and says "my pain's 8 out of 10", you must do something about it right then and there. ... if there was a prompt somewhere to record a pain score every four hours ... then they would record it, thinking ... I'm trying to put dot to dot and hoping that nurses would match the dots up ... if you're asking the question every four hours and you're getting a higher score then you should be giving something for that. (RN04)

To address the problem, this nurse reported that she has initiated documentation of pain scores for her own patients:

There is no documentation anywhere on the end of bed charts that you actually have to record some sort of pain scale ... I record it at the bottom of my graphic charts where I record my obs, every four hours if necessary and I include it on their care plan as well. (RN04)

Staff on another ward had initiated the use of Acute Pain Service documents to provide a facility for documentation that might prompt nurses to assess pain more regularly:

We use them for other patients ... when you know they're probably going to be in pain ... we just pop a chart in ... we just use the APS pain chart ... and that way we can ask at least ... I think the reason it started was that a lot of the nurses were not asking it they were in pain. (RN09)

There was a perceived benefit derived from using such a chart on the ward:

I do actually think he's being very well managed because he's constantly being asked so he's being consistently offered something ... [asked whether patient would be assessed regularly without the chart] No ... he's the kind of man who wouldn't really tell you unless he was in excruciating pain ... with him asking [sic] between 1 and 10 and if he would like something for his pain ... it's just a reminder to the nurses to ask him ... otherwise he would sit in the corner all shift because he doesn't speak any English so ... how would we know? (RN09)

In general, some nurses expressed the view that requiring regular documentation of pain information would be a powerful prompt for nurses to assess pain. As assessment is seen by nurses to be the first step in the management of pain, it was felt that this would lead to more nurses initiating pain relieving strategies in their patients.

### ***PRN Dosing***

This category relates to problems that nurses perceived arose when medications are prescribed to be given “as required”. In practice, nurses need to be aware that patients are in pain and requiring analgesia before such medication is administered. In this situation, nurses’ texts revealed that the potential for patients’ pain to be under-treated emanated from a conflict of expectations between patients and nurses:

If the patient is not saying they are in pain ... or asking for pain relief ... a lot of patients won’t ask for things and people do presume they’re comfortable ... because quite often the doctors will just write the medication down prn and the patient might not have one [analgesic] all the time they’re in hospital. (RN03)

This conflict between nurses not asking patients and patients not requesting pain relief was perceived to be an even more potent when nurses were busy:

If your patient’s charted prn doses then nurses aren’t always asking the patient ... if they don’t look like [they’re in pain] and if the patient doesn’t ask, sometimes the nurses don’t offer ... whether it’s because of time constraints ... because you’re busy and the patient’s not telling you they’re in pain. When you’re doing their obs ... you ask them but if they’re not telling you then it’s really hard. You can’t just go around and ask them, especially if you’re really busy with post-op patients. (RN06)

Nurses addressed this problem by alerting colleagues of the patient’s reluctance to request analgesia:

Often we’ll just write ... “needs adequate” ... “is to have” ... whatever they’re ordered 4th hourly ... sometimes we’ll write it on our handover sheet ... nursing care plan was well ... it does sometimes [make a difference] if the patient’s not asking. Or we’ll hand it over ... the patient is not asking for anything. (RN05)

In general, although prn prescriptions were probably designed to accommodate flexibility in analgesic administration, nurses sensed that the conflict between nurses expecting patients to request analgesia, and patients being reluctant or unable to express pain, impacted negatively on pain management in the general ward.

### ***Nurses’ Goals for Pain Relief***

All nurses were asked what their goal was when administering pain relief in terms of how much pain they aimed to relieve. Nurses’ texts revealed that whilst these goals varied, the majority did not aim for their patients to be pain free.

Three of the ten nurses reported that their goal was for their patients to be pain free: "Well I aim to relieve it all" (RN03). A fourth nurse found this unrealistic: "I know the aim is to have somebody in no pain at all ... and that's the aim but ... I don't see that very often on the ward even though that's what we try to do a lot" (RN07). Commonly nurses expressed their goals for pain relief as being what the patient found comfortable, strengthening the suggestion that they accepted the subjectivity of pain: "... to the patient's satisfaction ... what is tolerable for that person because everyone is different and everyone is individual ... make sure it's acceptable for that patient. That is my goal anyway" (RN02). Many of these nurses did not have the expectation that they could relieve all their patients' pain: "... you don't expect it to go completely to zero but ... where they're comfortable, basically if they say they're comfortable then I'm happy" (RN08).

These goals were defined using same indicators by which nurses measured pain, linking to the sub-categories generated in the "Measuring Pain" section (see p. 59). Some nurses framed the goal for pain relief as having the patient report a pain score below an arbitrary level. However, this was always qualified by the observation of behavioural cues that indicated that the patient was comfortable: "I like to have a pain score of 4 or less ... and to see that they're visibly comfortable. Someone who is a little more relaxed ... who is able to ambulate ... do all your ADLs" (RN01).

I think the main goal is for the patient to be comfortable in their bed ... to be able to sleep especially at night time when they need their rest. Also prior to getting them out of bed its important for them to be more comfortable so it's not painful and then they tend to hold their breath when they're in pain ... [asked about using pain scores] Yeah, I think that's a really good way of judging ... but every patient is different ... you ... want to make it below 5 ... you just want to make sure they're comfortable and that they're more comfortable after analgesia. (RN06)

One nurse formulated goals in terms of numerical pain scores, aiming for a relative reduction in patients' pain rather than setting an arbitrary level. However this nurse qualified this, explaining that when patients were unable to communicate verbally, goals need to encompass the absence of pain indicators:

I aim to get them where ... if they're rating their pain at an 8 out of 10 then I aim definitely below 5, to get them at a 4 or a 3 out of 10. If they're rating their pain at a 5 then you aim to get them down to a 1, zero, 1, 2 ... so I aim to at least reduce by four points ... the number they're putting it on. If they can't

communicate with me then I aim to get it so ... they don't look they're in pain, they don't grimace, they don't wince, their blood pressure isn't high. (RN04)

Although nurses aimed for their patients to be comfortable, it was suggested that patients needed more information about what was achievable in pain relief. This links to nurses' role as educators:

[asked how much pain wanted to relieve] ... to a degree whatever that patient is comfortable with. I think it all depends on what their level of comfort is ... I don't think you always alleviate all the pain. I think that's something that maybe our patients have to be informed of because they maybe think there's going to be this wonderful miracle drug that's going to take everything away and it's not always possible ... but to alleviate it to as much of a comfortable level that they can feel that they ... move within their own control. (RN10)

Apart from quantifying how much pain nurses aimed to relieve, some expressed the intention also to avoid peaks of pain in their patients:

If a patient has got a pain that comes and goes the whole time ... the pain relief is reduced ... I aim to keep that pain on a level ... its very difficult to relieve a pain ... that's at its peak because by the time that you give them the analgesia, by the time the analgesia gets to its peak ... that's quite a long time before it will ... take that pain down so the idea is to keep it on a level. (RN03).

Not all nurses referred to aiming to control peaks in levels of patients' pain and it is unclear how widespread awareness of this approach is amongst nurses. Links can be discerned between this concept and that of lack of consistency between nurses' diligence in the provision of analgesia that allows pain to peak that was highlighted in the "Nurse as an Independent Practitioner" section (see p. 48).

### *Analgesic Administration*

This category relates to the decision-making process that results in the selection and titration of analgesic medication for effective pain relief. The concepts that emerged from nurses' texts have been presented in three sub-categories, however, in practice these often mesh together. These three sub-categories will be presented separately and then an example of how they impact on each other will be presented at the end of this section.

### ***Selecting Analgesic Medication***

This relates to the criteria that nurses use to select which analgesics to administer. Nurses were given the scenario of a number of analgesics prescribed on the medication chart and asked how they decided which one to give their patient. Responses were varied, but mainly related to the level of pain relief that nurses perceived their patients required, with decisions made on the basis of the strength of the medications. Decisions could be based on the patient's pain score: "... judging on asking them again what their pain score is ... if it's a 7 or 8 out of 10 you'd be looking at more along the lines of oxycodone ... stronger ..." (RN06).

Some nurses reported matching the strength of an analgesic to the level of pain their patient was experiencing. However with this in mind, nurses' preferences were to give simpler medications whenever possible:

... giving an appropriate medication to the pain ... I think the idea is to give the minimum analgesia that you can to reduce the pain to its most effectiveness [sic]. So if someone can get away with Panadol and be quite happy with taking the Panadol for their pain and ... they're comfortable with that and they're written up for morphine, I wouldn't be diving in giving the morphine. (RN10)

Nurses reported that a common decision-making strategy was to ascertain from the patient how effective any analgesia given previously had been. Nurses were then guided to as to which analgesic might be suitable for the current clinical situation. This comment was typical:

Well I'd probably look at what they've had previously so if they have been having Panadol and then they say they're in pain and I see that that's all that they've been having, I'd say to the patient "You've been having Panadol. Is that keeping you comfortable? Is that enough?" and if they say "Actually no I'm still in pain" then I'd probably go to tramadol and try an anti-inflammatory as well depending on what is causing the pain. (RN09)

Nurses were aware that they had to take into account the amount of time that had elapsed since the previous dose of a medication. They implied that this was a major consideration in the decision-making related to which analgesic to administer:

We look at any other alternative medication that is still available for him ... Panadol or Panadeine Forte ... there is a timeframe when we can give it to him ... if it is before the timeframe I will look at the medication chart ... to look [at] what other analgesic [can be] given ... . (RN02)



... a big thing is when a patient is written up for ... four hourly oxycodone and in two hours they are ringing the bell saying they've got pain so you've got to look think "oh, what can we use instead?" you have to look at other options ... . (RN06)

Reflecting nurses' perceptions about patients with a history of i.v. drug use, this was reported to impact on the decisions nurses made about which analgesics to use: "if they've got a history of addiction issues, we're always strongly encouraged to try non-opioid medications" (RN01).

### ***Timing Analgesic Doses***

As previously described, nurses' texts displayed a belief in the effectiveness of analgesics being regularly administered. However, these also revealed that nurses were required to determine when to give analgesia that is prescribed to be given as required by the patient's clinical condition, rather than on a set timeframe. In these cases, nurses' texts revealed that they took various factors into account when deciding when to give analgesic medication. One nurse indicated how the decision-making process integrated how much time had elapsed and patient activity requirements:

... part of the time it's by time, length of time since when did they last have something for pain. If you're going to roll them, you definitely need to give them something for pain ... if they haven't had anything for ... about three hours they need something else for pain before you're going to do anything to them. (RN05)

Nurses' clinical judgments about their patients' medical conditions were also integrated with time periods. One nurse displayed a strongly proactive approach, basing the decision to administer an analgesic on the time elapsed since the last dose:

Logic says a fractured hip, a fractured bone, a broken bone – it is painful. There's no doubt about it. So logic says there should be some pain relief going in. If I look at my chart and they've had nothing for twelve hours and their obs are suitable for them to receive something then I'll give it. (RN04)

### ***Titrating Analgesic Dosage***

This relates to the decisions that nurses must make when analgesic medication is prescribed not as a specified dose, but rather with a dosage range. At the bedside, nurses make a choice as to how much medication to give depending on the patient's clinical condition. All nurses were asked how they determined the most appropriate analgesic dosage when faced with such a range. Again, responses were varied and nurses

indicated that they integrated various factors when choosing the most appropriate dosage.

