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WORKING BACK TO NORMALITY:

The patient experience of wrist fracture

A thesis presented in partial

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ABSTRACT

This qualitative descriptive study explored the patient experience of wrist fracture, which was treated within an emergency department setting, with the patient not requiring hospital admission. Ten participants were interviewed about their experiences of wrist fracture, with data being analysed using constant comparative analysis.

The experience of wrist fracture has not previously been explored from a patient perspective, although the medical treatment of this injury has been well documented. The findings of this study have provided some enlightenment about the way patients live through an acute injury, coping with treatment, symptoms and disability. The impact of the injury upon the individual's lifestyle was substantial, even though this is medically classed as a 'minor injury'; with some participants' having developed long term complications. Participants had contact with health workers in many circumstances, and they had both positive and negative effects on the participant's experience of injury and treatment. The categories identified in this study were Getting Through Injury, Putting Life on Hold, and Being in their Hands. Working Back to Normality was identified as the core category, with participants working towards this goal from the outset of their injury experience.

As a result of this study, it is clear that nursing practice needs to focus upon developing positive relationships with patients; to address issues related to pain management, before and during treatment; and to improve patient preparation for treatment and education. It also needs to be emphasised that the relationship with patients who have experienced wrist fracture does not end with the patient going home. For patients, working back to normality is an ongoing process which commences at the time of injury, and which may last for several months, or years.

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The undertaking of a Masters degree in nursing initially seemed like an exciting challenge, with the prospect of carrying out research and writing a thesis an integral part of that challenge. I felt I would be able to accomplish my goal (to complete this degree within the allowed time) while continuing to work full time, and maintaining a 'normal' social life. I now realise that I had little appreciation for what this would involve and went into this exercise somewhat naively. Credit for the fact that I have actually accomplished my primary objective (completion) must be shared by the many people who have provided me with support and assistance.

It is with great pleasure that I now acknowledge and thank those who have helped and supported me through this process. First of all I wish to thank my participants for the time they gave me, and their valuable insight into their experiences of wrist fracture.

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Chapter One

Introduction

Introduction

This descriptive study aims to explore the patient experience of wrist fracture, treated within an emergency department setting, not requiring hospital admission; and to clarify and understand the issues associated with this injury for patients. My reason for this exploration is the frequency with which patients present with wrist fracture, and the lack of any literature that considers the impact this injury has for patients.

Distal radius (wrist) fracture is one of the most common injuries seen in emergency departments, with one out of every six patients (within the context of nursing the term patient will be used, as clinical experience has revealed that individuals, when in a health care setting, refer to themselves as 'patients') treated with a fracture having a wrist fracture (Byl, Kohlhase & Engel, 1999). These numbers were confirmed in the orthopaedic department in which I was employed, where approximately 50 of the 300 patients treated each month had wrist fractures. There are two distinctive adult patient populations who experience this injury. They are the elderly person with osteoporosis, who sustains the fracture from a low impact fall, and the young adult sustaining injury from a high velocity force associated with some sports activities (Laseter & Carter, 1996; Love, 1998; Raskin, 1999).

Radley (1994) describes a biomedical model that applies the concepts of physiology, anatomy and biochemistry to the treatment of injury or disease in an effort to reduce the condition to an objective and understandable state. Biomedicine values scientific verification, and makes assumptions about both cause and effect when considering illness or injury, giving precedence to physical rather than emotional aspects. Treatment of wrist fractures is generally reviewed and considered within a biomedical context as health workers are, naturally, concerned with the challenge of managing fractures and preventing complications. The effect this injury may have upon the life of the patient is secondary to this significant challenge.

Logical positivism

Biomedicine is located within the world of logical positivism, which values objective, measurable criteria. For this reason the focus of many health workers is upon anatomical signs, such as xray findings, range of movement, and swelling or deformity. In contrast to this patients are understandably concerned by symptoms, which are subjective and can be difficult to measure. Because symptoms are subjective and often invisible, management may be influenced by personal value judgements because an objective framework for assessment is not available. Reliance upon value judgements related to symptom management can be problematic (Madjar, 1998), as the beliefs, expectations and priorities held by health workers and patients may be vastly different. The positivist approach of biomedicine may result in symptoms that are considered significant by patients, being ignored by health workers because they have not been recognised, or are considered to be a 'normal' aspect of injury.

The current trend of health care treatment is that it is required to be based on scientific evidence. Evidence includes quantifiable statistical measures of outcome, and also the qualitative experiences of patients. For this reason it is essential that nurses undertake clinical research that describes the patient experience, and identifies issues that are considered significant by patients. Wrist fracture is a common injury for which many forms of treatment are available. It is important that health workers develop an understanding of the impact of this injury for patients, including the effects of treatment. With this knowledge the treatment of wrist fracture can be patient focused, and they can have confidence that their needs will be identified and met.

The qualitative paradigm

Dominant social discourses will influence the approach taken in research, including the methodological standpoint of the researcher, which directs data collection and interpretation (Holloway & Wheeler, 1996; Miller, 1997). The knowledge gained is therefore influenced by the social world of the researcher. Within the qualitative research paradigm, social constructionism is a prevalent belief, as it provides an explanation for the many meanings and understandings which can be attributed to a

certain experience within cultures and communities, and for the disparities that can exist (Eccleston, Williams & Rogers, 1997).

In the clinical field of orthopaedics, positivism is the dominant discourse. However, within the broader context of nursing, the influence of qualitative methodologies is evident, including phenomenology, ethnography and grounded theory. Balancing the dominant biomedical discourse of orthopaedics with a more qualitative interpretation of a patient's injury experience will result in greater understanding and ultimately the care of patients will improve.

Justification for the research study

While the concept of trauma is explored in nursing literature (and that of other disciplines), the patient's experience is not well reflected. Much of the focus of literature is upon the technical aspects of treating injuries, rather than considering how patients experience an injury and its sequelae. Within this literature the invisibility of the patient is somewhat disconcerting. At present nursing literature articulates technical aspects, but does not appear to consistently demonstrate concern with understanding how patients experience injury. To ensure that the patient focus of nursing is transparent, patient experiences must be reflected when nurses articulate what occurs in their practice.

Serious injury does, appropriately, attract the interest and resources of many health researchers. However, it is equally important that the patient experience of more common injuries also be understood, despite these considered less serious or clinically challenging. Because there is a dearth of information about the subjective experience of patients who experience some common orthopaedic injuries such as wrist fracture, research into this area is needed. A cohesive approach is required to enable health workers to effectively manage patients' symptoms, with the goals of treatment being clearly understood by both parties. Without a comprehensive understanding of what is significant for patients, health workers' ability to achieve this cohesion will be limited. Qualitative exploration of the issues considered significant by patients with wrist fracture would enable nurses to provide better support, identifying and meeting patient needs more effectively.

A qualitative, descriptive study will allow exploration of the patient experience of wrist fracture, by employing a holistic approach to describe and analyse the complexity of the experience, within the patients' social reality (Borg & Gall, 1989; Miller, 1997). This methodology focuses upon obtaining data that illuminates the lives of people and includes the way they interpret and attribute meaning to their experiences (Berg, 1998; Boyd, 1993; Holloway & Wheeler, 1996; MacKenzie, 1994; Miller, 1997; Roberts & Taylor, 1999). Health workers can thereby gain insight and vicariously understand the patient's experience. The aim of this research was:

To explore the experience of patients who had a wrist fracture, which was treated within an emergency department setting, not requiring hospital admission; and to clarify and understand the issues for patients.

Research questions were:

- What are the social issues for a person who has a displaced distal radius fracture treated as an outpatient?
- What is their qualitative experience of pain that is inflicted in the course of treating distal radius fractures?
- How has this injury impacted on the patient's lifestyle?
- What was the impact of nursing on the patient's injury experience?

Participant eligibility

Participants were eligible for inclusion in this study if they had experienced a wrist fracture that was treated within an emergency department or fracture clinic setting, if they did not require surgery or hospital admission, or have other orthopaedic injuries. The original intention of this study was to explore the issues for patients who had their fracture 'set', ie manipulated or reduced. However, it became evident that participants considered that having the fracture treated in a cast was having it 'set', and it was decided after discussion with my supervisor, not to exclude these participants. While patients who required surgery or hospital admission may have experienced similar or different issues to those that evolved from this study, assumptions cannot be made about this. For this reason the findings of this study

cannot be generalised beyond the context of the experience of those participants involved.

Locating myself

At the time of undertaking this study, I was working as a nursing team leader in an orthopaedic outpatient clinic which treated patients with acute injuries, and also provided follow up care and treatment for these patients. I have had 10 years experience in this work environment and have worked closely with a number of patients who have experienced wrist fracture. This clinical experience has resulted in the development of my knowledge of the nursing and medical management of wrist fracture. A desire to better understand how patients experience this injury, and the issues they consider significant has also developed. While I am not currently employed in this environment I anticipate returning to this clinical area in the near future.

Organisation

This thesis will be organised in the following way. A range of literature related to wrist fracture, patient experiences of trauma, and the impact of pain associated with trauma, will be presented in Chapter Two. This literature is examined in an attempt to determine how patients live through the experience of fracture or trauma, including the emotional consequences, and the significance of pain inflicted during the course of providing treatment. Chapter Three will describe the method employed in this study, including a detailed presentation of how the study was undertaken. Chapter Four describes the category Getting Through Injury, which presents the participants' experiences during the initial phase of injury and treatment. Chapter Five: Putting Life on Hold describes the period of disruption when participants suspend normal life and activity while waiting to recover from injury. This chapter illuminates the variances in participants' experiences that can occur when the acute injury develops into a chronic experience. Chapter Six presents the category Working Back to Normality, which considers the participants efforts to return to their pre-injury situation; and Chapter Seven presents the data that emerged in relation to the participants' interactions with health workers, Being in their Hands. The data in this

chapter has been presented separately because it considers the impact that health workers had on participant experiences, rather than processes employed by participants to 'get through' their experience. My original intention in this study was to determine the impact of nursing upon the patient experience. However, it became evident that this would be difficult to achieve because participants generally did not distinguish between interactions with nurses, or with other health workers. For this reason, all references to nursing, physiotherapists and medical personnel have been grouped under the heading of health worker. Chapter Eight will present the findings of the study, including the implications for nursing practice, and will consider recommendations for further research.

Conclusion

This chapter introduced this study, its aims and research questions, and criteria for participant eligibility. Some background information related to the occurrence of wrist fracture, and the predominance of a positivist approach to previous research into this injury, was also presented. The reader was informed of the justification for this study, and the philosophical underpinnings that directed me towards a qualitative exploration of the patient experience of wrist fracture.

