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**Patients' attitudes to analgesics and expectations of
emergency care**

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Abstract

Alleviating pain and suffering has long been a goal of health professionals. Pain has been shown to be one of the leading reasons that patients present to emergency departments (ED) throughout the world and the use of analgesics in ED's has been extensively explored. What has been less extensively researched is why some patients in pain choose not to use analgesics and what it is that they expect from emergency health care. The present work is an exploratory study looking at the attitudes of patients in pain, presenting to an urban ED and declining analgesics. It asks why patients decline analgesics and what they expect from emergency care. Seven participants were recruited over a two month period and volunteered to participate in semi-structured interviews while waiting to see a health professional. Four women and three men participated. Thematic analysis led to several themes being reported. People did not like taking analgesics because their injury was "not that painful"; they used "pain as a reference point"; and they had an "aversion to taking medications". Reasons for accessing emergency services included a "need to know what's wrong" and a belief that "diagnostic tests" were required. A surprising theme to emerge was the use of dental pain as a reference point for pain tolerance and pain behaviours. It was concluded that health professionals should accept that some patients in pain do not desire analgesics. Patients have non-pharmacological means of coping with pain. They access emergency care for diagnosis, active treatment, and have an underlying need to understand the cause of their pain. It is suggested that future study might include interviews with health professionals to compare and contrast their subjective perceptions with objective observations and to investigate the use of dental pain as a reference point.

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List of Abbreviations

ACC	Accident Compensation Corporation
CAM	Complementary and Alternative Medicines
C&CDHB	Capital & Coast District Health Board
DHB	District Health Board
ED	Emergency Department
GCS	Glasgow Coma Scale
GP	General Practitioner
HE&R	Maori Health Education & Recreation
LOC	Level of consciousness
MOH	Ministry of Health
MPQ	McGill Pain Questionnaire
NP	Nurse Practitioner
NZ	New Zealand
OTC	Over-the-counter
POP	Plaster of Paris (cast)
RAG-M	Research Advisory Group - Maori
RN	Registered Nurse

Chapter One

Alleviating pain and suffering is a traditional goal of medical care (Beel, Mitchiner, Frederiksen & McCormick, 2000). Even the ancient Greeks and Indians used medications to "... alleviate pain ... calm the mind ... induce restful sleep" (Dormandy, 2006, p. 9). This introductory chapter will explain my background and interests in the area of pain and pain relief. To understand the project, the context of study will be explored, and this will include a review of the New Zealand (NZ) health system, definitions of pain, analgesics, over-the-counter medications and of help seeking behaviour.

Researcher's background

I have worked as a Registered Nurse (RN) for over twenty years and this research project was developed from working part-time as a triage nurse in a busy Emergency Department (ED) at Capital & Coast District Health Board (C&CDHB). With an undergraduate degree in psychology, when I was required to complete postgraduate study for my role as a part-time nurse lecturer, at Whitireia Community Polytechnic, it seemed logical to build on this and to merge my interest in psychology with my knowledge of nursing. I noticed that people were presenting to the ED without having taken any analgesics and when offered analgesics by nursing staff would refuse them. People were prepared to wait for long hours, while in pain, to see a doctor. There was never enough time to determine why they did not want analgesics or what they expected from emergency services, given that a major role of the RN in the department is to administer prescribed analgesics. This project has allowed me the time to question patients about their beliefs about pain, analgesics and expectations of emergency care.

Significance of study

Anecdotally, many people present to ED's without having taken any analgesics and when offered analgesics by health professions, they decline them. Nicol and Ashton-Cleary (2003) found that people had many reasons for not taking analgesics which included a belief that pain should be tolerated and a dislike to taking pills or tablets. Other reasons cited by the authors were referred to under the heading of "inappropriate perceptions of how pain killers may interfere with

their care” and included reasons such as “didn’t want to mask the pain” (Nicol & Ashton-Cleary, 2003, p. 228). What was interesting was that although their study somewhat answered the question ‘Why do people not take analgesics?’ it raised another issue of what are the expectations of patients in pain, who do not want to take pain relief? By increasing health professionals awareness of what it is that patients expect from emergency services one can provide education to both patients and staff as how to best meet the needs of the patient.