Criteria upon which nurses based their decisions included the patient's weight, age and pain intensity. Additionally, as with selection of analgesics, nurses often looked to the medication dosages that patients had been given previously and these factors were considered together:

Obviously the age counts, the weight, the size of the patient ... and I would look [at] whether anyone has given her opioids before and how much was given ... depending on the intensity of the pain too, how the patient rates the pain. If it is very high then ... give the maximum dose but if they say "Oh, its only ... just take the edge off" ... I will give the lower dose. (RN02)

Nurses reported listening to their patients about how effective previous doses of analgesics had been:

I would look at what they were having before ... if they had 10[mg] to 15mg of morphine charted I'd ask them ... and on their chart they've been having 10[mg], 10[mg], 10[mg]. I'd say "each time you have the injection, is that enough?" and if they say "no" then I'd go up to the 15[mg] and if they were comfortable I'd stay with the 10[mg]. (RN09)

Some nurses reported having a preferred approach to titrating dosage. These varied in whether they chose to give the lower dose or the higher dose of an analgesic with a dosage range. One nurse preferred to give the larger dose in recognition of the prescribed time period that must elapse before further analgesia could be given:

Well I would probably err on the side of giving the upper dose ... sometimes if you go for the lower dose, you find you're having to give it again in a very short time and if they're only written up for it four hourly, you've given it ... the way its written "5 to 10[mg] four hourly". So if you elect to give them the 5mg ...you've still got to wait the four hours before you give them the next bit ... if they've been getting 5mg and its been keeping them comfortable that's fine but often you find that the 5mg might not be sufficient. So I would err on the side of giving them the 10[mg] ... if I've know that patient and I've looked after them for a while, you know [sic] that 10mg is going to give them a better response to the pain for a longer duration. It'll cover them for that three to four hours. (RN10)

In contrast, others reported giving the lower dose whenever possible:

If I've got a dose range I assess their weight how much pain relief they've had prior, what has been effective and I often go for the smaller dose first ... if I can

see that they are in a lot of pain I'll just use the bigger dose but often I use a smaller dose first and then if they need ... a further dose then that's still available. (RN01)

Reflecting this approach, one nurse described how the perception of an increased risk to the elderly from opioid medication led to the preference to give smaller doses to these patients:

I suppose I'm scared to some extent ... there's nothing wrong with having a healthy fear of overdosing people but ... if you're sensible ... with an elderly person if they're [aged] 100 then giving them 2.5[mg] of morphine ... don't give them 7.5 [mg] when its 2.5 to 7.5 [mg]. Give them the 2.5 [mg] and then you can give them a little bit more. (RN05)

Ultimately, nurses had to integrate all of these decisions about analgesics with their assessment of the patient's condition. One nurse's description of her decision-making when treating acute pain in the elderly indicates how the complexities of pain management are integrated. This example displays how various factors facilitate or preclude other decisions and also links to the nurse's role as an independent practitioner and as a patient advocate:

If the patient is not confused when they come in then I make sure that they are still not confused because once they start building up the morphine they become acutely confused so assess them for confusion. I assess their pupils for any sort of signs of narcolepsy ... if there's nothing there; if they don't seem confused and it's a small dose I'm quite happy to give it. With the elderly - tiny - I'm more of a fan of 2.5mg given on a regular basis such as two hourly, two to three hourly, rather than 5mg every four hours ... eventually they will go longer than the two to three hours with that morphine on board ... you're only giving that 2.5 [mg] each time rather doping them with the 5 [mg]. So I prefer, and I will ask doctors to write, a 2.5 [mg] to 5 mg order. If they ... first off need a 5mg dose you can give them 5mg but then after that 2.5 [mg] is less harmful than a big 5mg dose. (RN04)

### ***Perceptions about Analgesics***

This category relates to how nurses' perceptions about particular analgesics influenced decision-making in the ward setting. Nurses expressed opinions about the acceptability of various medications to them and their patients and indicated that these views had been formed by their clinical experiences. This section presents nurses' views and preferences about the analgesics that patients are commonly prescribed. Analysis of interview transcripts generated four categories that encompassed commonly prescribed analgesics. Two sub-categories were also generated for opioid medication. These reflect

the different perceptions nurses had of strong and weak opioids as classified in the WHO analgesic ladder guidelines.

Although they referred to specific analgesics, it seems that strategies to relieve pain often involved the use of a number of medications used together:

I aim for them to have that [Panadol] on a regular basis. If that's not sufficient then ... perhaps they could have ... some morphine ... depending on the situation ... morphine is usually three to four hourly, two to three hours depending on the patient and the patient's condition ... the patient with intractable cancer pain will have it hourly if necessary ... and extra for breakthrough pain. (RN03)

### ***Panadol***

Panadol was seen as an effective medication, particularly when given regularly or used in conjunction with other analgesics. For example: "Panadol is good ... it works well with conjunction with other things like tramadol or morphine ..." (RN06), and "They [patients] all have Panadol just to potentiate the effects of ... the opioids ... its supposed to be very good for bone pain, so they've got that as a background all the time" (RN05).

Many nurses preferred to give Panadol regularly: "Panadol given on a regular basis, not just an odd two here or there, on a regular basis is really quite good pain relief and we give that to patients who have had major surgery" (RN03). A benefit of regular administration of Panadol was perceived to be the reduced requirement to use opioids for pain relief: "I like Panadol ... we use Panadol a lot ... and for good reason. A lot of research shows that for bone pain, regular Panadol given regularly can reduce the use of narcotic pain relief ..." (RN04).

Not only was regular administration of Panadol regarded as effective pain relief, an advantage was that this practice was seen as easy for nurses to implement: "... its one of those things that you think 'Oh, well yes it's good to learn that' ... one of the easier things to put into practice" (RN10). However, nurses implied that they did not always need to initiate regular Panadol for their patients because often it has been prescribed:

A lot of post-op patients always get charted the regular Panadol ... a pretty common thing ... that's really good. A lot of patients will refuse it but you say "No, keep having it regularly and you won't get that pain". They're [patients]

pretty happy to have the analgesia and you always say “if you do get pain there’s [sic] always other options we can give you ... stronger analgesia” but its usually a common thing, patients always have regular Panadol. (RN06)

### ***Opioids***

This category relates to nurses’ perceptions and preferences about using opioid medication. As reported earlier, many nurses commented on using opioid medication when treating pain in elderly patients (see p. 35). However nurses had varying opinions about opioid use in general. Primarily opioids, and in particular morphine, were seen as being very effective analgesics. Typical of her colleagues, one nurse described them as “... a lot more effective than any other medication” (RN02).

#### ***Strong opioids.***

Morphine was the only medication classified as a strong opioid that nurses reported using in the ward setting. Nurses commented that they considered morphine a very effective medication: “Using morphine ... most successful because it brings them [pain level] down, being an i.m [intramuscular injection], subcut [subcutaneous injection] it brings them to that level a lot quicker than taking oral ...” (RN04). A nurse gave an example from the day of the interview:

There’s someone today actually who’s on two hourly morphine injections ... as soon as he’s had the morphine ... he’s comfortable ... [when] you’re ready to give the next dose is when he starts to feel a bit of pain again ... just that little breakthrough [pain] just before his next dose is due ... that’s pretty good. (RN07)

However, nurses demonstrated an awareness that associated side effects could make its use problematic: “The side effects can be great. Some patients are really sensitive. They get urinary retention and the blood pressure drops ... nausea and vomiting” (RN06). When asked to describe her experiences using morphine one nurse answered: “Good and bad. It’s good but I’ve had patients ... with resp [respiratory] rates of four [per minute] ... give you a fright” (RN05). Nevertheless nurses implied that they preferred to use morphine for acute pain, albeit with caution: “I think they are very effective ... some people have terrible side effects with nausea and vomiting ... opioids are [effective] in combination with Panadol or anti-inflammatories ... that’s my preference with post-op [postoperative patients]” (RN09).

### ***Weak opioids.***

Nurses made particular comments on weak opioid medications, which included codeine, tramadol and oxycodone. They described codeine as not particularly effective for severe pain and seemed to find morphine more effective in this situation. For example:

I had a patient; she had quite severe ear pain. It was going right back into the back of her head ... she had analgesia Panadeine Forte [paracetamol and codeine] ... earlier on so she couldn't have any more codeine. (RN06)

Also codeine was seen to have a problematic side effect and not prescribed frequently:

Codeine is just a horrible drug with the constipation side effects in the elderly, more so than morphine ... and people forget ... how serious it can be ... giving ... two tablets four times a day ... by the next day the poor woman ... or poor man can't go to the toilet. It's used very sparingly ... not even written up [prescribed] any more. So regular Panadol and tramadol ... or Panadol and Oxynorm [oxycodone] are standardly [sic] our orals ... which I like much better than any codeine. Codeine, horrible, I hate it. (RN04)

Nurses reported using tramadol, often in conjunction with Panadol. However the only comment about its acceptability concerned side effects, which had been observed particularly in the elderly:

I don't like the way it [tramadol] works with the elderly ... I think it's actually used more readily than morphine. I think we're all scared of morphine in the elderly ... and therefore watch it a lot more. Tramadol in the elderly is just as scary ... we see people on it for two or three days and all of a sudden they get very confused. So tramadol, I'm very hesitant ... with the elderly plus also its reaction with antidepressants and a lot of the elderly come in and they're on some form of antidepressant. (RN04)

Nurses reported using oxycodone as an oral medication given hourly until pain is under control or a maximum dosage is reached. Nurses referred to this approach as an "hourly protocol" and commented on the effectiveness and acceptability of this strategy: "I find that they're effective because ... you're giving them analgesia every hour ... you would imagine that that would cover them" (RN07).

I do find that the Oxynorm [oxycodone] seems to work quite well with our patients, the orthopaedic patients, especially when they are put on the protocol hourly. They don't tend to have it hourly but ... that's when they want it ... [asked whether feel confident using hourly protocols of oxycodone] definitely.

I've never had any trouble with them ... after a day or two they'll start decreasing like every two to four hours. (RN08)

That's what they teach us to do ... give it every hour until they're comfortable because it takes a while ... for the pain to level out. That's been really great [hourly protocols] ... if you do it regularly and they ... settle down and they've reached that level ... they keep going until they're reviewed again ... you're still assessing their pain every hour ... I've found the hourly oxycodone's been really good and usually there's a maximum amount that we give and they [doctors] write that down so you can't overdose them. (RN07)

Nurses' texts indicated that the use of weak opioid medications is widespread in pain management on general wards. Nurses were aware of the side effects of these medications and displayed varying degrees of acceptance of these analgesics. There did not seem to be an accompanying appreciation of effectiveness similar to that which redeemed morphine in the eyes of the nurses, except when the "hourly protocol" approach was used.