Chapter Two

Literature Review

Introduction

This chapter will review a range of selected literature in an attempt to develop a clearer understanding of the injury of wrist fracture, including treatment, and implications for patients. At the time this study commenced, my clinical experience and perceptions about wrist fracture directed me towards literature focused upon the acute phase of injury. Consequently, my literature review incorporated searches in Medline, CINAHL, and PsychLit, determining a database suited to medical, nursing, physiotherapy, and psychiatric fields. The search tools used were:

- wrist, Colles, distal radius
- fracture, break, injury, trauma
- illness or injury experiences
- emotional responses to injury or illness, stress, post traumatic stress disorder & PTSD
- pain, procedural pain, inflicted pain

The body of literature related to wrist fracture, injury and trauma experiences, and pain was explored in an attempt to determine what was currently 'known' about the injury, wrist fracture. As it became evident that little had been written about this specific subject, the search expanded to include patient experiences of other injuries. This revealed an extensive knowledge base about patient experiences related to serious trauma, but little knowledge about injuries that were not life threatening. This in turn led to an exploration of concepts related to pain, particularly pain inflicted during treatment. While this chapter does not consider or evaluate the totality of literature available on these subjects, it does reflect the principle themes that exist within the mainstream of health literature.

Subsequent to the collection of data in this study, as categories had emerged and were beginning to take shape, a second literature review was undertaken. This

explored concepts related to illness narratives, personal safety, disability, gender, aging and chronic pain. The findings of this second review of the literature have been integrated into the data chapters and used to support the study's conceptual findings.

Wrist fractures

Fractures of the distal radius are generally associated with a fall onto an outstretched hand, resulting in a metaphyseal injury, within 2 centimetres of the radio-carpal joint (see Appendix 5 for clarification of medical terminology). This fracture was first described by Abraham Colles in the early nineteenth century (Laseter & Carter, 1996), and is consequently known as a Colles fracture in biomedical circles. Many classifications exist, which include description of articular involvement, radial shortening, degree of angulation and amount of displacement (Ark & Jupiter, 1993; Laseter & Carter, 1996; Szabo, 1993). Colles fracture is frequently considered to be an unstable fracture, which may be reducible, but difficult to hold in alignment (Laseter & Carter, 1996; Szabo, 1993).

Medical literature considers treatment of wrist fracture in relation to the clinical outcome and explores preferred medical treatment, criteria for selecting a specific treatment strategy, and prevention of complications. The treatment options described include cast immobilisation, functional bracing, percutaneous pinning, and internal or external fixation. The complications of both the injury and treatment that are discussed include pin site or wound infection, neurovascular compromise, digit and wrist stiffness, loss of the fracture reduction, and carpal tunnel syndrome (Laseter & Carter, 1996; Love, 1998; Raskin, 1999; Szabo, 1993).

This injury and the associated complications were generally explored exclusively within a biomedical context. These authors are concerned with the challenge of managing fractures, and preventing complications, rather than the effect this injury may have upon the lifestyle of the patient. This approach is also predominant in literature describing the nursing care of patients with wrist fracture (Brown, 1998; Love, 1998), although discussion does include patient issues such as controlling pain, caring for casts, and post injury rehabilitation.

Treatment of wrist fractures is also considered within physiotherapy literature, with rehabilitation of the wrist being considered essential if a good outcome is to be achieved (Byl et al., 1999; Weinstock, 1999). Weinstock states that rehabilitation aims to achieve "complete and rapid recovery of range of motion, strength and function" (1999, p.99). This is achieved through a staged rehabilitation schedule, which is commenced during the initial period of wrist immobilisation and continues after cast removal. The goal of therapy initially is to reduce swelling, and promote movement of non-affected joints, followed by recovery of joint mobility after cast removal, and eventually a strengthening programme. The functional limitation for patients associated with wrist fracture was explored by Byl et al. in their study, which concluded that there was a measurable impairment of hand function following cast immobilisation, and that all patients should be referred to a hand therapist to ensure a rapid recovery.

None of above literature has considered wrist fracture from the perspective of the patient's experience. Although the pain of injury and some problems or complications associated with treatment of this injury are discussed, this has not occurred in a manner that clarifies the experience of wrist fracture for patients or its impact upon patients' lifestyles. For this reason, it is not possible to determine from this literature what issues are of significance for patients, and whether health workers effectively manage these in the view of the patient.

The patient experience of 'serious' injury

The literature related to major traumatic injury is extensive, with a relatively wide focus. Most nursing and medical literature explores serious trauma through a biomedical lens, with focus upon nursing and technical challenges. Alt-Grantham, Duncalf, Harms, Lake and Potter (1992) describe the horrific injuries experienced by a woman as a result of a domestic attack, using a case study approach. Although the focus of this article is clearly to illuminate how health workers might be affected by treating patients suffering purposely inflicted injuries, there was a missed opportunity to explore the consequences of this experience for the patient. Case study was also used by Ziglar and Parrish (1994) to describe the nursing care and treatment of life threatening pelvic trauma, but within this account the patient is almost invisible, and a

patient focus not evident. Fortunately some literature does provide a patient focus when discussing serious traumatic injury, such as pelvic fracture (Irving, 1999); traumatic amputation (see Appendix 5) (Carter, 1998); and spinal cord injury (Cooper, 1994; Kurtz, 1993; Lapham-Rhandlov, 1994).

Following sudden, serious injury feelings of emotional distress, ranging from anxiety to rage, or social withdrawal and nightmares may be experienced (Lee, 1991; Lenehan, 1986; Moore & Thompson, 1989). Psychology and psychiatric literature widely describes issues related to emotional symptoms following traumatic injury. One study, undertaken by Blanchard, Hickling, Vollmer, et al. (1995), concluded that between 10 and 50 percent of patients who experience injury as a result of traumatic injury experience emotional symptoms that may represent Post Traumatic Stress Disorder. According to Blanchard, Hickling, Mitnick, et al. (1995) experiencing emotional symptoms are not related to the actual severity of injury. Instead the factors believed to impact upon the emotional response to injury were generally related to the individual's internal value system, the perception of threat to life (and lifestyle), and the situation that preceded the injury. As this view is supported in much of the literature related to post traumatic stress (Bryant & Harvey, 1995; Joseph, Yule, Williams & Hodgkinson, 1994; Moore & Thompson, 1989), it cannot be concluded that emotional distress will only occur following serious injury, and needs to be considered in all cases.

Brock and Kleiber (1994) found that the distress associated with injury was considerable, claiming that "Injury shrinks the ill one's universe: Whereas once the body was a gateway to a wide world, injured, it becomes the only world" (p.412). Although the significance of this is explored in literature from psychiatry and psychology, the emotional issues that result from injury are seldom explored in any detail in other medical literature.

This situation is beginning to change in nursing literature, with injury experiences being researched and written about. Morse and O'Brien (1995) developed an injury model describing the patient transition processes following severe trauma, named 'Preserving Self: From victim to disabled person'. The injury experience was further considered and refined by Morse (1997), who developed a more complete injury

model, 'Responding to Threats to Integrity to Self', which also incorporated the patient experience of illness. The stages of illness described in these two models are summarised in Table 1.

Preserving Self (Morse & O'Brien, 1995) (Injury trajectory)	Responding to Threats to Integrity to Self (Morse, 1997) (Illness or injury trajectory)
<p>Stage 1 - Vigilance: becoming engulfed Being vigilant Distancing subjective from objective body Relinquishing to caregivers</p> <p>Stage 2 - Disruption: taking time out Being in a shattered reality Anchoring onto the significant other Recognising reality Beginning the struggle</p> <p>Stage 3 - Enduring the self: confronting and regrouping Learning to endure Latching onto the significant other Doing the work of healing Refusing to accept the damage</p> <p>Stage 4 - Striving to regain self: merging the old and the new reality Making sense Getting to know and trust the altered body Accepting the consequences of the experience</p>	<p>Stage 1 - Vigilance Suspecting Reading the body Observing Becoming overwhelmed Maintaining emotional control Accepting assistance</p> <p>Stage 2 - Disruption: enduring to survive Holding on Being in a shattered reality Experiencing a 'haze of disorientation'</p> <p>Stage 3 - Enduring to live: striving to regain self Living through pain Trying to bear it, learning to take it Accepting dependence Recognising physical change and loss of function Fearing isolation Grasping the implications of illness or injury Recognising the uncertain prognosis</p> <p>State 4 - Suffering: striving to restore self Struggling with grief Doing the work of healing Making sense</p> <p>Stage 5 - Learning to live with the altered self Getting to know and to trust the altered body Accepting the consequences of the experience Revaluing the experience Attaining mastery Revising or modifying life goals</p>

Table 1 – Illness/injury models

These injury models build on the Illness Trajectory theory developed by Corbin and Strauss (1988), who identified that patients experienced stages or shapes of illness that varied depending upon associated factors, including whether the illness was sudden, or gradual. These were called illness trajectories, which Corbin and Strauss concluded could follow a linear progression, be intermittent or relapsing, or could be stable or progressive.

One other study identified had findings of significance in relation to this research. This was a grounded theory study exploring the experience of women having cardiac surgery (King & Jensen, 1994). This study, called 'Preserving the Self: Women having cardiac surgery', found that women underwent a five stage process which they managed throughout a time when 'normality' was constantly changing and being redefined. Inherent throughout this process were issues related to trusting/distrusting others, retaining/losing control, and making sense of their experience.

These studies provide an excellent insight into the experience of surviving illness or serious injury. However, it is not possible to determine from this literature whether issues identified only have significance if a person's life is threatened, or if these issues are also problematic for patients whose injuries are not life threatening. An extensive search of the literature databases revealed only one article, which explored patient issues associated with a disabling but not life threatening injury. This study, by Griffiths and Jordan (1998), explored the experience of patients with lower limb fractures that required surgery. Issues of stress and coping, seeking control and returning to normality were identified. A principal cause of the stress experienced by these patients was ongoing severe pain. Pain had implications for participants in relation to their ability to assert control over their situation, and their ability to return to pre-injury activity. This study is somewhat unique, and further research of this nature is essential if the many patients who experience injuries are to receive the best care possible.

Inflicted pain in the treatment of fractures

Pain is one of the most frequently mentioned and significant symptoms of injury, including wrist fracture. Pain is generally related to the traumatic event, but in some cases also resulted from treatment (Carter, 1998; Lenehan, 1986; Madjar, 1998; Nagy, 1998; 1999; Ulmer, 1997; Walton & Madjar, 1999). Patients who are injured will often submit to a painful procedure, believing that this is a necessary part of their treatment (Dewar & Morse, 1995; Fagerhaugh & Strauss, 1977). These patients assume that pain will be kept to a minimum, however, many procedures undertaken

in the provision of treatment cause severe pain that is not well managed (Fagerhaugh & Strauss, 1977; Madjar, 1998; Schroeder, 1992).

A review of the literature related to orthopaedic injury reveals that pain is considered a significant aspect of both injury and treatment. In emergency departments, where fracture reduction most frequently occurs, managing pain does not appear to be given a high priority by health workers (Arblaster, 1995; Day & Sands, 1996; Johnston, 1999; Tanabe, 1995; Tanabe & Buschman, 1999). As uncontrolled pain can be dehumanising (Greipp, 1992; Lisson, 1987), and can exacerbate a patient's future pain experience (Carter, 1998; McGrath & DeVeber, 1986; Morse & Mitcham, 1998; Pasero & McCaffery, 1998; Ptacek, Patterson, Montgomery & Heimbach, 1995; Vessey, Carlson & McGill, 1994; Weisman, Bernstein & Schechter, 1998), it is important that nurses understand patient issues related to pain and particularly to pain which is inflicted in the course of providing treatment, or reducing fractures.