McLean, Maio and Domeier (2002) write that pain is one of the primary reasons people seek medical care. Fins (1997) writes that by understanding the attitudes that people have to pain and to analgesics, health professionals can develop educational programmes about pain management and reduce the ‘burden of pain’ on health services. The burden of pain refers to the large amount of resources used within health care services in the diagnosis, management and treatment of pain.

Context of study

To make sense of where this research project took place, that is, the context of the study, it is important to have some understanding of the health care system in NZ. For further clarification the processes within the Wellington ED, such as triage will be described. It is important to realise that care received through public hospitals is generally free whereas seeking health from primary care providers involves a cost to the patient.

New Zealand health system

At present in NZ government subsidies exist in healthcare and this is funded through taxes. Public hospitals are presently managed by twenty-one District Health Boards (DHB's). The Ministry of Health (MOH) is responsible for the management and funding of the DHB's and these DHB's are responsible for the organisation of healthcare delivery and in meeting standards of care as set out by the MOH (MOH, 2008a).

Public hospitals treat all citizens or permanent residents free of charge and this includes specialist care. The costs of care for people presenting with injuries or trauma that have occurred as a result of an ‘accident’ are covered by the Accident Compensation Commission (ACC). Under ACC non-residents are also

entitled to public health care services if their presenting complaint is a result of an accident. Therefore, care delivered through all of NZ's public emergency departments is free of charge for *all* people presenting with an injury as a result of an accident.

Visits to primary health providers, such as General Practitioners (GP's), or Nurse Practitioners (NP's), are subsidised by the government however, patients are still required to pay the shortfall between subsidy and actual cost. This can range from ten dollars to fifty-eight dollars depending on which health care provider one sees (C&CDHB, 2007). This upfront fee for visiting a doctor can be reduced if the patient/family is earning less than a certain amount and meets criteria for qualifying for a Community Services Card. The structure of the New Zealand health and disability sector has been included as an appendix (see Appendix 1).

Department of Emergency Medicine

The Wellington ED treats approximately 45,000 patients per year, thirty percent of who are admitted as inpatients for further treatment and investigation (C&CDHB, 2008). Issues are constantly raised through the media as to overcrowding in ED's and on long waiting times to receive medical treatment/advice (Gower, 2008).

Research has been carried out into presentations at ED's in NZ as to whether or not presentations are 'appropriate' as determined by health professionals and whether by defining 'inappropriate' presentations, measures can be put in place to steer patients into more appropriate health care (Richardson, Ardagh, & Hider, 2006). However, little consensus can be reached among health care professionals as to what constitutes an appropriate presentation and little research has been done to investigate patients perceptions of appropriateness (Richardson et al., 2006). Patients are obviously presenting to these services with a perceived need for emergency care.

Triage

Within Wellington ED, triage is the process of immediate assessment by the first nurse to see the patient that presents to the department, with a perceived need for care. *All patients* (except those that are undergoing active cardio-pulmonary

resuscitation) that present to the ED are initially triaged by a triage nurse. This process may vary in other hospitals with medical staff rather than nurses actively triaging patients. Triage is a decision-making process based on the professional knowledge and skill of the health professional, and calls upon sound clinical judgment, thought and intuition (Mitchell, 1999). It is a core process in all emergency services.

There are several different triage scales used throughout the world' however they are all based on the need for the triager to make an assessment to determine the speed with which a patient needs to receive medical care. The Wellington ED uses the Australian National Triage Scale (Table 1). This is where patients are categorised on arrival to the department into one of five categories according to the triager's assessment that the patient should receive medical care within a pre-determined timeframe. A Triage Clinical Pathway had been included as an appendix for further clarification of the triage process (see Appendix 2).