### *Anti-inflammatories*

Nurses reported that anti-inflammatory medications were used for pain relief, and felt that they were generally effective, albeit with some problems. As with the opioids, these were considered to be more of a problem in elderly patients, which ties in with nurses' perceptions of altered physiological function as a significant factor discussed in "The Role of the Patient" (see p. 35):

We use some non-steroidals [anti-inflammatory medications] ... which are effective. They do have negatives though, in the elderly and renal problems as well as bone healing and wound healing ... they affect as well ... but we do use them in conjunction when appropriate. I think that's good. (RN04)

One nurse who had not expected anti-inflammatories to be effective, when used in practice found them to be useful:

... the doctor ... ordered her some anti-inflammatories, i.m. Ketorolac [a non-steroidal anti-inflammatory medication] ... instead of the morphine which I thought would have been more appropriate because the patient looked like she was in severe pain and ... the Ketorolac did help. (RN06)

In these interviews, nurses did not refer widely to use of these medications. It is therefore unclear how often they are prescribed, or how often nurses choose to

administer them. The inference is, therefore, that this type of medication is not a mainstay of pharmacological pain management in general wards.

### ***Femoral Nerve Blocks***

This refers to an invasive treatment for pain that involves the injection of a local anaesthetic medication to block pain transmission along the Femoral Nerve that supplies the leg. Most commonly of benefit to patients who sustained a fracture to the “neck” region of the Femur bone, this procedure is a medical intervention. However, it was deemed to be significant to nurses on orthopaedic wards because it dramatically reduced the amount of analgesia they were required to give their patients, and thus had a major effect on pain management practice. Nurses’ perceptions about this intervention are included to complete the pain management picture:

Most of our NOFs [patients with fractured neck of femur] that come in, pre-operatively can sit on our ward for anywhere from two hours to three [or] four days waiting to go to surgery ... there’s a very good thing called a femoral nerve block ... the problem with NOFs is their age. Giving them i.m. morphine is not ideal because it can send them whacky but you can give them a femoral nerve block, which can alleviate and make their leg completely numb. (RN04)

I believe they [patients] all should have a femoral block in ED ... you don’t always get that but if someone’s pre-op [pre-operative] and they’re going to be pre-op for a few days ... it’s a good pain relief measure. (RN05)

Generally, nurses embraced the inclusion of femoral nerve blocks in the pain management armoury and acknowledged benefits to the patient. Additionally, as this is a medically performed intervention, there was relevance to nurses’ practice that extended to liaising with doctors to initiate the treatment for their patients (see p. 38).

### ***Non-pharmacological strategies***

As defined earlier, this relates to pain management strategies that do not involve the administration of analgesic medication. In these interviews, nurses referred to non-pharmacological interventions indicating their importance to practice in the ward setting. As discussed previously, nurses perceived a benefit of this approach to be the ability for them to institute these measures without needing a doctors’ prescription and as such this is an inherent part of independent practice (see p. 46).



The majority of nurses in these interviews reported using non-pharmacological pain management strategies, with the most common being the application of heat. The application of ice, elevation of extremities, massage and the use of traction for patients suffering fracture related muscle spasm were also reported: "We use hot towels a lot on the ward and ice and I think they are quite effective depending on the type of pain that they have got" (RN01). Despite sensing a focus on pharmacological pain management and being unsure of the supporting scientific evidence, another nurse perceived non-pharmacological approaches as effective:

I find that on the ward it's pretty pharmacological, you know, pain management. I don't know if there's much proof ... I know warm towels seem to work because it's an instant relief. They go 'ooh that's much better' ... being on a surgical ward there are people in pain all the time. I find warm towels help a lot ... Somebody's got a bit of back pain ... they can't sleep properly ... I was on night shift recently and I was giving out a lot of warm towels and it ... helped a lot of people. (RN07)

This nurse also reported using non-pharmacological strategies as an adjunct to analgesic medication:

I had a patient who had cancer and it had spread pretty much all over her body but she also had a very sore knee and she was having ... slow release oxycodone plus ... two hourly or four hourly immediate release ... This lady had a warm towel on her knee, warm towel across her chest, sometimes on her back and as soon as they went cold ... she said "Can I have another one?" ... so that was in addition to it ... I used to give her leg massages ... a few back rubs ... helped her out as well. (RN07)

The most common experience that nurses related was using non-pharmacologic strategies when analgesic medication was not effective. Some examples were: "I'd say ... has that worked?" And use something like hot towels or something as well ... if it still wasn't having any effect" (RN03). Another nurse who had been describing a patient with severe ear pain, noted the non-pharmacological intervention used as an adjunct to analgesic medication: "... it [severe ear pain] was going right into the back of her head ... I'd given her ice packs and she had analgesia ..." (RN06). Although nurses incorporated non-pharmacologic strategies into their pain management when analgesics were not effective, they implied that the pharmacological approach, which required a medical review, remained the cornerstone of treatment:

I think a big thing is when a patient is written up for four hourly oxycodone and in two hours they are ringing the bell saying they've got pain so you've got to think "Oh, what can we use instead?" ... look at other options or ringing the doctor and asking them to increase the dose maybe or getting them to assess or looking at other factors ... what is actually causing the pain ... Some diversional things ... giving hot towels ... ice if it's for a fracture or elevation as well, mainly for fractures. (RN06)

Of interest was the report of a nurse on an orthopaedic ward who described using traction as a strategy to reduce muscle spasm when patients with fractures are in pain and awaiting surgery. As with other non-pharmacological strategies, this was initiated by the nurse and used in conjunction with pharmacological options:

If they're in a lot of pain and they've got muscle spasm, which they tend to have, and that causes most of their pain, I put them in traction. Often if you put them in traction that eases their pain a lot ... and if they've still got muscle spasms I'll actually ask the doctor if I can get some Valium [muscle relaxant medication] written up and also make sure that they've are written up for Panadol and something else ... [other nurses] say "oh, you don't have to do it" but often I find that the patient's pain decreases with traction. (RN08)

It was suggested that non-pharmacological pain management may not be explored by nurses because dispensing analgesics may be more convenient for busy nurses: "... sometimes nurses don't have time to do something else to relieve pain ... it seems that giving them a tablet is much quicker and much easier or something like that" (RN07).

### *The Acute Pain Service*

This category relates to nurses' perceptions of the contact they had with staff members of the Acute Pain Service (APS). This is a specialty department within the hospital staffed by doctors and clinical nurses who monitor and manage invasive pain interventions in inpatients. These interventions include Patient Controlled Analgesia (PCA) intravenous infusions, and epidural infusions.

Although the focus of these interviews was on nurses independently caring for patients in acute pain, the role of the APS was often commented upon. The extent to which this service was considered to be a resource and support for nurses was explored. The APS was seen as a source of knowledge about analgesics and current pain management strategies, as well as a service that could be accessed when nurses had concerns about a patient's clinical care:

I find them really helpful and you can ask them ... the charts they use, APS charts, really good ... its all there ... observations and their pain scores and nausea scores ... they're really up to date with everything and the in-services they've given us are really good. (RN06)

Nurses reported that the APS provided education through formal in-service sessions that guided their clinical care. For example: "... its good for the APS, we have in-services with them and talk about assessing the pain score ... giving them [patients] oral analgesia even if they're not in pain. That's what they teach us to do" (RN06). In the only reference made to the WHO analgesic ladder in these interviews, one nurse described the information that had been gleaned from the APS:

I've been to a few in-services ... tramadol in-services as well and they're pretty good at explaining to us the analgesic step ladder ... they've given us education ... we're to ask their pain scores every hour and usually they're written up for hourly analgesia. (RN07)

Apart from education sessions, the APS was regarded as an information resource that could be accessed informally:

... they're great. They do give talks ... you can ask them any question, they're very, very good ... doctors in the Theatre directorate and the APS nurses ... are excellent. You can ask them anything ... give talks on the ward, maybe not enough because they don't have time as well. (RN05)

Nurses also reported contacting the APS when concerned with a patient's clinical management:

I had a patient come back from surgery yesterday ... He was 21, had a broken femur ... had a big nail put in it, now that's super painful surgery ... he didn't come back with a PCA or an epidural, nothing ... i.m. morphine, which I have to disagree with in someone who's twenty two and is quite competent ... I was mortified ... so I rang APS right then and there and said "What's going on?" ... APS came up, set him up with a PCA in about an hour. (RN04)

The APS also intervened to facilitate a medical review when nurses had no other options:

This particular patient had a necrotising toe ... he was neurovascularly compromised ... it just wasn't adequate and the doctors didn't have time to come up and review the pain and his pain got well out of control ... so the way we managed that ... actually to get in contact with the APS and say "Can you get in contact with the doctors because this is being managed very poorly" ... and the APS were involved. (RN01)

In summary, nurses' decision-making was seen to be a complex process that integrated an assessment of patients' pain, the formulation of goals for pain relief and the selection and titration of analgesia. Nurses accepted the subjectivity of pain and based assessment of pain intensity primarily on patients' self-reports, although physical and behavioural indicators were important as supporting evidence. Some frustration was expressed with the lack of facility to document pain scores and documentation was linked to prompts for pain assessment. Nurses largely regarded the goal of total pain relief as unrealistic and demonstrated preferences for the selection and titration of analgesic medication that had developed with clinical experience. Non-pharmacological strategies for pain relief were seen as useful adjuncts to analgesic medication and the hospital's Acute Pain Service was a resource that nurses valued, particularly in difficult clinical situations.

### **Directions for Improving Pain Management**

This is the third major category that was generated in the analysis of these interview transcripts. This section relates to nurses' perceptions about constraints in the practice setting and interventions that might promote the delivery of more effective pain relief. Nurses were asked how they could be supported and their pain management skills developed in the ward setting. Responses were varied and analysis of the nurses' texts generated two sub-categories in this section. These encompassed "nurses' knowledge" and "changing ward practice".

#### ***Nurses' Knowledge***

This study did not evaluate nurses' knowledge as such, however perceptions about levels of knowledge could be discerned. In particular, nurses tended to make comments in regard to the knowledge and practice of their more junior colleagues. Analysis of nurses' texts generated two further sub-categories in this section that related to "assisting junior nurses" and "education for nurses". Although included in this section, links exist between these categories and nurses' perceptions about their roles as educators.

#### ***Assisting Junior Nurses***

Nurses made many references to the knowledge and skills of their junior colleagues throughout these interviews. In general, it was considered that these nurses

needed help to improve their practice. Of particular concern were newly graduated nurses who did not prioritise pain:

... we found that a lot of grad[uate nurse]s when they were first coming out would, until the patient actually said "can I have something for my pain?" they wouldn't even think about it ... normally the grads are the ones ... the junior nurses who aren't as insightful in expecting pain or knowing when to ask ... I think its just practice ... when a grad comes on they've got a million and one things ... going through their minds and perhaps that's not a high priority ... . (RN09)

This nurse also perceived that junior nurses, being inexperienced, may have little understanding of the painful nature of some clinical conditions:

... maybe just lack of experience and not understanding ... whatever their diagnosis is, not realising, say, how incredibly painful ischaemic leg pain could be, or pancreatitis or any of the ones that classically are very, very hard to manage their pain. (RN09)

One nurse who commented on the disadvantage that elderly patients might be at in the ward setting, suggested that this was in part due to the inexperience of junior nurses who lacked confidence using medications in these patients: "Sometimes I think people are scared ... they don't want to over sedate people ... sometimes the younger nurses might be a bit ... afraid of over sedating oldies" (RN05). This nurse later specifically referred to newly graduated nurses:

... graduate nurses ... ! know they've just come from university ... but I don't know how much they do on acute pain management ... but they could certainly do with a bit more ... because I just find they're often the ones not giving older people ... a bit more inclined to play it safe with older people with opioid medication. (RN05)

Although this nurse had commented that graduate nurses could benefit from more education on pain management, other nurses had contrasting perceptions of the level of knowledge possessed by newly graduated nurses. Some felt that the recent education these nurses had received meant that they were familiar with new approaches to pain management:

... it's [nurses' knowledge] fairly up to date especially when a nurse is straight out of uni[versity] because it's a big thing at uni ... I think [graduate nurses] are fairly up to date ... and just new treatments as well. (RN06)

The perception that deficiencies in junior nurses' practice emanated from a lack of confidence was echoed by other nurses. In particular, junior nurses were observed to have particular difficulty contacting doctors to adjust ineffective analgesic prescribing:

... some of the younger nurses are very reluctant to have any say with the doctors ... they're a bit timid to ask and say "This is what I want." I don't think they communicate well with the doctors. I'll get them to ring themselves so they get that confidence but in the end I usually ring. (RN08)

Nurses implied that this lack of confidence restricted the extent to which junior nurses were able to advocate for their patients, as well as the extent to which they were able to have input into adjust analgesic prescribing from the unique vantage point of the bedside.