Madjar (1998) has described pain caused during procedures as 'clinically inflicted pain', stating that this is pain "generated by diagnostic and treatment procedures carried out by nurses or other health care workers" (p.vii). In orthopaedics, the consequences for patients related to clinically inflicted pain has not been considered. Instead literature reviewing pain management in orthopaedics has a strongly biomedical focus, being concerned with technique, safety and nursing care.

The earliest discussion of the phenomenon of clinically inflicted pain was undertaken by Fagerhaugh and Strauss (1977). They were interested in the political influences upon pain management, and particularly the secondary role pain management assumed within the work of doctors and nurses, who perceived their primary task was to treat the disease. Fagerhaugh and Strauss found that health workers focused upon completing a therapeutic task, and that the pain inflicted as a result of this was perceived by staff as legitimate and acceptable.

It was many years before inflicted pain was again considered within a nursing / patient context. In 1992, clinically inflicted pain was compared to torture by Schroeder (1992). While attempting to articulate the caring aspects of nursing, Schroeder discussed the similarities that exist between inflicted pain during treatment

and deliberate torture. The conclusion was that the only factor which separated the two was the caring relationship between nurse and patient, but that, unfortunately, the "caring" nature of many nurse / patient interactions was questionable.

Exploring the nurse / patient relationship was a fundamental aspect of Madjar's (1998) phenomenological study, which considered clinically inflicted pain within two areas, burns and oncology. This study involved interview and observation of nurse and patient interactions in an attempt to identify issues associated with inflicting pain. Madjar (1998) found that nurses experienced a role conflict between caring and inflicting pain in the provision of that care. Because pain was seen as an inevitable part of providing care, it became invisible, and therefore frequently overlooked. As nurses focussed upon completing treatments, they became oblivious to the discomfort caused by their actions, with the consequence for patients that pain became inevitable. Madjar also concluded that patients' experiences of clinically inflicted pain were influenced by the nature of the relationship that developed between patient and health worker. If a therapeutic relationship existed, nurses and patients worked cohesively to minimise pain, whereas if nurses distanced themselves from patients, they became oblivious to the pain that resulted from their actions.

The concept of nurses dissociating themselves from patients as they inflict pain was also considered by Nagy (1998), who undertook a study that explored the emotional reactions of nurses to their patients' pain. This study showed that nurses experienced anxiety related to the patients' pain, and that nurse morale was related to four factors. These four factors included the challenge to nurses' perceptions of their role in alleviating pain; the issue of personal vulnerability related to the patients' pain; beliefs about their skill in pain assessment; and their relationship with medical prescribers of analgesia (Nagy, 1998).

Another study by Nagy (1999) focused upon the strategies nurses utilised to cope with inflicting pain upon patients, also during burn treatment. This study identified 14 coping strategies nurses used routinely while treating patients, five of which involved distancing themselves from the patient's pain. The other strategies were to actively engage with the patient, seeking ways to minimise pain; to increase their skill and ability to manage pain; to seek to reconstruct their role as nurses so that the

necessary infliction of pain was acceptable; and to utilise external social supports to help resolve internal conflict.

The studies undertaken by Madjar (1998) and Nagy (1998; 1999) provide insight into the patient experience of clinically inflicted pain as a result of burn and cancer treatment, and the response of nurses to this pain. While the findings of these studies cannot be generalised to orthopaedics, questions arise about the ramifications of clinically inflicted pain in fracture treatment.

A number of methods are available to alleviate pain during closed reduction of fractures. These methods are primarily pharmacological, and include local and regional anaesthesia, conscious sedation using ketamine, and high dose narcotics (see Appendix 5) (Barsan et al., 1993; Glickman, 1995; Groeneveld & Inkson, 1992; Hennrikus, Shin & Klingelberger, 1995; Kennedy, Porter, Miller & Jaffe, 1998; Knoop, Trott & Syverud, 1994; Kost, 1999; Nelson, Walters & Watkins, 1996; Pascarelli, 1996; Rivellini, 1993; Scott, Horne & Devane, 1995). Literature describing these techniques was explored in an attempt to clarify patient issues with regard to procedural pain management in orthopaedics. The focus of this literature is primarily upon safety aspects and technical challenges, and does not consider the impact for patients. Although efficacy is considered in some cases it is generally measured utilising inappropriate strategies that do not acknowledge the subjectivity of pain, nor consider the influence of social construction or culture on pain behaviour (Clancy & McVicar, 1992; Thorpe, 1996).

Kennedy et al. (1998) undertook a study comparing two forms of conscious sedation utilised for children with orthopaedic injuries. Protocols described were compared for safety and efficacy utilising an "observation scale of behavioural distress" (Kennedy et al., 1998, p.957). As a patient's pain cannot be accurately measured by independent observation of pain behaviour or distress, it would not be appropriate to rely upon this data as a reflection of a patient's experience.

The approach utilised by Hennrikus et al. (1995) to evaluate efficacy is more appropriate for measuring patients' pain. A study was undertaken which explored safety and efficacy of haematoma block and entonox for children having fractures

reduced. While the major focus of this study appeared to be safety, the authors did measure efficacy by asking the children to rate the pain experienced, in addition to the observational scale.

Scott et al. (1995) also asked patients to evaluate the effectiveness of the pain relief utilised during fracture reduction. These authors were concerned with ischaemic arm block - a regional anaesthetic technique widely used for controlling pain during wrist fracture reduction. This method of controlling pain was found to be painful in itself, with 50 percent of the study participants reporting significant tourniquet pain. In addition, 30 percent of participants reported significant 'breakthrough' pain during reduction of the fracture. The study concluded that, while the procedure was safe, participants did not find it particularly effective at managing pain. Unfortunately, Scott et al. (1995) question the validity of the patients' pain reports within the context of 'statistical significance', and 'variability', rather than accepting them as credible responses from the participants in relation to their experience.

Patient feedback was incorporated into Knoop et al.'s (1994) study of the efficacy of two regional anaesthesia techniques - digital and metacarpal nerve blocks. The conclusion of this study was that both techniques were painful, but that digital blocks were more effective. It is not clear whether participants shared this conclusion. Local and regional anaesthesia methods have also been discussed in relation to nursing care issues, however, discussion is generally limited to physiological effects, technical challenges and safety issues (Rivellini, 1993). Nursing issues related to inflicting pain were not addressed, and there was no consideration of whether patients these techniques to be effective at managing pain during procedures.

Conscious sedation is yet another technique for managing pain during orthopaedic procedures. Procedural and safety issues associated with conscious sedation are described by a number of authors, who concluded that this technique can be 'safely' utilised if appropriate procedures are followed, and staff are adequately trained (Glickman, 1995; Groeneveld & Inkson, 1992; Kost, 1999; Nelson et al., 1996; Pascarelli, 1996). High dose narcotics are used in a similar manner to conscious sedation in the treatment of orthopaedic conditions and procedures. Barsan et al. (1993) explored the safety of utilising large doses of intravenous Meperidine™. The

conclusion was that changes could occur in the patient's respiratory and cardiovascular status, but that these were clinically insignificant, and high dose narcotics were safe and well tolerated by patients undergoing painful procedures. There is no reference to the patients' perceptions of the effectiveness of these techniques, or consideration of their impact on patients. As patients were seldom consulted it is not possible to make conclusions about the efficacy of conscious sedation or high dose narcotics.

Conclusion

Acceptance of the qualitative paradigm in nursing has resulted in nurses wishing to understand patients' experiences of injury or illness. The patient's lived experience of traumatic injury is an area of particular interest to nurses working in orthopaedics. While a patient perspective of traumatic injury is beginning to be explored (Carter, 1998; Morse & O'Brien, 1995), the focus tends to be upon injuries that are considered serious by health workers. The lived experience of patients who have suffered non-life threatening injuries, or injuries which are not considered technically challenging, currently receives little attention in nursing literature.

It is evident from the literature that the functional impairment that results from injury contributes to patients feeling stress and anxiety while struggling to maintain some control over their lives. Although symptoms of emotional distress may be more prevalent in patients with serious injury, these symptoms cannot be excluded in patients whose injuries are less severe. Nor should it be concluded that patients and health workers have a similar perspective about the extent of an injury, or what constitutes a 'good' or 'bad' injury experience.

It can be assumed that, following trauma, pain results both as a consequence of injury and of treatment of that injury. Because of the low priority given to pain management in some clinical settings, and the staff perception that pain is an inevitable aspect of treatment, it can be further assumed that significant pain will occur as a result of fracture reduction. This pain may be exacerbated by the invisibility of pain to nurses who are focussed upon task completion (Madjar, 1998) and by nurses emotionally distancing themselves from the patient (Nagy, 1999).

While Griffiths and Jordan's (1998) research with patients who experienced single leg fracture is invaluable, their participants were admitted to hospital, and received ongoing nursing care and treatment. The immediate post injury period was spent in the care of trained health workers and in an environment that could be considered safe and supportive. As the majority of patients who experience wrist fracture will be treated in either an emergency department or fracture clinic, and then discharged home there can be no assumption that the experience of wrist fracture will be similar to the experience described by Griffiths and Jordan (1998).

Chapter Three

Method

Introduction

Chapter Three will be presented in two parts. The first part describes the method employed for this study, discussing the qualitative underpinnings of the descriptive method, and the form of data analysis used. The second part describes the actual design and implementation of this study, including ethical issues, recruitment, data collection and analysis.

Why qualitative descriptive research?

The health care environment, which includes orthopaedics, is one with a belief in universal rules, objectivity and neutrality (Dzurec, 1989; Holloway & Wheeler, 1996). In this world subjectivity is considered a "private and personal reading of reality" (Boyd, 1993, p.66), which cannot be used as a basis for treatment. According to Munhall and Boyd (1993), the subjective experiences of patients are "inextricably bound" (p.xxi) with an objective reality. However, scientific approaches evolving out of logical positivism, which promotes a "single true vision of reality and route to truth" (Munhall & Boyd, 1993, p.xvii), cannot reflect the uniqueness of the individual patient experience. Qualitative research is able to capture the subjectiveness and individuality of a patient's experience through a systematic exploration (Artinian, 1988; Boyd, 1993), and for this reason qualitative research is a valuable and legitimate scientific tool.

Qualitative exploration of the patient perspective of illness or injury, and the inclusion of this in the domain of nursing knowledge, will enhance patient care. Health workers will be better able to identify and meet patients' needs if they have an understanding of how patients attribute meaning to their health care experiences (Cobb & Hagemaster, 1987; Popay, Rogers & Williams, 1998; Roberts & Taylor, 1999; Toombs, 1987; Walton & Madjar, 1999).