Table 1

The Australian National Triage Scale

National Triage Scale	Treatment Acuity	Numeric Code
Resuscitation	Seen immediately	1
Emergency	Seen within 10 minutes	2
Urgent	Seen within 30 minutes	3
Semi-urgent	Seen within 1 hour	4
Non-urgent	Seen within 2 hours	5

(From Mitchell, 1999)

Once initial assessment has been completed the triage nurse is required to regularly reassess the patient until they are accepted into the care of another nurse or doctor. The regularity of this assessment corresponds to the initial triage code assigned by the nurse. For example a patient with a triage code of three should be assessed every thirty minutes. This is to detect any change in the patient's condition that may result in their triage code changing. The triage

nurse should also provide basic first aid (sling, ice, elevation of injured limb) and is able to administer basic analgesics (paracetamol and ibuprofen) if required.

Definitions of terms/concepts

It is important to have some understanding of the terms and concepts that are being explored in this project. Entire books and courses of study have been devoted to determining an understanding of pain, and people's responses to it. It is a complex concept that will only briefly be described here.

The definition of an analgesic is also defined here, with some exploration of how the terms pain relief and pain killers can be used interchangeably. Help-seeking behaviour has been widely researched and there are many reasons as to why people access emergency services rather than primary health care services.

Pain

Attitudes to pain have changed significantly over time (Tebbe-Grossman, 2006) and the experience of pain is a topic that has been extensively researched throughout medical, nursing and psychological literature. It is a broad topic that ranges from the culture of pain (the way in which society shapes the meaning and treatment of pain), the words and terminology associated with pain, differences in responses related to gender and age (Bendelow, 1993; Chambers, Reid, McGrath & Finley, 1997; Monsivivais & McNeill, 2007; Noble et al., 2005; Vallerand & Polomano, 2000).

Pain is a warning sign that something is wrong but it is often difficult to define or measure as people vary as to how much pain they can feel or tolerate (Jackson et al., 2005; James & Hardardottir, 2002; Koutantji, Pearce & Oakley, 2000). Other authors have found that culture shapes the norms, values and beliefs of people and this has a large part to play in their response to pain and therefore their beliefs about analgesics (Wong & Chan, 2008). Given that an individual's response to pain is so personal, research in the area becomes quite complex.

Definition of Pain

Three systems interact to produce pain; the sensory/discriminative system, the motivational/affective system and the cognitive/evaluative system (DeFriez &

Huether, 2008). The sensory/discriminative system processes information about the strength, the intensity, and the temporal and spatial aspects of pain. This system is the one that results in individuals abruptly withdrawing from painful stimuli. These sensations are mediated through the afferent nerve fibres (neurons that transmit sensory information from peripheral sensory receptors to the central nervous system), the spinal cord, the brain stem and the cerebral cortex. The cerebral cortex is responsible for sensing and interpreting input from various sources. It maintains cognitive function, such as thinking and understanding language and interprets various sensory functions such as hearing, vision and touch (DeFriez & Huether, 2008).

The motivational/affective system determines individuals conditioned or learned behaviours in relation to pain. These are mediated through the limbic system and the brain stem. The limbic system is a group of structures that mediate emotions through complex connections in the prefrontal cortex (Sugarman, 2008).

Through the cognitive/evaluative system an individual's interpretation of appropriate pain behaviour is determined and this is learned through life experience and cultural practices. This system can "block, modulate or enhance the perception of pain" (DeFriez & Heuther, 2008, p. 305). Fins (1997) writes that people each have a "personal history that will richly inform his or her behaviour once ill" (p. 169). In this way responses to pain are determined by previous experiences.