Support and education for junior nurses was available to a certain extent from their more senior colleagues as part of the role of "Educator" however, as nurses observed, not all senior nurses embraced the opportunity to mentor younger nurses. From nurses' perspectives, it seemed that these nurses in particular needed assistance to develop decision-making and advocacy skills in the general ward setting.

### *Education for Nurses*

When nurses were asked how their skills in pain management could be improved, the most common response was "more education". As discussed, some nurses saw this as particularly important for junior nurses; however improving knowledge was seen as important to improve all nurses' practice. For example: "education is important and if they were more educated ... there won't [sic] be any underlying fear of giving them analgesics" (RN02). Various suggestions were made as to how knowledge could be disseminated. For example:

It would be good to have more education on acute pain because it is a specialty area ... With these older patients we need a lot more education on care of the older person anyway ... It would be great if the APS could do more education ... through staff development. (RN05)

Study days, where nurses are removed from the ward setting for an intensive education session, were seen as an effective method of disseminating information:

I think more education on pain ... because I attended a study day and that was really good. [We] talked about all different aspects of pain and different ways of treating pain as well ... in-services as well ... just education and finding out what nurses actually know about a lot of the analgesia. (RN06)

Some nurses felt that the education resource might be more effective if provided as one to one contact: “basic education ... some more direct one-on-one type ... just as a refresher even, which we get but it’s still good to keep it going” (RN10).

In a similar vein, a specialist resource nurse or group of nurses was also suggested. Junior nurses in particular were seen as probable beneficiaries:

There’s [sic] no resource persons on the ward. If you could get maybe four or five ... nurses involved, once a month keeping up to date and bringing that information back to the ward. I think it would be a good idea. If you’re not talking about it then people aren’t thinking about it in nursing. So if we talked about it a bit more, had regular meetings for resource people, have resource people on the ward, then the junior nurses could go to them also and say ... “I’ve got this little old lady who has got a broken hip and she hasn’t had any pain relief since she’s been here, can you help me out? What shall I do? What should I be looking for” and then that person could go and assess them with the junior nurses, the junior is then learning more. (RN04)

### *Changing Ward Practice*

This category relates to nurses’ suggestions for interventions that might support and direct practice on the ward. Towards the end of these interviews, all nurses were asked whether they could suggest any interventions in the ward setting that might support nurses and develop nurses’ pain management skills. Responses were varied and are presented in this section.

The most common area that nurses considered could be improved was documentation of nurses’ assessments of pain. Specifically, instituting a requirement for pain scores to be documented was seen to be valuable as a prompt for more frequent assessment:

The patients who are under APS are very well managed because we have to do hourly obs ... they’re forced to ask their patients and they do think about it then. So maybe something like that ... using more of the pain score charts. (RN09)

Another suggestion was the formulation of a protocol of analgesics that could be that would guide nurses and provide standardised analgesic options in the management of pain in patients who have undergone minor surgery:

When we've got a postoperative patient, we have a postoperative nausea and vomiting protocol ... and as much as it's an extra piece of paper ... for our medication charts it's really good because you just automatically have a set of drugs that you can use ... maybe there could be something similar for pain control ... we could have some sort of postoperative plan. (RN01)

Although nurses reported that they were using non-pharmacological pain management strategies, it was seen that expanding the use of this approach to pain relief might be valuable, making nurses more effective in the ward setting. Nurses could initiate such measures as required by patients without having to wait for a doctor's order, enhancing the nurses' independent practitioner role: "the non-pharmacological ... maybe some education or awareness of other things that we could do ... something we could do on our own" (RN07). Additionally, non-pharmacological strategies enhanced the effectiveness of the analgesics that nurses were already using. Expanding the scope beyond those currently available to nurses was considered to be an advantage:

I'm thinking about complementary type things as well ... I can't imagine us having time to do visualisation therapy ... with patients but if there were some other group of people that were on the ward, some other allied health professional who was able to do things ... visualisation techniques and other pain management techniques [other] than ... hot towels and drugs. (RN07)

When asked what interventions would support ward nurses, another suggestion concerned hospital policy that presently prohibits ward nurses from giving intravenous morphine. "The ability to give ... i.v. morphine if we could ... in some situations that would be really effective" (RN10).

In contrast to her colleagues, one nurse felt that nurses were already well supported on the ward. This perceived support came from each other, ready access to the information resource that Pharmacy staff provided and to assistance from specialist nurses in the hospital:

People on the ward liaise well ... you can ask anybody ... Pharmacy are very good with medications ... what goes well with what and what do you suggest ... so we all ... pull from one another, information ... anything new that comes up, pharmacy will come up ... we get little seminars ... we do get a lot of information and are all kept up to date with all the new things ... We have our own pharmacy book on the ward that tells us anything new ... we have the palliative care nurse who comes and deals with the intractable pains of cancer ... you only have to lift the phone and people will come and assess the situation and deal with it. (RN03)



## **Summary**

In summary, analysis of these interview transcripts revealed that the demands made on nurses managing pain in the general ward setting were many and varied. Nurses integrated the complexities of pain assessment with the decision-making that was required to tailor analgesic medication to the needs of their patients. Nurses understood that they were required to be proactive and valued their role in patient advocacy, however they perhaps took for granted the degree to which they independently initiated and implemented pain management strategies. To some extent, nurses were also unaware of the potential for an emotional component of some decision-making to affect nursing care. The effectiveness of pain management was seen to be influenced by the interaction between patient, nurse and doctor and nurses' voices told of the central role that they assumed in the general ward setting.

## **CHAPTER 5**

### **DISCUSSION AND CONCLUSIONS**

This study has described the experiences and perceptions of nurses managing acute pain in a Western Australian public hospital. Chapter Five presents a discussion of these findings in relation to pertinent literature. Conclusions are then drawn that are significant to nursing practice in this setting and recommendations made.

#### **Discussion**

The theme that emerged most strongly from the data was that of nurses independently managing pain. As noted in the presentation of the findings of this study, this was a thread that ran through every aspect of the nurses' texts. An acknowledgement of the central role played by the bedside nurse in pain management underlies studies which focused on nurses' knowledge and attitudes to pain and analgesics (Cohen, 1980; Clarke et al., 1996; Dalton et al., 1998; Ferrell et al., 1991; Heath, 1998; Manias, 2003; Schafheutle et al., 2000; Sloman et al., 2001; Watt-Watson, 1987; Watt Watson et al., 2001). These authors implied that opportunity exists for nurses' attitudes and knowledge deficits to influence their pain assessment and the administration of analgesics, because nurses practice independently in the ward setting. Although the quantitative nature of these studies can describe the nature and extent of knowledge deficits and attitudes, limited scope exists to describe how these come into play. In this current qualitative study, nurses' descriptions of their practice confirm these authors' assumptions that the role of nurses in pain management is central. Additionally, this is undertaken with reference to little else other than a prescribed analgesic framework that nurses recognise they may need to have input into adjusting. Nurses in this study illuminated their descriptions of practice with the context in which they make many of their decisions and with their attitudes and knowledge, demonstrating that these do indeed impact on day-to-day pain management practice.

This current study reflects another recent Australian qualitative study that described nurses' role in pain management (Nash et al., 1999). In a series of focus groups, nurses explored their perceptions about the tasks associated with pain

management. The study's authors attested to nurses' central role in pain management by highlighting their descriptions of liaising with doctors, their perceptions of pain management advances and use of non-pharmacological strategies. As in this current study, nurses in these groups also recognised that conflict existed between nurses' decision-making and the limits put upon them by doctor's prescribing and that it seemed some nurses also ultimately accepted the authority of the prescriber.

In contrast to nurses' unconscious role as independent pain managers, nurses were acutely aware of their role as patient advocates. Patient advocacy in pain management by Australian nurses has been documented in other qualitative studies, both in nurses' descriptions of themselves and in the observations of researchers (Manias et al., 2002; Nash et al., 1999). A major part of the advocacy role encompassed nurses initiating and having input into the adjustment of inappropriate analgesic prescribing. Nurses' view that analgesic prescribing can be inflexible, limiting their pain management practice has been documented elsewhere (Schafheutle et al., 2000). It is, therefore, likely that this is a common area in which nurses must negotiate on behalf of their patients. Generally nurses in the current study displayed confidence and a willingness to undertake this role, however Manias et al. (2002) observed that inexperienced nurses were less likely to request changes in prescribing from doctors, but rather liaised with more senior colleagues. This reflects the perceptions expressed by nurses studied by Nash et al. (1999) and by nurses in the current study and has implications for the quality of pain management provided to patients being cared for by more junior nurses.

A somewhat surprising theme that emerged from this study was that these nurses displayed a strong belief in patients' self-reports of pain. This finding does not reflect the literature in general. Previous studies have reported that nurses believe that patients overstate the intensity of their pain (Brunier et al., 1993; Drayer et al., 1999; Van Niekerk & Martin, 2001; Vortherms et al., 1992; Watt Watson et al., 2001; Zalon, 1993) or that nurses believed that physiological changes and behavioural cues were more important indicators of pain than the patients' reports (Brunier et al., 1993; Ferrell et al., 1991; Heath, 1998; Nash et al., 1999). Generally, nurses in the current study did not express these viewpoints. One participant, however, reported judging the validity of patients' self-reports of pain, and nurses expressed confusion when faced with conflicts between patients' reports of pain and observed behaviour. More commonly, nurses tended to value objective indicators more as supporting evidence of patients' reports of

pain or as indicators of pain when patients were unable or reluctant to verbally report pain. It appears that attitudes of the nurses in this study varied from those reported by Schafheutle et al. (2000) who concluded that nurses made their own subjective judgments when assessing patients' pain.

In view of the striking contrast between the perceptions about patients' self-reports expressed by these nurses and those documented in the literature, the researcher went back to some participants to investigate how this belief might have originated. One younger nurse felt that her belief in patients' reports had been formulated during her university education and that the culture of the ward in which she worked, which she described as being "positive and sharing", was conducive to this attitude of acceptance (RN01). Another explained that her perception had developed as she became more experienced in dealing with patients with pain. Interestingly, this comment was qualified with an acknowledgement that patients needed to be checked in case they were "seeking [opioid analgesia]" (RN06). This was a view not expressed in this nurse's interview, although she had extensively described her confusion when patient reports of pain and observed behaviour conflicted. One response was strongly expressed when the participant commented: "I can't believe that anyone would not accept the patient's report of pain!" (RN04).