Qualitative research processes are primarily inductive, with theories emerging from the data, rather than being confirmed or disproved by the data (Glaser & Strauss, 1967; Morse, 1991). The two principal forms of qualitative research are critical research, which aims at generating change; and interpretive research, which is about explaining or describing a phenomenon to generate meaning and knowledge (Roberts & Taylor, 1999). Qualitative descriptive research is interpretive, and is a particularly useful way of developing a knowledge base when little is known of a phenomenon (Holloway & Wheeler, 1996; Parse, Coyne & Smith, 1985). Through this exploratory approach it is possible to describe the phenomenon and develop new insight, which can illuminate the patient situation (Morse, 1991).

While it is important that health workers understand the clinical management issues associated with wrist fracture, this needs to be balanced against the perspectives and expectations of patients. Experience has been described from an anthropological perspective, being considered an “interpersonal, inter-subjective realm of engagements, transactions, communications and other social activities” (Kleinman, 1992, p.128). According to this view, experience is the movement between and within persons, which includes the achievement of actions and transactions. The Oxford English Dictionary describes experience as “actual observation of, or practical acquaintance with, facts or events; knowledge resulting from this; **event that affects one ... process of being so affected**” (emphasis mine) (Fowler & Fowler, 1964; p.426). From this definition it is clear that although health workers can gain some knowledge from observing patients with wrist fracture, these health workers do not actually go through the process of having a wrist fracture. The experience they have is secondary, and subject to their own interpretation or construction. Both interpretations of ‘experience’ relate to the individuality with which people live through and respond to situations, including the influence that societal constructs will have upon the interpretation of that experience.

Symbolic interactionism

An individual’s subjective understanding of self and of injury will evolve out of the person’s lived world, which will influence their interpretation of the meaning of that situation. Response to injury, and the significance attached to symptoms will

therefore vary according to the social context of the individual, and their previous experience with, or exposure to, injury (Benner & Wrubel, 1989; Schussler, 1992; Tishelman & Sachs, 1998; Toombs, 1987; Walton & Madjar, 1999). Different social contexts, with unique cultural and community influences, may therefore result in a significant disparity between the way an individual will interpret the meaning of symptoms and the way health workers will (MacLeod, 1993).

Social, or symbolic, interactionism is a means of considering the "multiplicity of meanings available in culture" (Eccleston et al., 1997, p.699), with the assumption that there will be a range of ways in which a symptom or action can be understood. There are three basic premises of social interactionism; that we know things by their meanings; that meanings are created through social interaction; and that meanings change as a result of interaction (Blumer, 1969; Fine, 1993). A complex process of action and interaction evolves, with meanings being created and adjusted according to this process. Understanding is constructed from the interaction of individuals within the society; and the society will be constructed from the behaviour of humans, who have developed the social limits that will be placed upon their behaviour. Behaviour is therefore an active process of construction and reconstruction within which individuals make sense of their environment (Meltzer, Petras & Reynolds, 1975).

Grounded theory is a qualitative research methodology developed by Glaser and Strauss in the 1960s to develop theories grounded in data from social research. This supports exploration of the way an individual's concept of meaning will affect the way they experience a phenomenon, or interpret their experience of that phenomenon. This method utilises the theory of social interactionism to determine and describe the diversity of responses to a situation and the different ways people make sense of their experiences (Eccleston et al., 1997; Glaser & Strauss, 1967) through close comparison of behaviour and actions. Grounded theory research is underpinned by symbolic interactionism as the intent is to clarify a phenomenon, identifying what is happening, and how and why it happens. While I am not intending to utilise grounded theory methodology for this research, some of the principles and techniques of grounded theory research, including constant comparative analysis, are being incorporated and therefore need to be clarified and understood. The reason for this will be explained later in this chapter.

The theory of symbolic interactionism suggests that social order depends upon how social institutions consider individuals, and upon how individuals use, manipulate and remake structure within that society. The world, therefore, can only be understood within a social context or within the 'social realities' of the individual's world or culture (Fine, 1993). The complexities of meaning and understanding which exist in society about injury and treatment means it is important that health workers are familiar not only with biomedical aspects of treating wrist fracture, but also the manner in which this injury is experienced by individuals. Clinical awareness can be enhanced by looking at the 'lifeworld' context of the experience of patients (Walton & Madjar, 1999), as health workers will be better able to identify and meet individual patient's needs.

Establishing credibility in qualitative research

Within the positivist paradigm there has been a belief that qualitative research is not 'good' research, and that there is no absolute way of demonstrating its validity or reliability (Popay et al., 1998). Much attention, however, has been devoted to assuring that qualitative research processes are trustworthy, and support the development of credible and reliable findings (Borg & Gall, 1989; Kahn, 1993; Roberts & Taylor, 1999; Sandelowski, 1986). According to Roberts and Taylor (1999) this can be determined when:

The extent to which the means used in the research to collect and analyse the data do what they are supposed to do. Reliability refers to the extent to which consistent results can be achieved on repeated undertaking of the research project. (p.172)

Key concepts of qualitative research methodology are the auditability of the process, and the creditability, confirmability and fittingness of the findings. Borg and Gall (1989) consider that these concepts can be verified by "the degree to which the findings can be generalised to the population from which the participants were drawn" (p.32). In addition the research method needs to be suitable for answering the specific question, and the research process sufficiently transparent to enable others to evaluate and replicate the study (Silverman, 1997).

Qualitative research processes can be verified by internal and external checks that which clarify the relationship between the research process and the results (Borg & Gall, 1989; Kahn, 1993; Koch, 1994 Laing, 1996; Roberts & Taylor, 1999; Sandelowski, 1986). These checks can include taking the data to participants, or others who have knowledge of the phenomenon being studied, to determine whether the findings are considered plausible; confirming the researcher's awareness of their assumptions as well as influences upon data interpretation; and providing an audit trail describing the process so that other researchers would be able to determine how the findings emerged from the data (Appleton, 1995; Koch, 1993). Incorporation of these checks, along with sound processes, will help to confirm the credibility of the study and the findings.

Data collection and analysis

It is essential in qualitative research that the participants have direct knowledge and experience of the phenomenon being researched. For this reason purposive sampling is generally used, rather than a random selection of participants (Borg & Gall, 1989; Popay et al., 1998). Data is collected through methods that are based upon human interaction, including conversation, interview, journaling or observation (Borg & Gall, 1989; Parse et al., 1985). A detailed evaluation of the patient experience of a situation, and the meaning attributed to the experience, then occurs through a process of coding, analysing and interpreting data within a social context (Artinian, 1998; Carter, 1991; Parse et al., 1985). In this study interview was determined to be the most appropriate data collection method, because participants' experiences were being explored retrospectively, rather than as part of an ongoing investigation.

Interview is a complex and involved research tool utilised to draw insight and information from participants (Minichiello, Aroni, Timewell & Alexander, 1995). Although an interview is a deliberately created opportunity to talk about a specific event (Dingwall, 1997), participants should be given the opportunity to narrate their story in their own way, with only minimal intrusion or direction from the interviewer (Sandelowski, 1999). The interview should evolve as a conversation, but one that is

not completed until the interviewer has covered the research topic and the participant has told his story (Denzin, 1989; Minichiello et al., 1995). Initial prompts should be aimed at putting the participant at ease, and should flow from general to specific subjects (Hutchinson & Wilson, 1992). Any questions asked must be carefully phrased, ensuring they contain only single issues, and are simple and easy to interpret (Berg, 1998).

Once collected, qualitative research data is then analysed through a systematic reduction and evaluation, with the researcher reflecting on the data and interpretations of meaning (Borg & Gall, 1989; Huberman & Miles, 1994; Parse et al., 1985). While this process might be perceived by some as tedious or time-consuming, for others it is considered "the most creative research activity (which) is also the most complex and mysterious" (Laing, 1996, p.118). The first aspect of analysing data is to become immersed in the data, which commences during the interview, and is solidified through familiarisation with the participant's interview transcript.

In this study it was decided to utilise open and axial coding techniques and constant comparative analysis for interpretation of data. These tools of grounded theory were first described by Glaser and Strauss in 1967, and involve analysing the data in discrete units of either words, sentences, paragraphs or documents. Questions are then asked of the data and comparisons made between each individual piece of data, until categories are developed which reflect an overarching pattern (Artinian, 1988; Glaser & Strauss, 1967; Strauss & Corbin, 1990).

The constant comparative data analysis tools of grounded theory have the purpose of explaining social interactions or behaviour by determining the social processes occurring in the situation. Categories emerge from the data that describe the underlying processes related to the phenomenon being explored. The principal underlying process is the core category, which clarifies variations in behaviour and meaning, and will form the basis of any theory about what is happening within the social context of the study (Strauss, 1987).

As it is my intent to explore issues and identify processes rather than develop a theory about the experience of wrist fracture, constant comparative analysis is a

suitable technique for analysing this experience. Through this method of analysing data the exploration and clarification of participants' social issues and experiences can be considered in a methodical manner. This technique enables the researcher to consider what participants are saying, and doing within their social context, and to compare the experiences of one participant to all others.

The initial step of constant comparative data analysis involves open coding, or breaking down of data through examination, conceptualisation and labelling. Concepts that appear to represent a similar phenomenon are grouped together to form categories, with respective sub-categories. Having identified theoretical categories, these are then given a conceptual name that clearly relates to the data represented (Strauss & Corbin, 1990). The names of categories may be constructed by the researcher, or may be abstracted from the words of the participants (Glaser & Strauss, 1967). Labelled concepts and categories are compared to other incidents within the same data set, and to the concepts or categories identified in data from other participants (Glaser & Strauss, 1967).

Once the data are sorted into separate categories, these are then further examined for connections, with questions being asked of the data to determine their properties, dimensional range, and the underlying meaning. In other words, not only is the researcher considering 'what is happening', but also how often it happens, for how long it happens, and whether it progresses or diminishes. This is axial coding, which attempts to specify a category within the context in which it exists, including properties, causal conditions, interactional strategies, and consequences. Examination of the category and related sub-categories occurs, with interpretation and reflection until clarity about the phenomenon emerges (Glaser & Strauss, 1967; Strauss, 1987; Strauss & Corbin, 1990; Wilson & Hutchinson, 1991). The substance of the researcher's reflections and theorising about similarities and differences between data are included within the data as theoretical memos, and used in this context to aid interpretation. Eventually understanding is solidified, and modifications occur less frequently. The number of new categories identified will diminish, and a point of theoretical saturation will occur. This point is reached when categories are conceptually dense, with variations and inconsistencies no longer appearing (Glaser & Strauss, 1967).

As previously stated, the assumptions of the researcher need to be made explicit, promoting transparency in data analysis, and providing a reference point for checking and consideration (Koch, 1994; Laing, 1996). My assumptions related to this research are that there are social implications for patients who experience wrist fracture, and that these implications may be different for patients who are not admitted to hospital, and who therefore have a briefer, more transient relationship with nurses. Other assumptions are that the experience of having a fracture set without general anaesthesia can be stressful and cause pain for patients, and that nursing actions can influence the patient experience.