One of the best known definitions of pain within the health sector and one which has become a mantra within the medical profession is that 'Pain is whatever the patient says it is'. This definition was developed by Margo McCaffrey, a registered nurse, who has worked extensively in improving the management of patients in pain. Heuther and McCance (2003) write:

"All definitions of pain suggest that it is a complex phenomenon composed of sensory experiences that include time, space, intensity, emotion, cognition and motivation ... it is uniquely experienced by each individual ... it cannot be

adequately defined, identified, or measured by an observer”
(p. 329).

It is this complexity that makes all study in the area of pain difficult. One needs to take on a multi-faceted approach for pain not only impacts on a person's physical functioning, it also has the potential to impact on their psychosocial functioning as well (Kastanias, Snaith & Robinson, 2006).

Measurement of pain

Even given the above definition, there exist several psychometric tests that set out to measure/quantify pain. Noble et al. (2005) researched the development of the measurement of pain over the last fifty or sixty years. They write of the development of standardised questionnaires to determine the characteristics of pain, the emotional impact as well as other dimensions. Many of these pain measurements focus on the experience people have with chronic pain such as the Pain Assessment Battery Research Edition (Eimer & Allen, n.d.) or the Psychosocial Pain Inventory Revised (Heaton, Lehman & Getto, 1985). Perhaps the most frequently used and most often cited pain assessment tool is the McGill Pain Questionnaire (MPQ) (Boyle, 2008).

The MPQ was not designed to specifically look at people with chronic pain as many other assessment tools do. It is inclusive of those with acute pain and is used to look at the qualities of pain and to measure the dimensions of pain that are meaningful to people (Melzack, 1975).

Pain scales

As has been mentioned earlier, only patients can accurately assess and describe their pain. However, it is important that this information is given to health professionals to help them deliver care responsive to patient needs. Various pain assessment scales have been developed to help patients verbalise their pain in clinical settings. These pain scales include non-verbal scales for use with children, patients that cannot speak, and those who do not understand the language in which the assessment is taking place. These tools are most often used to determine a baseline for pain, determine the need for intervention, as well as to determine the effectiveness of interventions (Smeltzer & Bare, 2000) and their use has become routine in many clinical settings (Noble

et al., 2005). The numeric rating scale that was used in this project is described in more detail in Chapter 3.

In conclusion, there are many ways to measure pain. Hadjistavropoulos and Craig (2002) write that self report measures of pain capture “expressive pain behaviour that is under the control of higher mental processes, whereas observational measures capture behaviour that is less subject to voluntary control and more autonomic” (p. 551). Observational means of assessing pain require the observer (or health professional) to look at facial expressions, body posture, movements of the patient, interactions with others, vocalisations and so on (Morello, Jean, Alix, Sellin-Peres & Fermanian, 2007). Recent research has begun advising health professionals to use combined methods of pain assessment that is, self-report and observational, to determine pain levels in patients (Hadjistavropoulos & Craig, 2002; Hall, 2007).

Analgesics

Much of the literature uses different words for similar concepts. Analgesia is defined as a lack of pain without loss of consciousness and, an analgesic is defined as relieving pain or a drug that relieves pain (Bullock, Manias & Galbraith, 2007; Lilley, Harrington & Snyder, 2005) However, the words analgesia and analgesic are used interchangeably throughout the literature as are the words pain relief, pain medication, and pain killers.

Over-the-counter analgesics

Differences exist between prescription medicines, restricted medicines, pharmacy only medications and over-the-counter (OTC) medications. Prescription medicines are those that can only be prescribed by a registered prescriber such as a doctor, dentist, or nurse practitioner and be dispensed by a pharmacist. Restricted medicines can be bought without a prescription but must be bought from a registered pharmacist and a record must be kept of the sale. Pharmacy only medications can only be bought in a pharmacy but do not need to be sold by a pharmacist. OTC's are those medications that can be bought from a supermarket, petrol station or dairy and are not classified under any Medicines Regulations. (Medsafe, 2008). For the purposes of this project I will only focus on people who did not take common OTC analgesics such as paracetamol, ibuprofen and/or aspirin.