When obtaining patients' reports of their pain, nurses encouraged and guided them in the use of numerical pain rating scales to quantify the intensity of pain. Use of pain scales was widely reported in this study, albeit with some reservations about their use in the elderly and patients who have a long history of pain. The literature documents varying perceptions held by nurses about the use of pain scales. Ferrell et al. (1990) reported that 59% of the 53 nurses surveyed used numerical pain scales, whilst all other nurses used subjective measures. In contrast, other authors reported that nurses often did not trust patients' pain scores (Schafheutle et al., 2000), or suggested that they did not understand them (Ward & Gordon, 1996). With the literature documenting an apparently limited acceptance of pain rating scales, it is encouraging that all nurses interviewed for this study reported using a numerical scale and implied that this practice is encouraged by the hospital itself.

In this study, nurses linked documentation of pain assessment to prompts for the institution of pain management strategies. If this is the case, then it is worrying that Manias (2003) recently described the documentation of pain assessment by Australian

nurses as poor. As an extension of their acceptance of pain rating scales, nurses in this current study suggested that standardising the use of, and requiring the documentation of pain scores might prompt greater recognition of pain amongst nurses and lead to more proactive pain management.

Neither the frequency nor documentation of nurses' pain assessments were examined in this study. However, the literature generally documents that nurses rarely take an organised approach to pain assessment and management and it has also been noted that there is a paucity of documentation about patients' pain or nurses' pain management (Carr & Thomas, 1997; Watt-Watson, 1987; Zalon, 1993). Like the nurses in this study, some authors have suggested using a standardised tool to assess and document pain (Heath, 1998; Morrison & Siu, 2000; Paice et al., 1991). Ferrell et al. (1991) made such a suggestion after finding that although 96% of the 53 nurses studied documented their pain assessments, only 27% used information about their patients' pain gleaned from their colleagues. They postulated the view that use of a flow sheet may facilitate better communication amongst nurses.

Some recommendations for a standardised assessment tool at the bedside are based on findings that pain assessment was more consistent for patients with PCAs or epidural infusions, the management of which includes such a tool (Clarke et al., 1996; Svensson et al., 2000). Similar experiences underlie the views expressed by nurses in this current study. In contrast to the recommendations of these authors, Schafheutle et al. (2000) referred to nurses' disregard for patients' self-reports and suggested that although nurses might record pain scores as a documentation requirement, they might not incorporate them into their practice. This was not the experience of Australian nurses, however, who have used such an approach and reported that standardising assessment has indeed increased nurses' awareness of the issue of pain (Nash et al., 1999). These varying perceptions suggest that there is scope for further investigation of the value of the standardised assessment and documentation of pain scores.

The concept that pain assessment is a complex process in which objective indicators and clinical knowledge are integrated with the patient's self-report of pain emerged from this study and is reflected elsewhere in the literature (Ferrell et al., 1991; Manias et al., 2002; Nash et al., 1999). However, the findings of this current study diverge from those of other studies in that these nurses valued other indicators of pain alongside, rather than instead of patients' reports of pain. The literature documents that

nurses recognise that physiological changes, such as increases in pulse and blood pressure or sweating, indicate pain and in some studies nurses have been shown to expect such changes to verify patients' reports of pain (Hamilton & Edgar, 1992; Watt-Watson, 1987). Additionally, nurses have questioned whether patients' pain is real in the absence of these indicators (Nash et al., 1999). In contrast to these findings, in this current study only one nurse expressed the need to assess patients' physiological status to evaluate the "correctness" of self-reports of pain.

In this current study, the nurses also recognised that behavioural cues are important indicators of pain. There is some support in the literature for this view, with a modest correlation reported between patients' pain behaviours and their verbal reports of pain severity (Drayer et al., 1999). The most common of these was facial grimacing, a perception supported by Manfredi, Breuer, Meier & Libow (2003), who found this behaviour to be a reliable indicator of pain in the cognitively impaired elderly.

The perception expressed by the nurses in this current study that a patient's reluctance to mobilise indicates pain, is a widely held view amongst nurses (Ferrell et al., 1991; Manias, 2002; Morrison & Siu, 2000; Schafheutle et al., 2000). Studies investigating patients' experiences of postoperative pain have supported the validity of this view, with movement found to be an increasing reason for pain on the second and third post-operative day (Svenssen et al., 2000). Apart from reluctance to mobilise, nurses noted behaviours that were exhibited when patients were required to move. They perceived that such behaviours indicated pain. This is supported by patients' reports of the postoperative pain experience in the literature. Forty four % of the 21 patients surveyed by Carr (1990) who responded "no" when questioned about the presence of pain, actually had pain on movement and postoperative patients who rated their pain as mild at rest, have rated it as moderate to severe when moving (Watt Watson et al., 2001).

In the current study, nurses initiated pain management strategies when they assessed that patients were reluctant to mobilise, or displayed an inability to breathe deeply. This is important in light of the findings of Shea, Brooks, Dayhoff and Keck (2002) who suggested a link between pain, the reluctance to mobilise and the development of postoperative complications. Their study of elderly postoperative patients found that those who developed pulmonary complications had, not only higher mean pain intensities, but also ambulated significantly fewer times than those who did

not develop such complications. This resulted in an average length of inpatient stay of 17.9 days compared to 8.5 days for those patients whose recovery was uncomplicated. These authors recommended the importance of controlling pain to facilitate patients' deep breathing, getting up to a chair, and ambulation. To this end, they advocate assessment of postoperative pain intensity with activity as well as at rest. This is an approach that was not reported by nurses in this study. However, it is one that could be incorporated into a regular standardised pain assessment tool.

Nurses had conflicting views on the validity of sleep as a behavioural indicator of pain, with most interpreting that sleeping patients were comfortable. The perception that sleep attests to an absence of pain reflects nurses' views documented in the literature. When Schafheutle et al. (2000) investigated why nurses had not asked patients about pain, the most common reason given was that the nurse believed that the patient was asleep. Taking another perspective, the quantity of analgesics administered at night has been shown to be less than during the day, regardless of the severity of pain (Closs, 1990). Yet Cohen (1980) found that patients reported sleep as the most common area of function disturbed by pain and Yates et al. (1998) found that pain affected the sleep of over half the patients studied leaving them exhausted. This view is reflected by the suggestion of Morrison and Siu (2000) that behaviours that indicate pain in the elderly may be subtle and may include an increase in sleep due to exhaustion. Such findings support the view of the one dissenting nurse in the current study, who did not regard sleep as an accurate indicator of pain in the context of patients' history of traumatic injury.

A number of themes arose from nurses' perceptions of the influence that patients themselves have on the management of their pain. A recently published Australian study suggested that nurses continue to perceive that patients' pain reporting and behaviour underlie inadequate pain relief (Jastrzab, Fairbrother, Kerr & McInerney, 2004). In the current study, nurses perceived that patients may be reluctant to request or accept analgesia, a view reflected in the literature. Common reasons were fear of opioid addiction, wishing to avoid unpleasant side effects, a stoic reluctance to admit pain or being frightened of the intramuscular route of injection (Carr, 1990; Carr & Thomas, 1997; Drayer et al., 1999; Morrison & Siu, 2000; Schafheutle et al., 2000; Yates et al., 1998). A recent study showed that such perceptions persisted. Fifteen percent of 160 patients who were offered pain relief declined and cited fear of opioid addiction and concerns about analgesic side effects (Brockopp et al., 2004). Encouragingly, nurses in

this current study were aware of patients' reluctance to accept analgesia and they intervened when necessary to support and educate patients, in an effort to increase compliance with analgesic regimes. Nurses also recognised that some patients may not wish to bother nurses and may therefore refrain from reporting pain or requesting analgesia. In previous studies, patients have reported that they perceive nurses as too busy to warrant interrupting (Carr & Thomas, 1997; Manias et al., 2002). Closs (1990) suggests this as a reason behind the decreased amounts of analgesia administered at night. Again, nurses in the current study suggested that they encouraged patients to report their pain when such a perception became apparent.

Carr and Thomas (1997) and more recently Chung and Lui (2003), supported one nurse's view in this current study that patients often underestimate the pain they will experience postoperatively. Of interest, Chung and Lui (2003) confirmed Ward and Gordons' (1996) finding that patients in pain still report satisfaction with nursing care, and they found that patient satisfaction did not correlate with reported pain levels. However Chung and Lui (2003) reported that patient satisfaction was lower in patients suffering from orthopaedic conditions, relevant because nurses on two wards included in this study cared for orthopaedic patients.

A theme that emerged strongly from this study was the difficulty nurses had managing pain in elderly patients, particularly in those who are confused and demented. The under-management of pain in the elderly has been recognised elsewhere in the literature (Bernabei et al., 1998; Sloman et al., 2001). A recently published study (Herr et al., 2004) documented that this situation has persisted and supported these nurses' perceptions that difficulty communicating with these patients presented the greatest challenge for pain management, a concept acknowledged by other authors (Manfredi et al., 2003; Morrison & Siu, 2000). Herr et al. (2004) reported that although pain was assessed more frequently in patients with dementia than those without, assessment of both groups were infrequent and not routine.

In a recent study, Morrison and Siu (2000) studied 98 elderly patients with hip fractures, of whom 59 were cognitively intact and 38 had dementia, and compared the analgesic management of their preoperative and postoperative pain. The results of this study are particularly relevant because the authors focused on analgesic medications integral to the WHO analgesic ladder and because four of the ten nurses in the current study worked on orthopaedic wards managing many elderly patients with hip fractures.



In a preliminary study, the authors ascertained the pain scores of cognitively intact patients and used these pain ratings as an approximation of pain levels in the group of patients with dementia. They were then able to comment on pain experienced by both groups of patients and compare their management. Preoperatively, 44% of the cognitively intact patients rated their pain as severe to very severe and 42% rated their pain as severe to very severe postoperatively from day one to day three. This quantitative study then measured the amount of opioid analgesia given to both groups of patients. Disturbingly, although these groups of patients would both have been expected to have similar levels of severe pain, the patients with dementia received, on average, one third of the analgesia administered to cognitively intact patients.

Authors' findings on the factors that influence nurses' assessment of elderly patients' pain are conflicting. Brockopp et al. (2004) based their investigation of a pain management intervention for nurses on the findings of a preliminary study. In that study nurses displayed biases towards elderly patients that resulted in a willingness to spend more time and effort managing pain. Regardless of the intent of nurses, Morrison and Siu (2000) commented on the lack of facility in acute settings for staff caring for patients with dementia to become familiar with these patients in order to "note subtle changes in behaviour and affect" (p. 245). Such comments support the view of RN10. This participant postulated that confused patients in the general ward setting may be disadvantaged by staffing organisation that does not facilitate demented patients being cared for by the same nurse over an extended period of time.