While prior assumptions held by a researcher can result in greater weight being given to some issues, personal and professional knowledge can also support the qualitative research process. The experiences of the researcher can assist in the analysis of data, enhancing the awareness of meaning, through insight, understanding, and the ability to separate the relevant from the irrelevant. Glaser and Strauss (1967) have labelled this theoretical sensitivity, and believe this will be enhanced as the researcher increases their knowledge of the phenomenon, and becomes more familiar with the data and literature (Glaser & Strauss, 1967; Strauss & Corbin, 1990). It is believed that theoretical sensitivity is essential if researchers are to develop theories that are "grounded, conceptually dense, and well integrated" (Strauss & Corbin, 1990, p.42). While developing a theory about what happens when a patient experiences wrist fracture was not the objective of this study, theoretical sensitivity has enabled me to interpret the data in a more effective manner.

Study design and implementation

A descriptive study was planned to explore the experience of patients with wrist fracture, treated within an emergency department or fracture clinic setting. Because this was a new area of exploration, a descriptive design was considered an appropriate method for discovering the significance of this injury for patients, the issues considered important, and the impact treatment had.

This study involved a small number of participants who had experienced the specific orthopaedic injury, wrist fracture. The self-select, voluntary nature of participation impacted upon the age, gender and ethnicity of the participants included, detailed in Table 2. While the findings of this study may be strengthened by the demographic make up of the participants in relation to middle class New Zealand Europeans, it has posed limitations with regard to other ethnic or cultural groups. This will be discussed further as part of the discussion related to the findings of this study.

Name	G	Age at injury	Treatment	Social circumstances at time of injury	Treated in
Anne	F	53	Colles cast (see Appendix 5)	Living with husband, in paid employment	ED and fracture clinic
Barry	M	45	IAB (see Appendix 5) Colles cast	Living with wife and children, working from home	ED and fracture clinic
Cathy	F	1. - 56 2. - 62	1. – Colles cast 2. – IAB, Colles cast	Living with husband, doing voluntary work	ED and fracture clinic
Debra	F	47	IAB, Colles cast	Living with husband and children, in paid employment	Fracture clinic
Ellen	F	60	Moulded Colles cast	Living with husband, retired	ED and fracture clinic
Frances	F	27	IAB, Colles cast	Living with flatmates, in paid employment	ED and fracture clinic
Gloria	F	74	IAB, above elbow cast	Living with disabled son, retired Stayed with daughter	ED and fracture clinic
Helen	F	66	IAB, Colles cast	Living alone, semi retired	ED and fracture clinic
Irene	F	49	Colles cast	Living with defacto husband, in paid employment	ED and fracture clinic
Jill	F	16	Colles cast	Living with family	ED

Table 2 – participant demographics

In-depth semi-structured interviews were conducted, and tape recorded. These were then transcribed verbatim by the researcher, allowing familiarisation and “immersion” in the data (Thorne, Kirkham & MacDonald-Emes, 1997).

Ethical issues

An application was made to the Human Ethics Committee of Massey University to undertake this research process. Having obtained approval from the University, an application was then made to the local ethics committee, for permission to undertake research involving human participants recruited from a hospital setting.

While it was not anticipated that harm would result for participants as a result of this study, various safeguards needed to be put in place to ensure that participants were protected. These safeguards included not recruiting participants from a health care environment in which the researcher was involved in a professional sense, and informing participants that their treatment and health care relationships would not be affected by the decision to be involved in this study, or to decline or withdraw.

To ensure the anonymity of the participants, all identifiers (including names of participants, family members, hospitals or towns, and treatment providers) were removed from the data during transcription. Tapes and transcripts were marked only with a randomly chosen pseudonym. The only record of the identity of the participants was the signed consent form (see Appendix 4), which was stored separately from the tapes and interview transcripts.

As an important aspect of preventing harm to participants is to prevent unauthorised access to data, and protect data from premature destruction, Laing (1996) recommends that data should be secured in both hard copy and on computer disc. In line with this recommendation, tapes were stored securely, and typed transcripts retained as a clean hard copy, as well as being retained in password protected files on computer hard drive, and floppy disc.

All participants were given a copy of the information pamphlet (see Appendix 3) and an opportunity to review this prior to involvement in the study. This information pamphlet clarified the objectives of the study, and informed participants of their rights. The participants' understanding of the study and their role in it were confirmed verbally prior to written consent being obtained. Should any participant have had any concerns about their rights in regard to this research, the information sheet also included the contact number of the Health and Disability Advocacy Commission.

Recruitment

According to Sandelowski (1999), time can be a critical issue in participant selection, as it is important that participants have sufficient distance from their injury to have reflected upon the injury and its consequences, but also have good recall of events. In line with this recommendation, participants who had experienced their injury within the previous six weeks were not included. What was not anticipated was the number of participants who volunteered for involvement in the study who had experienced their injury more than 10 years previously.

Prior to formulating a research proposal, verbal permission to recruit participants was obtained from the unit managers of the physiotherapy and orthopaedic outpatient departments of a mid-sized city hospital. To ensure I did not undermine my own or subsequent research within the clinical environments concerned I introduced myself to the staff in the health care settings from which participants were to be recruited, including my professional and academic background. I also ensured that the aims and purpose of my research was made explicit. I felt this was important as beginner researchers may, through inexperience, "unwittingly become an unguided projectile bringing turbulence to the field" (Punch, 1994, p.83).

With verbal permission received from unit managers, formal written permission was then obtained from these unit managers, their service leaders, the Director of Nursing, and the Chief Executive Officer of the hospital. These letters of support were included with the research proposal submitted to the two ethics committees.

Participants were sought on a volunteer basis, through poster advertisement (Appendix 1) in the hospital and local newspaper advertisements (Appendix 2). The posters invited interested parties to contact the researcher, and detailed information pamphlets (Appendix 3) about the research project (including the credentials and objectives of the researcher, and the position of the research within a Massey University graduate programme) were prominently displayed below posters. As recommended by Timmerman (1996) the poster was A3 size, brightly coloured, and clearly readable. Where newspaper advertisements were utilised, participants who

contacted the researcher were then sent a copy of the information pamphlet, and invited to contact the researcher again if they felt they met the criteria, and wished to participate in the research.

Having read the information pamphlet, participants were asked to sign a form consenting to being involved in an approved research project. The consent form (Appendix 4) reiterated participants' rights with regard to the study, and also included the information that the interviews would be audio taped. It was made explicit to participants that, having agreed to participate, they retained the right to turn the tape off at any point during the interview, or to suspend or discontinue the interview. They also retained the right to withdraw from the study at any point. Fortunately, no participants withdrew from the study or declined to have interviews taped, and while two participants did turn off the tape, this was merely to enable them check some details with family members or written records.

Participants in this study were all volunteers who contacted the researcher, expressing an interest in taking part in the study. The primary methods of recruitment were the poster or newspaper advertisements, although an unexpected source of participants was word of mouth. Three participants heard of the study through friends or colleagues of mine, and contacted me expressing an interest in taking part. Although participants were not actively sought in this manner, it was felt that they should be included as the researcher had not been involved in their care or treatment in any way, and had no part in their recruitment. Four participants were recruited from poster advertisements in the hospital, although only two of these were currently being treated for their wrist fracture. Newspaper advertisement was the recruitment source of the remaining three participants.

Data collection and storage

Although questionnaires can be utilised in descriptive research (Carter, 1991; Parse et al., 1985), this study incorporated the qualitative method of semi-structured interview as the principal source of data. This method enabled participants to voice their experience in their own words and identify issues that were of concern to them,

rather than having their narrative constrained by an interview schedule or questionnaire.

Semi-structured interviews attempt to elicit certain types of information from participants, but questions may be asked in varied order and format (Berg, 1998; Denzin, 1989; Minichiello et al., 1995). Using this strategy in this study allowed participants to discuss things of interest to them, and ensured issues of significance to the participants could be raised, even if these had not been considered by the researcher. The data collected from interview is in the form of narratives, which is a strong and compelling source of information, being concerned with the individual's lived experience of illness or injury (Brock & Kleiber, 1991; Garro, 1994; Poirier & Ayres, 1997). Illness narratives are storytelling, but with an agenda determined by the individual's interpretation of their experience within their social and cultural context (Garro, 1994; Steffen, 1997; Waitzkin & Magana, 1997).

The passage of time has some influence upon the way individuals interpret their illness narrative as these are based upon memories that are reconstructed according to the individual's current understanding. The stories constructed may be ongoing, with unknown endings (Garro, 1994). The individuality with which individuals interpret their experiences and describe them could be considered a limitation of the effectiveness of narrative as data, because an objective 'truth' cannot be determined. In narrative, 'truth' is the individual's interpretation of that 'truth' as currently considered (Kirmayer, 1994). Despite any perceived limitation, narratives are able to supply meaningful coherence about an individual's experience, and to situate the illness or injury in an ongoing story, which affirms the person's societal and cultural values. Narratives have value because they are true for each individual, and this truth is evident because it has internal consistency for that person (Kirmayer, 1994).

For interview to be successful, a comfortable relationship needs to be developed between the researcher and participant. The interviewer needs to be able to "project oneself into the other's situation" (Denzin, 1989, p.109), and listen with empathy and understanding. Eye contact and a friendly manner will help to establish a rapport, which will support the relationship between interviewer and participant, and the interview process (Appleton, 1995; Fontana & Frey, 1994; Holloway & Wheeler, 1996;

Minichiello et al., 1995). Effective interpersonal and communication skills are important, as the participant must understand the nature of the questions, in order to provide the desired information (Appleton, 1995; Berg, 1998; Denzin, 1989).

Because of the need for an interview location to be suitably quiet and free from interruption or disturbance, most interviews in this study took place in the participants' homes. This had the added advantage of minimising cost and inconvenience for the participants, and gave them the opportunity to have a support person present during the interview, if desired. Two participants chose to have their partner present, and this person was welcomed and able to contribute to the interview as desired.

Single interviews were conducted with participants, varying in length from 30 minutes to 90 minutes. Although it was agreed that a follow up interview might be undertaken if any issues emerged that required clarification, this was not required. In general the participant's experience set the direction for the interview, however, a number of prompt questions were utilised to elicit information. How or whether these questions were employed varied according to the experience of the participant, their responses and the content and direction of their narrative. The prompt questions were:

- "Tell me about your experiences when you broke your arm"
- "What was it like to have your broken wrist set?"
- "What involvement did you have in how your injury was treated?"
- "How would you feel if you had to have that done again?"
- "How did you manage when you were in the cast?"
- "How did you manage when the cast came off?"
- "How did this experience impact upon your life?"
- "What were the things you were worried about?"
- "What things were difficult for you with a broken wrist?"
- "What were the things the nurses did which made your experience better or worse?"
- "If this happened again, what would you like to be done differently, and why?"