It is also worth noting here that these common analgesics, indeed most medications, are known by many different names. A generic name of a medication is the shortened or simplified name of the chemical name (Bullock et al., 2007). This medication can be sold by different companies and is therefore sold under different brand or trade names. For example paracetamol is a generic name (derived from the chemical name para-acetylamino-phenol) and is sold throughout the world under different trade names such as 'Panadol', 'Tylenol' and 'Setamol' (Bullock et al., 2007).

Help-seeking behaviour

Help-seeking is defined here as the person making a decision that something is wrong and that some sort of professional intervention is required. This is a complex interplay between the individual needing to recognise that there is a problem, deciding whether to deal with the problem themselves or whether to seek professional care. This can include care from a variety of sources either biomedical (for example a doctor, pharmacist or nurse) or more alternative sources such as a chiropractor, naturopath or reflexologist. This decision making process is based on patients attitudes, their general health status, and their ability to pay for services (Sharma, Hass & Stano, 2003).

Overview

Research into the use of OTC's and ED use has been limited. Fosnoct, Swanson, Donaldson, Blackburn and Chapman (2003) found that patients in severe pain were more likely to have taken pain medication before accessing health care from an ED than those with milder pain. Elderly patients and those that had pain for over eight hours used pain medication more often than younger patients did and, more often those who had pain for a shorter duration. Fosnoct et al. (2003) found that forty-four percent of the people presenting to the ED had taken some form of pain medication prior to arrival. Cham, Hall, Ernst and Weiss (2002) concluded from their own work that many of the patients accessing emergency services use OTC's. This, however, is in contrast to what other studies have found with presentations at ED's without prior use of analgesics between thirty-nine and eighty-one percent (Corbally & Gallagher, 2006; Nicol & Ashton-Cleary, 2003; Singer, Garra, Chohan, Dalmedo & Thode, 2008).

Much of the research has come from a biomedical stance – firmly set in the quantitative arena. Bendelow (1993) writes that health research has been dominated by Western medicine which divides the mind/body and emotion/sensation. Measures such as pain scales fail to “transcend the mind-body dualism and limit how pain is defined” (Bendelow, 1993, p. 288). Though this research was completed over fifteen years ago much of what Bendelow writes about still has relevance today. This quantitative dominance in the literature prompted me to approach the topic in a more qualitative way.

The focus in the literature is also on medical/pharmaceutical interventions that patients implement. Studies have shown that many people that present to ED's have used alternative therapies/interventions. Rolniak, Browning, MacLeod and Cockley (2004) found that there was a high use (forty-seven percent) of complementary and alternative medicine (CAM) use in patients presenting to an urban ED and recommended that patients should be routinely questioned about their use. Nicholson (2006) found that the use of CAM is significant in New Zealand patients presenting to ED's. Though not originally in the research question several participants mentioned alternative methods of coping with pain and therefore it is briefly mentioned here.

Chapter summary

There is a lack of in-depth research to help understand the reasons people attend emergency services and what their expectations of care are. Attitudes to OTC medications and analgesics have been researched but how do these attitudes impact on expectations of care?

This chapter has explored the context in which this piece of research takes place. The wider context of the NZ health system has been described as well as the more localised context of the Wellington ED. Pain, analgesics and help-seeking behaviour have briefly been defined and the process of triage has been explained. In Chapter Two the literature relating to beliefs about analgesics is explored, as are patients' reasons for attending ED's, attitudes and beliefs about pain and analgesics, the use of OTC analgesics and help-seeking behaviour.

The attitudes that people have toward analgesics determines their use. This research has the potential to raise the awareness of all health practitioners about patient's attitudes towards pain and analgesics and to understand the rationales behind patient's behaviours. By understanding people's attitudes towards analgesics and their expectations of emergency care, health professionals can shape patients discharge education/information to best ensure concordance and improve patient outcomes.