In addition, Morrison and Siu (2000) suggested that nurses might be unsure about the safety of opioid medication in these patients, particularly in regard to precipitating an episode of delirium leading to reluctance to use this type of analgesia in the elderly. This concern was mentioned by nurses in the current study when using both morphine and tramadol, with recognition of their roles in the development of confusion. One nurse reported continuing to use morphine, albeit with caution, even when hallucinations were noted as long as patients did not become distressed. In support of this, Morrison & Siu (2000) suggest that untreated pain itself may precipitate such episodes. In general, the literature supports the perceptions of the nurses interviewed in this study, that pain in the elderly is under-managed and that confused and demented elderly patients are disadvantaged in the general ward setting. This is of particular concern considering the propensity of elderly patients to develop complications when pain is not managed effectively (Shea et al., 2002).

When Brockopp et al. (2004) described the biases of nurses, they included patients described as “substance abusers” as a group toward whom nurses displayed a positive bias, that is were more willing to spend time and energy managing their pain. This finding is in stark contrast to the perceptions and experiences of nurses in the current study about such patients that they referred to as “intravenous drug users”. These nurses expressed ambivalence towards the motives of these patients requesting pain relief, and described the extent to which labelling of these patients by their colleagues prejudiced the quality of care these patients received. No studies were identified that investigated nurses’ attitudes to patients with a history of present or previous substances abuse. However, Brockopp et al. (2004) argue that the subjectivity and complexity of pain combined with the absence of clear directives for pain management make it possible for biases to come into play. The current study provides evidence that each of these factors is active and facilitated by the independent nature of nurses’ practice. Arguably though, the current study brought nurses’ negative biases towards “substance abusers” into focus, rather than positive ones.

Although current recommendations are for nurses to aim for complete pain relief for their patients (McCaffery & Pasero, 1999), nurses in this study did not generally espouse this goal, and some of those who did qualified it with an acknowledgement that total pain relief is rarely achieved in practice. These perceptions reflect the view widely documented in the literature that nurses do not have the goal of complete pain relief (Brunier et al., 1995; Cohen, 1980; Schafheutle et al., 2000; Vortherms et al., 1992). More commonly, nurses in this study aimed to achieve pain relief at a level at which patients reported or were assessed as being “comfortable”.

This study did not evaluate patient outcomes and evidence in the literature about the effect of nurses’ goals for pain relief is conflicting. As previously identified, there was a suggestion that patients being cared for by nurses who aimed to relieve more pain were likely to report pain, and by extension receive more pain relief (Watt-Watson et al., 2001). However, a recently published study evaluated the effect of a pain issues discussion group on nurses’ pain management practice and patient pain levels, found that whilst nurses’ pain goals were lower after involvement in the group, patient outcomes remained the same (Brockopp et al., 2004).

Numerous previous studies have reported that postoperative patients experience high levels of pain (Carr, 1990; Paice et al., 1991; Svensson et al., 2000; Ward &

Gordon., 1996; Watt-Watson et al., 2001; Yates et al., 1998). Although this study did not investigate patients' pain levels, recent studies indicated that patients have reported high levels of postoperative pain. For example, the pain reported by elderly patients with hip fractures has already been described (Morrison & Siu, 2000). In addition, although the majority of the 294 patients studied by Chung and Lui (2003) described their pain as "acute and temporary" (p. 15), 27.4% rated their pain as moderate to severe at the time of survey. Eighty one % of patients interviewed by Brockopp et al. (2004) stated they were in pain at the time of interview. In this current study, nurses did not comment on the prevalence of pain amongst their patients. However, the nurses from one particular ward generally expressed satisfaction with the efficiency of pain management, whilst nurses on the three other wards felt pain could be managed better. The small sample of nurses interviewed on each ward makes it difficult to generalise these perceptions to other nurses on the wards concerned.

Manias (2003) provided a recent evaluation of analgesic prescribing and administration trends for postoperative pain management in Australia. This prospective chart audit of 100 participants from the day of surgery until the fourth postoperative day, referred to the prevalence of analgesic infusions being continued up to the fourth postoperative day. The author suggested that patients experienced at least moderate levels of pain until this point. This study also suggested that prescribing of analgesic medication to be given on a prn basis remained common in Australia. It reported that the frequency for analgesics to be prescribed in this manner increased over the four postoperative days studied, probably as analgesic infusions were discontinued.

In this current study, nurses indicated that the prescription and administration of fixed doses of analgesia might be more prevalent in this setting than documented in the literature. These nurses widely reported that they gave Panadol on a regular basis and took action to encourage and educate patients about the benefits of this approach when this Panadol was refused. Additionally "hourly protocols" of oral opioids were given when intravenous analgesia was removed rather than prn medication, and were continued until pain relief was achieved and stabilised. No studies have been identified that evaluate how extensively such approaches are used among nurses. However studies that report low percentages of prescribed analgesics being given, suggest that prn dosing is usually the norm (Carr, 1990; Closs, 1990; Cohen, 1980; Mac Lennon, 1997; Paice et al., 1991; Watt-Watson et al., 2001). Such a suggestion is supported by Manias (2003)

who reported that whilst between 48% and 65% of medications prescribed as fixed doses were given, only between 7% and 17% of prn medications were given.

This current study did not audit patients' medication charts so cannot comment on the amount of prescribed medication administered to patients. However, the theme of nurses accepting and promoting the regular administration of analgesics is encouraging as the concept of fixed doses, rather than prn analgesia, appears to have been embraced. Again, this is not reported elsewhere in the literature so the researcher went back to the participants and asked from where such a belief might have originated. The most common response was that the Acute Pain Service encouraged nurses to administer Panadol and prescribed "hourly protocols" that nurses were obliged to follow. This information had been disseminated to nurses during visits by the APS when attending patients on the wards and during the in-service study days. With particular reference to Panadol, only 2% of the 53 nurses Ferrell et al. (1991) surveyed gave non-opioid analgesia, a finding that led the authors to propose that nurses had a role in suggesting such medications to patients. It is encouraging to see that, in this setting at least, this seems to have occurred.

Undoubtedly medications are still prescribed to be given on a prn basis in this setting and there were several concepts that arose from these interviews that conceivably could contribute to a similar under-administration of analgesics documented in the literature. Many studies recognise the conflict that exists between patients' reluctance to request analgesia or expecting nurses to know they are in pain and nurses waiting for patients to request analgesia before administering medication (Carr, 1990; Carr & Thomas, 1997; Closs, 1990; Hamilton & Edgar, 1992; Mac Lennon; 1997; Watt-Watson, 2001; Zalon, 1993). Nurses in this study did not report that they waited for patients to request analgesia, however they were aware that patients did not always report their pain or request analgesia. Arguably, under-management of pain related to prn dosing of medication may be complicated by the tendency that nurses in this study reported, that of referring back to previous doses and timing of medication when making decisions about pain management. Although some studies have examined nurses' decision-making when managing pain (Ferrell et al., 1991; Brockopp et al., 2004), none referred to this phenomenon yet it was widely reported in this current study.

Other themes that emerged concerning the specifics of nurses' pain management decisions are reflected in the literature. In this study, nurses varied as to whether they

chose the minimum or maximum doses of analgesic medication when presented with a range from which to choose. Other studies have demonstrated that nurses often choose the minimum dosage allowed (Carr, 1990; Carr & Thomas, 1997; Cohen, 1980; Hamilton & Edgar, 1992). No studies were found that reported nurses choosing to give the maximum dose as described in this current study. In general, nurses' explanations of their pain management decision-making and the variety of approaches that were described supports Brockopp et al.'s (2004) view that this is a complex process.

The importance that nurses in this study attached to avoiding peaks of pain when managing analgesic administration is reflected in the perspective of Ward and Gordon (1996) who found that patients report satisfaction with pain management despite the presence of pain, and suggested that this may be related to the patterns of pain. These authors suggest that controlling peaks of pain for patients is important. Yet the lack of consistency in the administration of analgesia that nurses perceived contributed to this problem, and so frustrated them in the current study, was also reported by Nash et al. (1999) suggesting that this phenomenon may be widespread.

Nurses related this lack of consistency in some cases to the practice of junior nurses, questioning the adequacy of their pain knowledge. This study did not examine nurses' levels of knowledge about pain, however numerous previous studies have described nurses' knowledge as moderate at best, with understanding of opioid medication a particular concern (Brunier et al., 1995; Chui et al., 2003; Clarke et al., 1996; Hamilton & Edgar, 1992; Heath, 1998; Sloman et al., 2001; Van Niekerk & Martin, 2001; Vortherms et al., 1992; Watt-Watson et al., 2001). As to the relative pain knowledge of less experienced nurses, the literature is conflicting. Studies that related nurses' knowledge test scores to levels of education and experience, reported various findings. No clear trends emerged from the literature as to the impact of either on nurses' knowledge. Some studies found no relationship between knowledge scores and length of clinical experience (Hamilton & Edgar, 1992; Watt-Watson, 1987; Watt-Watson et al., 2001). However, others found that knowledge was related to nurses' clinical experience with Sloman et al. (2001) reporting a positive correlation between length of experience and knowledge of pain in the elderly. In contrast, Van Niekerk and Martin (2001) found that younger nurses knew more about addiction issues, pain assessment and patient variables. Additionally, length of time employed in the clinical unit was significant with nurses who had worked in their clinical area for between one

and six months knowing more than those working seven to twelve months or twenty five months or more.

Jastrzab et al.'s (2004) recent study of Australian nurses suggested that nurses' moderate levels of knowledge persisted, when 272 nurses scored an average of 61% on knowledge testing. These authors correlated nurses' results on knowledge testing with their demographic characteristics. They described the characteristics that tended to be more common in nurses with higher knowledge levels and presented these as a profile of the "pain aware" nurse. These authors found, in contrast to the perception of the majority of nurses in the current study, that younger nurses tended to display higher levels of knowledge than their older colleagues. If this finding is reflected among nurses in this setting, then arguably the deficiencies in younger nurses' practice referred to by more senior nurses, may not relate to less knowledge, but more to low levels of confidence in less experienced nurses. The comments of nurses studied by Nash et al. (1999) add weight to this premise, in their descriptions of developing confidence in pain related decision-making with clinical experience, particularly in regard to opioid medication. If this is the case, then it seems that nurses recognise the difficulties experienced by junior nurses lacking the confidence to embrace an advocacy role. However they might be less likely to understand the challenges faced by less experienced nurses managing the complexities of day-to-day pain assessment and management. Often nurses described the education and support that they offered to junior nurses, and yet commented on the lack of support forthcoming from their senior colleagues.

Arguably, had this study quantified nurses knowledge levels in this setting the results could be expected to reflect those of the numerous quantitative studies that have been reported previously. Of more value might be an exploration of that factors that underlie lack of consistency in pain management practice, and the degree to which the clinical environment supports junior nurses and develops skills.

Within the overall picture of nurses' moderate levels of knowledge about pain and analgesia, most commonly authors reported that nurses exaggerated the addictive potential of opioid medications (Brunier et al., 1995; Clarke et al., 1996; Cohen, 1980; Ferrell et al., 1991; Hamilton & Edgar, 1992; Heath, 1998; Vortherms et al., 1992). Although nurses' understanding of this issue was not tested in this current study, their comments suggested that they had a fairly realistic perception of the incidence of opioid

addiction when used for pain relief. Nurses did, however, believe that this fear existed in their patients and less knowledgeable colleagues, and that it impacted on the practice of others.