The interview data were transcribed by the researcher, and transcripts were then double checked by re-listening to the tapes. At the conclusion of the interview

participants were all offered the opportunity to review their interview, once transcribed, so that they might change, delete, clarify or add to the data. Only three participants elected to review their interview transcripts, and these were subsequently returned to the researcher, unchanged.

The storage, sorting and retrieval of data are integral components of data collection and analysis (Huberman & Miles, 1994). A methodical way of keeping and locating large volumes of written data was essential. For security reasons tapes, floppy discs and transcripts were stored in securely in separate locations to protect against accidental loss or destruction. The interview tapes will be retained until the conclusion of the study, at which time they will be offered to participants, along with copies of the transcripts. Transcript copies will be retained by the author for a minimum period of five years.

Data analysis

Following transcription, a clean copy of all interviews was printed, as well as a working copy for coding, and a coloured copy for separating the data into discrete units. Each line of each transcript was numbered to ensure the original location of the data within the transcript could be easily and accurately determined. Each interview transcript was then coded, and concepts, categories and sub-categories were identified. The coded lines of data were cut from the coloured copy of the transcript, sorted into categories, which were then filed in separate envelopes. Managing and sorting data in this way was found to be impractical, and eventually the data were entered into a computer table, and sorted by category and sub-category. This process enabled the researcher to sort data, consider and relocate pieces of data, and add theoretical memos and field notes as these were developed. In addition to the electronic storage of data, the initially coded transcripts and clean copies were also referred to regularly to ensure data was always considered in context. If any questions arose about the data or the participant's intent, the tapes were listened to again to verify the context, inflections, and any other subtleties.

The open coding process commenced with analysis of the first interview transcript. This process generated approximately 150 codes, which were sorted into 8 principal

categories, each of which had a number of sub-categories. Some examples of the codes that were developed from this interview during the initial stage of data analysis are identified below. These codes follow the participant's quote, and are in bold type.

You [husband] took me down daily, we went three times a week ... they put all sorts of things on it. They did exercises, I did exercises at home (Anne).

Trying things / working

It went on for weeks, and weeks, and weeks (Anne). **Working**

It is wonderful now to get it back and to be able to carry on with life (Anne).

Getting it back

These codes were originally grouped as part of the categories 'Doing what you can' and 'Looking forward'. These, along with other categories and related sub-categories that evolved from the first interview, conducted with Anne, are detailed in Table 3.

Categories and Sub-categories	
Experts at work <ul style="list-style-type: none"> • Trying hard • Offering hope/reassurance • Explaining actions • Admitting failure • Denying responsibility 	Doing what you can <ul style="list-style-type: none"> • Maintaining independence • Taking control • Solving problems • Coping • Working hard
Emotional turmoil <ul style="list-style-type: none"> • Not knowing • Suffering emotionally • Giving up • Being exhausted 	Knowing <ul style="list-style-type: none"> • Being informed • End of uncertainty • Experiencing new technology • Relating to past experience • Knowing something is wrong
Asking for help <ul style="list-style-type: none"> • Consulting experts • Needing support • Reporting problems • Seeking relief 	Relating to health workers <ul style="list-style-type: none"> • Being vindicated • Feeling unwelcome • Questioning health workers • Handing over self • Needing health workers to listen • Being given false hope
Being injured <ul style="list-style-type: none"> • Being dependent • Putting life on hold • Experiencing symptoms • Not improving 	Looking forward <ul style="list-style-type: none"> • Experiencing joy/relief • Hoping • Setting goals • Being cured

Table 3 – initial categories

Following subsequent interviews, additional codes were added, and examined closely to determine categories inherent in the data. These were compared to each other and to data from previous interviews, with the intention of identifying what was happening and why. The concepts of 'working', and of 'looking forward' continued to emerge in interviews subsequent to Anne's. Some further examples of the data related to these concepts are listed below:

*It was easier because you were getting back, working your way back into normality, shall we say, trying to do things (Gloria). **Working / Getting better***

*I have many, many things I have to do at home. And if you don't do them, you won't get better (Cathy). **Working***

*I had lots and lots of physio. I've done lots ... I've been to pain management [...] I've been to the pain clinic, I've done pain management courses. I've done possibly everything there is to be done, and ... (Irene). **Working / struggling***

As categories and sub-categories developed, theoretical memos were written and added to the data, along with field notes. Field notes and theoretical memos helped to clarify analysis of the data, and contributed to the development of categories, as data was closely examined and questions asked of it to determine what was happening. Some of the questions asked were:

- 'what are these participants working so hard towards?'
- 'what are they looking toward?'
- 'are these participants working toward recovery of their old self?'

The categories 'working' and 'looking forward' were identified as key processes and during the continued analysis of the data it was recognised that these two categories were in reality part of the process of 'Working Back to Normality'. This, and other categories that emerged during this phase of data analysis, are described in Table 4.

Categories and Subcategories	
Being injured	
Coping with injury	Working out how it happened
Knowing its broken	Experiencing symptoms of injury
Handing self over for treatment	Taking pain killers
Coping with symptoms	Being concerned by symptoms
Having treatment	
Having to wait	Receiving information
Being prepared for treatment	The effects of treatment
Getting plastered	
Not being able to do things	
Being disabled	Worrying about what might have happened
Working out why	Having to ask for help
Needing help	Consequences of not being able to do things
Putting life on hold	
Relating to health workers	
Not being listened to	Losing confidence in health workers
Being made to feel bad	Questioning the work of health workers
Not knowing what to expect	Finding health workers helpful
Not getting better	
Knowing something is wrong	Going back because something is wrong
Giving it time	Having a hard time
Seeking another opinion	Battling
Working back to normality	
Doing what you can	Having residual symptoms
Having to carry on	Getting better
Working hard	Looking forward/carrying on with life

Table 4 – secondary categories

At this point it was necessary to step back from the data, and consider not only what people were saying, but also what they were doing, and why. Questions were again asked of the data, in an attempt to determine the underlying reasons behind participants' behaviour, thoughts and actions. Theoretical memos, field notes and literature were integrated with the data, to allow a complete analysis to occur. Examples of a field note and a theoretical memo, related to the impact health workers had on participant experiences, are detailed below.

Had a good rapport with staff. Felt she had her 'needs' met. Has this influenced her overall feelings about her wrist fracture experience?? (clinical observation is that her wrist remains swollen with an obvious deformity so chances are there are residual symptoms). Helen is clearly happy with her outcome – is this because of the rapport she had with staff? (Field note from interview 12/12/00)

Jill was angry when she wasn't 'heard' by staff, and had much more confidence in health workers who 'listened' to her. She obviously gives more credence to the opinion of the health worker who listened to her, and who treated her with honesty and respect, as this person's version of events carries much more weight than the other health workers'. Feeling she can't be heard appears to result in her questioning the ability of the health workers who didn't listen. (Theoretical memo)

Consideration of these questions and issues, as well as the many others identified, were further evaluated. This process involved examining data until the most appropriate 'fit' became evident and the categories appeared to be saturated. Four categories and a number of sub-categories eventually emerged. One such evolution was the category 'Being in their Hands' which evolved from analysis of the interaction and relationships with health workers. It was evident that participants were not only relating to health workers, but were placing themselves in their hands. This new category illuminates the many intricate variations that participants experienced in relation to their interactions with health workers. The categories that eventually emerged from the data described the way participants got through the period immediately post injury, and coped with treatment; the way life was suspended as they coped with pain, disability, and development of chronic symptoms; began the work of returning to 'normal' through striving for balance between disability and independence, and, eventually began to look forward. These categories and subcategories are detailed in Table 5.

Categories and sub categories	
Getting through injury	Coping with injury Submitting to treatment Getting ready to go home
Putting life on hold	Living through the pain Living with disability Not getting better
Working back to normality	Striving for balance Looking forward
Being in their hands	Feeling safe Being disappointed by health workers

Table 5 – final categories

These categories emerged as a result of many hours of consideration of the data, the codes, the initial categories, and the questions that were asked of the data. In addition to numerous false trails that had to be followed until it became evident that the data was being forced, there were occasional moments of crystal clarity about what was happening. Eventually these moments of clarity resulted in categories being solidified until the processes identified were reflective of the study data.

'Working Back to Normality' emerged as the core category of this study, reflecting the non-linear processes employed by participants during their injury experience. Participants' efforts to return to 'normality' occurred throughout the injury process, and this category clarifies some of the variations, discrepancies and inconsistencies that were evident when analysing participants' recovery processes.

Conventions

The following conventions have been used within the data chapters, and during participant quotes. Participant data are presented as indented quotes in italics. Within these any quotes are identified with single quotation marks. The pseudonym of the participant, and the page of interview transcript from which the quote is taken are identified in parentheses. All identifiers have been removed from participant quotes, including person and place names, and where a name would have appeared a description is enclosed in parentheses. Capitals are used when a specific department is named, while lower case characters are used if an area is referred to in general terms. Pauses in the participant's speech, as well as laughter, or clarifications are presented in square brackets, while three dots indicate that a portion of the quote has been omitted.

Conclusion

This chapter described the method employed during this study, including a rationale for the use of qualitative research and the theoretical perspective of symbolic interactionism, which underpins this research. The design and implementation of this study is also described. Data collection and analysis methods employed were reviewed, including a description of the technique of constant comparative analysis of

data, ethical issues, recruitment. This chapter provides some insight into how the data was interpreted and analysed to demonstrate how the categories evolved.

Chapter Four

Getting through injury

"I just wanted it done, and to get out of the place" (Debra, p.6)

Introduction

This chapter will explore the manner in which participants in this study initially experienced the injury wrist fracture. Exploration will include how participants coped with the injury in the initial stages, how treatment was experienced, and how participants were prepared to go home following their injury.

Corbin and Strauss (1988) have defined the acute phase of illness as one "in which the afflicted individual is physically or mentally affected by an illness to a degree that necessitates immediate medical attention ... the work is directed at bringing about physiological or mental stabilisation and promoting recovery" (p.46). These authors describe illness as a 'trajectory', which begins, progresses, and ends with a fluctuant pattern over a period of time. While this work did not consider the injury experience, data from this study demonstrates that many issues faced by individuals following injury are similar to those encountered by people experiencing sudden illness. The injury trajectory of individuals who experience wrist fracture also have a clear beginning, progressing and relapsing in a fluctuating pattern, through to an eventual conclusion. The connection between illness and injury experiences was also made by Morse (1997) as part of the evaluation of the illness model described by Morse and Johnson (1991), and the injury model described by Morse and O'Brien (1995), which amalgamated these into a single model describing both illness and injury experiences.

Coping with injury

Participants' experiences of wrist fracture were subject to a range of responses and emotions. Different feelings were in evidence about the impact of the injury, at differing times. One participant in this study reported that her wrist fracture

experience was dreadful, but went on to discuss how she coped, feeling that she managed very well during this difficult time.

And at the time it was the worst thing that had ever happened to me. Because it was, it is just that I was unable to do the things that I would normally like to do. Even though it wasn't my dominant hand, it was bad for me (Debra, p.1).

When I had the plaster on, well because it wasn't my dominant hand it wasn't as bad as it might have been. Because I can remember we had builders in at that time. And I remember the following day making them muffins and morning tea. I managed. You just do. But then maybe that's because that's how I am. I wouldn't let it rule me (Debra, p.4).

This participant's conflict about the impact this injury had for her reflects the ongoing nature of the injury experience, with different feelings being associated with elements of the experience over a period of time (MacLeod, 1993).

Being in control, and coping, appear to be of great consequence for participants, particularly in the time immediately post-injury. The participants' ability to cope with injury, and their perception of injury, either as a challenge or a struggle, were influenced by a number of factors. These included the type of fracture, and symptoms associated with this, as well as the social circumstances of the participant. Socialisation processes and the individual's understanding of themselves and their condition also played a part in how they adjusted to the injury (Schussler, 1992; Youngblood & Hines, 1992).

Maintaining control

Participants in this study almost always attempted to assume control over some aspect of their situation, no matter how insignificant this might appear to be. In some cases control was achieved when participants were able to cope with the injury independently, while in other cases control was achieved by yielding to the support and assistance of family or others. Although this choice was often made unconsciously, in some circumstances the decision about which of these strategies to

employ was taken from individuals because of their circumstances at the time of the injury. Situations where participants felt they had to cope included being alone at the time of the injury, or being responsible for another person.

I had a blind lady with me. We had to get a taxi, her and I, in a taxi, to the hospital. And I still had to look after her too. I couldn't drop her off; I couldn't leave her anywhere (Cathy, p.16).

This participant not only felt she had to cope with her own circumstances, but also that she needed to continue to take care of the woman with her. The issue that appears important for participants following wrist fracture was the perception of self-control, and the overall sense of 'coping', rather than the actual accomplishment of any specific activity. This perception of coping could be achieved for participants when they declined assistance, made independent decisions about what to do, or took charge of their situation.

So he suggested that we go back up the steps and call a taxi but I said no way I am going back up those steps, only to come down again, and probably fall again. So I sat down on a neighbour's step at the bottom while (husband) went up and called a taxi ... and I sat there for about 15 minutes, while no taxi arrived ... but while (husband) was climbing up the steps to go and ring the cab, I was sat on the neighbours' step trying to get my rings off. And I managed to get my rings off, huddled under my umbrella in the rain (Debra, p.1).

This participant's response following injury bears some similarity to the actions of participants in Morse and O'Brien's (1995) study. During the stage of 'Vigilance: becoming engulfed', Morse and O'Brien's participants were directive towards others, because they perceived themselves to be threatened and felt and that they needed to control their situation for self-protection. While the experience of wrist fracture was not life threatening for participants, as were the injuries experienced by participants in Morse and O'Brien's study, the need for control to be achieved appears similar.

Rationalising the extent of the injury was another strategy utilised by some participants in an attempt to cope with injury and sustain their image of themselves as they were prior to the injury. One participant, on a number of occasions, discussed the more visible, but less serious, injuries she experienced. When asked to describe what happened, she talked of the cuts and bruises she received during her fall, focusing upon these rather than the wrist fracture.

I was badly bruised, very badly bruised, around my face, with a black eye, and I was bleeding from the mouth, from my lips where I had cut myself on my tooth. I had broken a tooth as well, and was in a bit of a mess, I had a cut on my shin. And my wrist was swelling up; it was a bit sore (Helen, p.1).

This participant was reluctant to consider the implications of her wrist injury, which may have had long-term consequences upon her independence. This appears to be an important aspect of retaining self-image and the perception of coping. Another strategy employed by participants which appears to be a coping mechanism was to objectify the injured limb, with most participants referred to their injured wrist as "it".

Didn't know whether it was broken, hoped it was because it was so sore (Anne, p.1).

He sort of looked, and said yes it was broken. It was pretty obvious, it was pretty bent. So they did a few things on it and got it a bit straight (Barry, p.1).

Objectification of the injured part was most prevalent within the acute phase of injury. Participants were struggling to cope with their injury and make adjustments, although this was also evident to a lesser extent throughout the entire injury trajectory. Morse and O'Brien (1995) also found that individuals attempted to distance themselves from their injured body when they were struggling to cope with their injury. Most of the participants in this study were women, and it appears evident that these women worked to maintain their image of self, as they may have been reluctant to reveal any condition that would give them a 'sick' or devalued role (Morse, 1997). Objectification is a coping technique that supports this, as objectifying the affected part allows patients to retain an image of themselves as they were prior to the injury (Lawler,

1991). It appears evident that this is a significant strategy employed by participants in this study as a way of getting through the injury experience.

Being in shock

The participants' desire and ability to cope following their injury was sometimes affected by emotional and physiological shock responses which occurred initially and several days later. Being in shock was significant, as participants were sometimes too shocked to consider their situation or needs clearly. This is evident in the following participant's attempt to cope with her situation, which was taken to an extreme when she drove her car home several kilometres in bad weather conditions, rather than calling an ambulance or asking strangers for assistance. Her focus was on the need to get home to a safe environment, where she could then let others take over, and take her to the hospital.

I drove home. I tried to put my foot on the clutch. I think (son) was only about 12, and he couldn't drive. He had no idea what [pause] about gears. You know I'm putting my foot on the clutch and trying to tell him where to put it, going about two ks and hour. This was [pause] it was one of the worst storms we've had. The sea was coming across the road. It was terrible, and there were cars behind me, and they just turned around and went back to where they were coming from, because I was driving too slow. I had to drive, I had to get home. Didn't have cell phones then. You know, I just had no choice; I had to get home (Irene, p.2).

Shock and disorientation also resulted in participants declining much needed assistance before going home from hospital because they were unable to absorb or assimilate the information they were receiving, or to anticipate their future needs.

No [didn't accept home help] because you are so traumatised at the time. And the shock and all of that (Cathy, p.11).

For one participant the symptoms of shock manifested some time later, with excessive tiredness and lack of energy. This participant was alone at the hospital,

and it is possible her energy at that time was focused upon the immediate situation and the need to cope, which then resulted in the subsequent delayed response.

I suppose it was a bit [pause], but I seemed to sail through. It was pretty stressful, but I put up with it, and then suddenly I was just so [pause] it suddenly hit me. It was like someone had hit me with a sledge hammer, and I was so tired all the time ... I was just so tired, and lying down in the afternoons and sleeping, and then sleeping all through the night. Which is not me, it is not like me at all. I just thought possibly it was shock from the trauma. It was different, it felt quite different, yes (Helen, p.6).

Another emotional response experienced by participants following wrist fracture was to be angry about the accident. One reason for this was the new realisation of vulnerability following an injury that had occurred in a place that was known intimately and considered safe.

It just irritated me. It was annoying. And I'm furious with myself for being such a damn fool. And I still can't work out how I did it, because I have walked in and out of that step, over that concrete piece for so long. It was just stupid (Ellen, p.3).

The feeling of vulnerability in the home resulted in one participant becoming angry with her neighbour. This participant appears to have a need to hold someone else accountable for her accident so that she could maintain her perception of herself as safe at home. Being able to focus her anger and frustration towards her neighbour helped her achieve this, and helped her to cope with her injury.

It was just the frustration that got to me. You know that this should have happened to me. That this could have happened to me ... I was really sort of antsy because I was so angry. But I think a lot of my anger was because it really shouldn't have happened. We were having all these hassles with the neighbours and it really shouldn't have happened (Debra, p.7).

Demonstrating anger was a coping mechanism, which in these cases could be focused inwards because of the individual's perceived carelessness, or towards another because of actions that were perceived to pose a threat to personal safety. Feelings of shock and disruption were also evident, and impacted directly upon participants' ability to cope with their injury and get through the experience. Schussler (1992), found that problem solving and with coping were affected by an individual's belief that they could control their circumstances rather than being at the mercy of external forces. In this study it was evident that the participant's perception of their ability to cope was determined by their perception of maintaining control. The participants who felt in control, felt they coped with their injury and with the experiences that they encountered.

Worrying about the future

Some participants worried about the possible consequences of their wrist fracture upon their future lifestyle. The social impact of the injury was therefore significant as participants worried about how the injury might affect their ongoing wellbeing or their independence.

I mean, you are really in a bit of shock and you are not thinking of the pain. You think how misshapen it is, and are you ever going to be able to knit again, or you know all the things that you used to do (Gloria, p.2).

Concern for the future also eventuated from the possibility of ongoing problems occurring as a result of the wrist fracture. These concerns included the possibility of developing other medical conditions, or experiencing other injuries, due to the belief that this fracture signified something sinister, such as osteoporosis. In some cases these concerns were an immediate part of the emotional response to the injury, while in other cases the symptoms that evolved over the next few weeks were the cause of the anxiety.

My first reaction was 'oh my god, am I going to be an old woman who breaks something every time I do something', but I have had no indication from medical records or anything that I have something leading to this, but it is just

something that you think of when you are in your sixties. But it was, it was one of my first reactions, 'oh my god, I'll be breaking bones' (Ellen, p.5).

The anxiety that participants experienced related to their future wellbeing also relates to the need to maintain the perception of safety and independence. These findings are supported by Griffiths and Jordan (1998), who determined that individuals with lower limb fractures also expressed anxiety and fear about their future wellbeing and safety. Lough (1996) also found that elderly individuals who were ill or injured were likely to consider their future tentative and uncertain, worrying particularly about the impact on their daily lives.

Looking for understanding

A concept that emerged strongly from this study was that participants had a need to understand how their injury occurred, including what happened, how, and why it happened. This appears to be an important factor in helping participants get through their injury experience, and assuring them of their future safety. By understanding how the accident occurred, participants believed they could guard against future injury or similar accident. This seems to have the greatest significance for those participants whose injuries occurred in the home, especially for those who were elderly or living alone, as the accident left these participants feeling vulnerable.

There were three perspectives relating to the way in which participants understood accidents. In some cases participants accepted that the injury resulted from an unavoidable accident, but they needed to identify and connect the contributing factors to complete their understanding.

I was going off to lunch and before that I thought I would pop off to the dentist to pay a bill. And I did it there. I slipped on the step and fell. I was wearing shoes, with a slippery leather sole, and I think the path was tiled, and quite slippery, and it was that combination of shoes and tiles, which caused me to fall (Helen, p.1).

For other participants, understanding how the injury occurred was tied up with their emotional response to injury and resulted in them holding someone else accountable for the accident occurring.

It was something that shouldn't of happened. We were having problems with our neighbours, and they were rebuilding. They destroyed some of our steps and it was because of this. The mud washed down the steps and on this particular morning it was really wet, I was in my usual rush to get to work, and I slipped down the steps, and, hey presto (Debra, p.1).

The third perspective involved not only understanding what happened and how, but attempting to determine whether there was anything that they could have done which would have prevented the accident.