Nurses in this setting valued non-pharmacological pain management strategies as effective and an integral part of independent practice. These strategies are used to complement analgesic medication and nurses believe that there is potential for this approach to be better utilised in the ward setting. Of interest is Morrison and Siu's (2000) report of the severe level of preoperative pain suffered by patients with hip fractures when considered in the context of one nurse's use of traction in these patients. As a non-invasive pain relief measure and in light of this nurse's anecdotal evidence of its apparent effectiveness, it is perhaps surprising that this intervention was not reported to be utilised more often.

When Ferrell et al. (1991) investigated 53 nurses' decision-making, they reported that only 6% used non-pharmacological pain relief measures and suggested that nurses increase the utilisation of this approach. Clarke et al. (1996) described non-pharmacological pain management as "under utilised" when they found that 90% of the 82 charts they audited, had no documentation of the use of non-pharmacological strategies of any kind. Encouragingly, the majority of the nurses in this current study reported using non-pharmacological interventions. The most common choices of heat, ice and elevation contrast with Carr and Thomas' (1997) study of patients' postoperative pain experiences when the most utilised non-pharmacological strategies were distraction, touch and empathy. Jastrzab et al. (2004) found a positive correlation between nurses' belief in the value of non-pharmacological pain management and higher levels of knowledge. This is encouraging, however further investigation would be required to quantify the knowledge levels of nurses in this setting.

Nurses perceived that the most important element in supporting nurses and developing clinical skills in pain management is the provision of pertinent education. The nurses interviewed in this study had had little postgraduate pain education other than hospital provided in-service study days. Evidence in the literature suggests that the value of ongoing education in the development of knowledge about pain management is unclear. Some authors have reported that nurses' knowledge has improved with in-service education (Brunier et al., 1995; Dalton et al.1998). Clarke et al. (1996) postulated that informal sources of information such as colleagues and handover reports

are more influential to the development of pain knowledge than formal education, but that of the formal sources, nursing school is the most important. This premise was reflected in the view expressed by Australian nurses that undergraduate education was more valuable than postgraduate (Van Niekerk & Martin, 2001). With these findings in mind, it is of interest that nurses in the current study displayed arguably up to date understanding and perceptions about pain management. This was evidenced by the extent to which belief in the subjectivity and self-reports of pain, regular administration of oral analgesics and non-pharmacological pain strategies had been embraced. As discussed, these issues have all been recommended by authors previously as important to effective pain management.

Nurses have described their in-service study days as being co-ordinated by the Acute Pain Service in this hospital. In addition, information is disseminated through the general ward setting during the liaison that occurs between ward and APS staff in the course of managing patients with invasive treatment modalities. It seems the APS has a role beyond just the management of these patients and effectively disseminates up to date information to ward staff. Carr and Thomas (1997) were cautious about the effect of establishing Acute Pain Services within hospitals, expressing concern about nurses' perceptions of having a reduced responsibility for pain management. The comments of the nurses in the current study do not reflect this premise. Rather, nurses expressed appreciation of the support offered by the APS as a resource to assist in the management of difficult issues.

The suggestion was made by nurses in this current study that a ward based "Pain Resource Nurse" whose role of supporting, assisting, and educating colleagues might be a beneficial addition to the ward team. Other authors have considered this concept. Clarke et al. (1996) described such mentors as "salient and cost effective" (p. 28) and Heath (1998) made the recommendation that such a clinical expert in pain might be of particular practical assistance to less experienced nurses, and facilitate skill development. Further investigation may be warranted to determine whether such an expert clinician might provide an even closer liaison between ward and APS, and an extension of the current service that nurses seem to find so valuable.

Nurses were confronted by barriers to effective pain management inherent in ward organisation and the requirements of hospital policies concerning the administration of analgesic medication. Lack of time was identified as a major barrier to



effective pain management practice and previous studies confirmed that lack of time is significant organisational barrier (Ferrell et al. 1991; Schafheutle et al., 2000). Lack of time available to nurses was considered to impact on the assessment of pain as they found themselves too busy to ask patients about pain.

There was an awareness that when nurses were busy, pain management assumed a lower priority. Manias et al. (2002) observed the multiple interruptions to nurses practicing in the ward setting and surmised that time used in dealing with these interruptions, reduced time available for pain assessment and that pain was forced down nurses' list of priorities. Arguably, the impact of this was strengthened when patients were reluctant to alert nurses to the presence of pain and this "busyness" was observed by patients, who by nature might not want to bother nurses. These patients might have been even less likely to report pain. Nurses were aware of this "vicious cycle" and commented that nurses' lack of time probably contributes to the problems in pain dosing that emanate from the conflict between nurses' and patients' expectations. As Manias et al. (2002) noted, interruptions seemed to be "taken-for-granted" by nurses (p. 732), so it is perhaps not surprising that these nurses did not identify multiple interruptions as a factor underlying their lack of time.

Studies have reported delays of five to twenty minutes between the decision to administer analgesia and the patient receiving the dose (Carr, 1990, Chung & Lui, 2003). Checking protocols for opioid medication classified as "Dangerous Drugs" were recognised as necessary but were a source of frustration to nurses in this current study, and the literature supports the perception that this is a significant organisational barrier to efficient pain management.

In summary, this study confirmed the premise that many authors have based their own research upon, that nurses assume a central role in pain management at the bedside. However, in contrast to the perception presented in the literature the nurses in this study displayed a belief in their patients' self-reports as well as the use of numerical pain rating scales. Nurses suggested that requiring the documentation of regular pain scores might prompt more frequent pain assessment, a view that reflects that of other researchers. In addition, nurses recognised that patients influence the management of their own pain and identified that elderly patients, and those with a history of intravenous drug use, may be disadvantaged in the ward setting. Problems with pain management in the elderly are described in the literature, however there has been little

research into how nurses' perceptions of intravenous drug users might influence the delivery of nursing care. Issues such as the role of prn dosing in the under-management of pain, non-pharmacological pain management and organisational barriers to effective pain management, have all been recognised previously and were explored by nurses in this current study. In contrast, the lack of consistent pain management practice identified by nurses in this study and attributed by some to junior nurses has not been quantified in the literature, although knowledge levels of nurses and specifically junior nurses have been extensively reported.

### **Conclusions**

This study has explored and described how acute pain is managed in the general surgical wards of a Western Australian public hospital from nurses' perspectives. At the bedside, nurses integrated the complex process of pain assessment and made decisions about the selection and titration of medications to tailor analgesia to individual patient's requirements. Nurses took responsibility for co-ordinating pain management and were strongly independent in decision-making that related to pain. Generally they embraced the opportunity to advocate on behalf of their patients when analgesia was ineffective, initiating medical reviews and bringing inadequate prescribing to the notice of responsible doctors. However, less experienced junior nurses often struggled with the advocacy role and required support to develop clinical decision-making skills and confidence in their clinical judgements. Unfortunately, although nurses recognised that education is an integral part of their role, this support was not always forthcoming from senior colleagues.

Lack of consistency between nurses in the provision of pain relief was identified as a deficiency of ward pain management practice, particularly by those who recognised that pain is much more difficult to control if severe and avoided peak levels of pain. Such inconsistency was thought to be related to difficulties prioritising pain when nurses were dealing with a heavy workload, or to individual nurses' attitudes. This is probably a complex issue and a major problem if found to be widespread. Further investigation could quantify the problem and explore underlying factors. Nurses embraced the concept of giving oral analgesics, in particular Panadol, regularly rather than "as required". This must go some way toward avoiding such peaks and troughs of pain, with nurses not waiting for pain to be severe enough to prompt a request for analgesia. However, from nurses' descriptions prn prescribing was widespread on these surgical wards. Because of this, the conflict that is documented in the literature between

nurses' expectations that patients will request analgesia and patients' expectations that nurses will offer analgesia was probably pertinent to this setting. Nurses did not identify such a conflict, but understood that pain assessment was difficult when patients were reluctant or unable to communicate the presence or severity of their pain.

Of particular concern was the difficulty experienced when assessing pain in elderly patients who may have been socialised not to complain, or were confused and unable to identify or express their needs. It was felt that the demands of heavy workloads and ward organisation might have denied nurses the time required to build the rapport needed to facilitate identification of subtle pain indicators in their elderly patients. It emerged from this data that the elderly were likely to be disadvantaged in general surgical wards in regard to having their pain recognised and efficiently managed. Closer investigation would quantify the prevalence of pain in this population of patients and as well as the effects of current pain assessment methods and ward organisation.

Another group of patients who were potentially disadvantaged in general surgical wards were those whom nurses identified as having a history of present or past intravenous drug use. These patients were able to communicate their needs but their motives for requesting analgesia were questioned and nurses sought to control the amount of analgesic medication these patients received. It is concerning that such patients were not thoroughly investigated for the presence of physical complications when their motives for reporting physical symptoms were questioned. Further investigation is warranted into the management of these patients, and the extent to which nurses' biases might influence the provision of effective pain relief.

The most surprising theme to emerge from this data was that nurses accepted the subjectivity of pain and that they believed patients' self-reports of pain. The use of verbal numeric pain rating scales was widespread, although nurses at times questioned the validity of pain scores that could differ so widely from person to person. However, nurses acted on patients' self-reports of pain and, as this differs so strikingly from the literature, it would be useful to explore this phenomenon further. In order to do so, it would be first necessary to determine how widespread is this belief in this setting, and then to explore the factors that might influence this belief. The Acute Pain Service was a valued resource for ward based nurses that provided a resource for managing difficult pain management problems and disseminated information about current pain

management. It is likely that the APS has been instrumental in developing nurses' acceptance of patient's self-reports of pain and administration of regular oral analgesia. Suggestions of ward based "Pain Resource Nurses" to further support nurses and develop skills and who might facilitate closer link between wards and the APS deserve further exploration. Additionally, non-pharmacological pain management strategies, valued because they complement and potentiate pharmacological pain management and can be implemented independently, are arguably being under-utilised in the ward setting and warrant further exploration.

### **Summary**

This study has identified positive trends in pain assessment and management amongst the nurses in this setting, in particular belief in patients' self-reports and the administration of regular oral analgesics. It was beyond the scope of this study to establish whether these have translated to improvements in patient outcomes. However, it is encouraging that nurses seem to be responsive to the dissemination of current guidelines for the clinical management of pain. Additionally, the identification of two groups of patients who might be particularly disadvantaged in the current ward setting, being the elderly and intravenous drug users, is an important outcome of this study and further exploration is needed to understand the complexities underlying the difficulties nurses experience assessing and managing the pain of these patients.

### **Recommendations**

Although the findings of this study are limited (see p. 26), nurses were generally supportive of the use of the numeric pain scores. The suggestion from nurses that this be included in ward documentation is supported in the literature and was the focus of a recent study by the National Institute for Clinical Studies (National Institute for Clinical Studies, 2003). Accordingly, changes to ward practice to accommodate the documentation of a numerical pain score alongside vital signs observations are recommended.

Suggestions for further research to quantify and evaluate the perceptions and trends are as follows:

- Quantitative study of nurses' knowledge and attitudes to self-reports of pain to confirm and quantify this trend within hospital environment.

- If above confirmed, further investigation to determine why these attitudes/beliefs have developed in this setting.
- Investigation into patient pain outcomes in this setting in light of nurses' acceptance of self-reports.
- Pain management of confused elderly in general wards.
- Pain management in intravenous drug users.
- Further exploration of non-pharmacological management of pain.
- Introduction and trial of bedside pain assessment/management flow chart.
- Introduction and trial of ward based "Pain Resource Nurse".
- Investigation of junior nurses' knowledge/decision making skills/confidence concerning pain management.
- Quantify lack of consistency of analgesic provision across 24 hour periods – correlating pain levels to provision of analgesia.

This study has demonstrated that nurses have a central role in the assessment and management of pain. The qualitative nature of this small study has suggested trends and factors that may influence nurses' pain management practice. Further research is required to confirm and quantify the extent of these and to explore how perceptions and beliefs that contrast with the literature have arisen in this setting.

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## **APPENDIX A**

### **Information Letter**

#### **“Nurses’ Perceptions of the Pharmacological Management of Acute Pain Experienced by Patients Hospitalised in the General Ward Setting.”**

You have been invited to participate in a research study investigating nurses’ experiences managing acute pain in patients hospitalised in general wards. This study has been approved by Edith Cowan University and the study hospital Nursing Research Committee.

The principle investigator in this study is Susan Slatyer who is an RN and currently practicing on the Casual Call list at the study hospital. This research is being conducted as partial requirement for a Bachelor of Nursing (Honours) degree.

If you decide to take part in this research study, it is important that you understand the purpose of the study and the procedures that you will be asked to undergo. Please read the following pages, which will provide you with the information about the potential benefits and precautions of the study. If you are currently involved in a research study as a participant you will be ineligible to participate in this one.

#### **Nature and Purpose of the Study**

You have been invited to participate in this study because you are a registered nurse who has been working on a general surgical ward at the study hospital for a period of at least three months.

The purpose of this research is to explore the perceptions that registered nurses practising in the general ward setting have about pain and pain pharmacology. It will focus on nurses’ attitudes, beliefs and knowledge about pain and analgesics and the influence of the clinical environment. This study will ask the questions on “What is it like to be a nurse managing acute pain in a general surgical ward at the study hospital in 2004?”

This study will increase understanding of the role of registered nurses in the management of acute pain in general surgical wards. It will also provide information on how best to support nurses and develop pain management skills.

#### **What the Study Will Involve**

If you consent to be included in the study, you will be interviewed for approximately 30 minutes with the interview scheduled at a time convenient to you. The interview will take place in a private meeting room in the hospital. Only you and the researcher will be present and the interview will be tape-recorded. You may request to have the tape recorder switched off at any stage of the interview and may elect to recommence,

postpone or abandon the interview. When the findings of this study are being formulated you may be contacted and invited to give feedback about the themes that have emerged from analysis of the data collected in this study.

Information obtained in the course of this study will be kept strictly confidential and will not be identifiable to any person other than the researcher either in the data analysis or in the study report. Any names or identifying information revealed during the interview will be removed during transcription.

### **Voluntary participation and Withdrawal from the Study**

Your participation in this study is entirely voluntary. If you decide not to participate in this study, your current position at this hospital will not be prejudiced in any way.

You may withdraw from this study at any time, for whatever reason.

Any questions concerning the project entitled “Nurses’ Perceptions of the Pharmacological Management of Acute Pain Experienced by Patients Hospitalised in the General Ward Setting” can be directed to Susan Slatyer of Edith Cowan University on 9384 2995 or Dr Anne Williams on 9346 3140.

If you have any complaints or concerns about the way in which this study is being conducted, you may contact the Director of Nursing Research & Evaluation at this hospital on 9431 2129.

If you have any concerns about the research project or would like to talk to an independent person you may contact:

Kim Gifkins  
Research Ethics Officer  
Human Research Ethics Committee  
Edith Cowan University  
100 Joondalup Drive  
Joondalup WA 6023  
Ph: 6304 2170  
Email: [research.ethics@ecu.edu.au](mailto:research.ethics@ecu.edu.au)

Susan Slatyer,  
Principle Investigator.

## **APPENDIX B**

### **Sample Interview Questions**

Whilst working on your ward you would have cared for a number of patients experiencing acute pain. Think now about those patients and tell me about the ones whose pain you felt you were able to manage effectively with analgesics.

What was the cause of the pain they were experiencing?

How did you judge the intensity of these patients' pain?

What were your goals when you were managing these patients' pain?

Tell me about the decisions you made to manage these patients' pain?

What were the criteria that you used for selecting which analgesic/s to administer?

How did you select the dose and the timing of the analgesic that you chose?

Can you tell me about some of the difficulties that you faced managing the patient's pain?

How did you overcome these difficulties?

Can you think now about the patients that you have cared for, or have observed others care for, whose pain you felt was not managed effectively with analgesics? (Questions as previous).

In your opinion what would help nurses in WA to develop skills in the management of acute pain in the general ward setting?

Is there anything else that you would like to add?

## APPENDIX C

### Demographic Information

Female \_\_\_\_\_

Male \_\_\_\_\_

Age : 20-29 years \_\_\_\_\_

30-39 years \_\_\_\_\_

40-49 years \_\_\_\_\_

50-59 years \_\_\_\_\_

60 years + \_\_\_\_\_

Institution at which initial nursing qualification obtained:

\_\_\_\_\_

Details of nursing qualifications attained (including Post Graduate):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Number of years of clinical experience: \_\_\_\_\_

Clinical areas in which you have past clinical experience:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Number of years in current hospital: \_\_\_\_\_

Length of time working on current ward: \_\_\_\_\_

Have you had any pain management education?

Yes

No

If yes, please give details:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## **APPENDIX D**

### **Level One Coding Categories**

Patient Preferences

Role of Patient (Reluctance/Knowledge/Understanding)

Independent Practitioner

Advocates

Pain Assessment (Self-report, Physical, Behavioural)

Goals of Nurse

Decision-making

Type of Pain

Access to Doctors

Lack of Time (Drs/Nurses)

Prescribing

Panadol

Tramadol

Non-Pharmacological Pain Management

Acute Pain Service

Nurse as Educator (Patients/Nurses)

Doctors Not Listening

Supportive Interventions

Nurses' Knowledge

Elderly Patients

Confused/Demented Patients

Labelling

Ex IV Drug Users

Stepwise approach to analgesia

Socialisation of Patients

Pain Scale Ratings

Lack of Documentation

Opioids

Nerve Blocks

Communication

Consistency of Pain Relief  
Patient Control  
Subjectivity  
Emergency Department  
Hourly Protocols  
Pre-operative Education  
Negative Pain Management

## **APPENDIX E**

### **Informed Consent**

**“Nurses’ Perceptions of the Pharmacological Management of Acute Pain Experienced by Patients Hospitalised in the General Ward Setting.”**

I \_\_\_\_\_ have been informed about all aspects of the above research project by Susan Slatyer and any questions I have asked have been answered to my satisfaction.

I freely give my consent to participate in this study, realising that I may withdraw at any time.

I agree that the research data gathered for this study may be published, provided that I am not identifiable.

I understand that I will be interviewed and the interview will be audio recorded. I understand that I may request that the tape-recorder be switched off at any time during the interview and that I may elect to recommence, postpone or abandon the interview. I also understand that the recording will be erased at the end of the study.

I have been given and have read a copy of the Information Sheet and Consent Form that pertain to the study named above.

**Participant:**

**Date:**

**Investigator:**

**Date:**

**Witness:**

**Date:**



## APPENDIX F

### Definition of Terms and Abbreviations

**ADLs:** activities of daily living – refers to daily activities of showering, toileting, dressing, nutrition etc.

**Anti-convulsant:** drug used to stop convulsions (Galbraith et al., 2001).

**Anti-depressant:** drug used to treat endogenous depression (Galbraith et al., 2001).

**Anti-inflammatory:** drug that alters the body's immune response and is used for the treatment of pain. These medications are commonly referred to as non-steroidal anti-inflammatory drugs (NSAIDS) and act as prostaglandin inhibitors in the body (Galbraith et al., 2001).

**APS:** Acute Pain Service.

**BP:** blood pressure.

**DD:** Dangerous Drugs – refers to drugs that are classified as Schedule 8 under the “Standard for the Uniform Scheduling of Drugs and Poisons” in Australia. These drugs are recognised as “Poisons to which the restrictions recommended for drugs of dependence should apply” (Galbraith et al., 2001).

**ED:** Emergency Department.

**Elderly:** refers to patients over the age of 65 years (Galbraith et al., 2001).

**Epidural:** administration of medication into the spaces surrounding the spinal cord. Drug can be delivered in the form of a continuous infusion or as Patient Controlled Analgesia using a pump (McCaffery & Pasero, 1999).

**Grad:** Graduate Nurses – newly graduated nurses undertaking clinically supported program in the first year post-registration.

**Hourly protocol:** refers to prescription of oral analgesic dose to be given hourly until pain is relieved. Maximum dose is specified in the order.

**Interim order:** doctor's verbal order, usually given by phone, to authorise a once only dose of medication.

**i.m.:** intramuscular route of injection.

**i.v.:** intravenous route of injection.

**Ketorolac:** non-steroidal anti-inflammatory drug used when patient is unable to take non-opioid orally (McCaffery & Pasero, 1999).

**Narcotic:** obsolete term for opioid drugs (McCaffery & Pasero, 1999).

**NOF:** refers to patients with a fracture to the neck of the Femur bone.

**Non-opioid:** refers to paracetamol and non-steroidal anti-inflammatory drugs (McCaffery & Pasero, 1999).

**NSAIDS:** non-steroidal anti-inflammatory drugs (McCaffery & Pasero, 1999).

**Obs:** observations.

**Opioid:** refers to natural, semi-synthetic and synthetic drugs that relieve pain by binding to the opioid receptors in the Nervous System (McCaffery & Pasero, 1999).

**Oxycodone:** generic name for opioid medication used to treat mild to severe pain (McCaffery & Pasero, 1999).

**Panadol:** brand name for paracetamol – an analgesic medication that has no significant anti-inflammatory properties (Galbraith et al., 2001). Paracetamol is commonly referred to by this brand name in Australia.

**Panadeine:** brand name for medication consisting of a combination of paracetamol and codeine (8mg). This oral medication is commonly referred to by the brand name in Australia.

**Panadeine Forte:** brand name for medication consisting of a combination of paracetamol and codeine (30 mg). This oral medication is used for the treatment of strong pain and commonly referred to by the brand name in Australia.

**PCA:** Patient Controlled Analgesia – intravenous infusion of opioid preparation for which doses are administered by the patient, usually using a pump (McCaffery & Pasero, 1999).

**PR:** per rectum – rectal route of drug administration (Galbraith et al., 2001).

**Pre-op:** preoperative.

**Post-op:** postoperative.

**PRN:** contraction of the Latin term “pro re nata”. Prescribing medications PRN means as needed, requiring assessment to determine when it is needed (McCaffery & Pasero, 1999).

**QID:** 4 times daily (Galbraith et al., 2001).

**RMO:** Resident Medical Officer.

**Stat:** immediately (Galbraith et al., 2001).

**Subcut:** subcutaneous route of injection.

**Tramadol:** generic name for opioid medication that has relatively weak activity at endorphin receptors in the Nervous System (Galbraith et al., 2001).