Home accidents and all the rest of it. I know, I think that's probably what made me cross. That it was something that happened in a position and place that I had [pause] that I am quite aware of, and I still can't see where I slipped or how I slipped, or why I slipped. There was no sign of any extra water in the place, or anything else, or whether it was the shoes, or what (Ellen, p.5).

As previously identified, participants felt vulnerable when their injury occurred in the familiar home environment and for this reason it appears important for participants to be able to find a reason for the injury. The consequence of this need was to blame someone else for the accident, or to be angry with themselves for perceived carelessness. This alleviated some of the stress and anxiety related to the injury experience, and helped participants to continue to feel safe.

People try to deal with disruption, and achieve normality, by attempting to construct order, or achieve control over their situation (Tishelman & Sachs, 1998). Feeling out of control following trauma results in individuals being unable to monitor and direct their care, and ultimately results in feelings of dissociation or loss of self (Morse, 1997). This will affect how individuals ultimately cope with and adjust to their injury experience. In this study the coping techniques utilised by participants included strategies aimed at controlling their situation, environment and the activities of others.

Submitting to treatment

At some point all participants recognised the need to seek medical treatment for their injury. It was noted that no participant felt their injury or situation warranted calling an ambulance, instead seeking assistance from friends or family members. A number of issues evolved around receiving treatment for wrist fracture, particularly related to the complex and unfamiliar process of diagnosis and treatment within a short time frame, and to the role of health workers in providing this treatment. The issues for participants associated with treatment of wrist fracture will be discussed here, while issues associated with the role of health workers in providing this treatment will be explored in greater detail in Chapter Seven.

Knowing it's broken

Participants' reactions to injury varied depending on what happened and how they felt about it at the time. Response was also dependent upon the person's previous personal or shared experiences of illness or injury, and their certainty of the extent of injury. In this study some participants knew they had a wrist fracture, based upon either previous experience, or the 'common knowledge' belief that pain and deformity equated to a fracture. When the knowledge of injury was clear, the response was also clear, with little confusion about what to do next.

We went to (city) hospital, and it was fractured in like five pieces, all the little bones inside the wrist. I don't know all the details ... I thought it definitely was [broken] because it looked really odd, and it swelled up and went quite tingling, numb almost. And I couldn't move it; it was quite sore (Frances, p.1).

Morse, Bottorff and Hutchinson (1994) believe that patients gain comfort from knowing, or having certainty about what is wrong, which allows them to relinquish themselves to trusted caregivers. Knowing can result in patients constructing the symptoms they are experiencing in a way which is acceptable, and which helps them to cope.

Certain knowledge of injury was not universal, as a number of participants were uncertain about the extent of their injury. Because these participants had no previous experience of a fracture they were unsure of how much pain there would be, and had no knowledge that a fractured wrist could appear outwardly normal.

Not knowing what a break feels like, you feel perhaps you tend to think you have to have the bone sticking out, or hanging at a crazy angle, and it wasn't (Anne, p.17).

Morse (1997) discusses how victims of trauma process the knowledge of injury, which includes a period of suspecting, during which victims check their bodies to determine the extent of injury, and confirm the severity. Having determined that there is an injury, their next action is to monitor the effect of this, or read the body to determine what is happening, the severity of symptoms, how long they last, and what triggers or alleviates the symptoms. As a result of this process individuals then make a conscious decision about how to proceed. In this study participants sometimes lacked clarity about the severity of the injury and their uncertainty about the actual presence of a fracture had two consequences. The first of these was that participants delayed seeking treatment, either until the continuation of pain removed any uncertainty, or until pain became of sufficient concern that participants felt they needed get help, despite the uncertainty.

Never thought 'oh, I'll have to do something about this'. I couldn't really keep on doing the dinner, kind of thing. It was, you know [pause] I wasn't coping, so I think at that stage I rang (daughter) and said I might have done something ... I wasn't sure. It wasn't anything, you know. It wasn't fantastic, but it was just painful (Ellen, p.1).

The second consequence of uncertainty was that participants experienced anxiety about how health workers would respond. While the following participant didn't hesitate before seeking hospital treatment, her uncertainty about the severity of her injury resulted in her being concerned that health workers would consider that she was wasting their time.

So I went down there, and was very relieved to find that it was broken [laughs] because I was quite dirty, and felt a bit of a fraud going in there (p.1). I just felt I was inconveniencing them. If it hadn't been broken [pause] when it was broken, I thought 'oh well at least [pause]'. I felt vindicated in coming down (Anne, p.17).

When there was uncertainty about the diagnosis, hesitation and monitoring prior to the decision to seek help occurred. Morse and Johnson (1991) made similar observations in their exploration of the illness experience. These authors determined that individuals would detect or suspect symptoms, and gradually attempt to make sense of them. Having done so, they would then seek medical attention, handing themselves over to health workers for care. Alternatively, when the knowledge of injury was certain, participants readily accepted the need to go to hospital for treatment, doing so without delay. This knowledge appears to reinforce the appropriateness of the decision to seek treatment.

According to Morse and O'Brien (1995), participants in their study "relinquished to caregivers" (p.889), feeling calm and accepting about surrendering themselves, and allowing health workers to set the direction of care. Participants who experienced wrist fracture also relinquished to caregivers, seeking assistance at the nearest hospital, although the timeframe for this occurring varied according to the degree of uncertainty about the extent of the injury. Family were the primary providers of early assistance, before participants eventually sought treatment from 'professional' health workers, accepting the direction of this without question. Family involvement continued during this time, as family acted to support and assist the participant through treatment. By giving permission for others to take over and make decisions, participants in this study were able to maintain an element of control and the perception of coping.

Accepting delays

As well as uncertainty about the extent of the injury, participants also delayed seeking treatment because of shock and a lack of clear thinking caused by shock. The extent of the delay in seeking assistance varied, with one participant waiting until the

next day before she sought medical treatment, while other participants waited until family members were available to provide the needed assistance.

Now this was 10 past eight in the morning, and of course there was panic and the plumber said 'oh, well, I'll take you up to the hospital', and I said, 'oh no, I'll ring my daughter'. I have two daughters, both working in different offices. They turned up and we went straight up of course to the A&E at (city) hospital (Gloria, p.1).

All participants went to hospital for treatment, where, upon arrival they underwent a process of being transferred from one area to another, including the emergency department for initial assessment, radiology for diagnostic xrays, and fracture clinic for treatment of their fracture. Delays were encountered in each area.

It was a very long wait. And they took me in and the doctor looked at it, and sent me down for xrays, and then I went back and waited a long time again, and then he told me that my wrist was broken, and that they would have to set it in plaster. And then there was another wait, and then they set it in the plaster (Jill, p.1).

Waiting appears to be a significant aspect of receiving treatment for wrist fracture, even for those participants who denied that they waited for long periods. Of course waiting time is relative, when one has a painful injury.

I don't recall that we had to wait. It was on a Saturday, about midday. I don't think we had to wait any particular time. We probably sat around for a little while (Barry, p.1).

In some instances, where participants had to wait for treatment, this delay was explained, and in one case attributed to an 'emergency' situation. This participant was very accepting of this, considering her wrist injury insignificant in comparison to any emergency.

The sticky thing began, because had the xray with not much delay, but of course then came back to A&E and to Fracture Clinic. And it was after hours of course. Attention - no not attention, staff was more limited than in the day time. We went to Fracture Clinic, where at that time there was no-one because they were busy ... the orthopaedic bloke on duty had an emergency in the children's ward or something. And so there was a bit of a hold up. I wasn't in any really excruciating pain. I was in pain but, you know, I have had worse pain than that when I ... Eventually they phoned another doctor, and I don't know who he is, or what he was, but somebody that was at home, but on call. And he came in (Ellen, p.1).

While not actually part of the acute phase of the experience of wrist fracture, waiting was also mentioned frequently in relation to the participants' follow up of their injury. Where the participant had developed a perceived positive relationship with health workers, the waiting did not cause concern.

And the letter, the appointment letter, tells you that the appointment will take about an hour, and you take something with you to do, like read or something, and I think that's fair enough (Helen, p.3).

In other circumstances participants could be resentful of the delays they experienced, being angry about having to wait. This anger and resentment were particularly apparent in situations where participants waited a considerable time for attention if staff did not appear to be busy.

We didn't get home until twenty past four, we had to wait, and wait, and wait, and there was hardly a thing going on (Cathy, p.15).

Participants also became resentful of delays when the relationship that subsequently developed with the health worker concerned, was perceived negatively.

She had obviously been asleep ... And I had to wait ages and ages for her too (Irene, p.1).

In this case the participant did not consider that the health worker was competent, and was angered by having to wait. It is possible that if the health worker had been pleasant and apologetic about the delay, that the participant might have accepted this without resentment.

Getting plastered

Having a plaster, or cast, applied was an aspect of treatment, which was commented on by a number of participants in this study, all of whom were treated in a cast. Most participants were very matter of fact about this aspect of treatment, with the actual cast application being mentioned but not given any significance.

You just went into a room, laid on the bed, put it out there like that, and then they pulled it, and they started to put the plaster on (Cathy, p.15).

Instead, being in a cast appears to reflect the ambiguity of the injury experience for participants. Being in a cast was described as 'awful', but participants also claimed they managed well in the cast. The significance of this inconsistency needs to be considered within the context of the complete injury trajectory. Many participants were relating their story years after the actual injury. Events that occurred subsequent to the injury may have superseded the significance of this period in their memory of the experience.

Tolerating treatment

Undergoing treatment for wrist fracture had some significant issues for participants. Treatment was undertaken shortly after injury in most cases, and required participants to be involved in a fairly traumatic process while experiencing stress from both the injury and the unfamiliar environment. Because of these circumstances, participants who felt that they were prepared for what was to occur believed they coped well, and tolerated treatment. The relationship that evolved with health workers was another factor that had some influence upon how participants tolerated treatment, as a good relationship resulted in participants feeling secure, and in good hands.

Preparation for treatment included receiving information about what was going to occur, and what could be expected. These participants believed that the degree of preparation they received helped them to tolerate the procedure. Because participants knew that what was happening was expected they were less anxious.

It was good, because you know, if I had gone in there, and had needles just pushed into me, and someone started pulling on my hand, I wouldn't have coped, I would have had no idea what was going on. I had no idea how they set a fracture, absolutely no idea, but it was excellent. Oh yes, I knew exactly what was happening, and I wasn't afraid or disturbed or anything like that. Everyone was nice about it and reassuring. And the actual block itself was ok (Helen, p.4).

The degree of preparation experienced by participants impacted on the level of confidence they had in health workers, resulting in fewer concerns being held about what was to come.

Yes, they looked after me. You know, you have hit your head, and everything. And it was good that the doctor in the Accident and Emergency explained, and (nurse) or maybe it was the house surgeon, explained exactly what was going on. It is the unknown that is worrying (Helen, p.9).

One participant in this study experienced a strong sense of personal pride because of her perception that she coped well with her treatment, although she gives the impression that this was not easy.

You completely forget about the pain. Not the numbness. But her saying you know, that you do very well, and that you've got to do it for 20 minutes. Looking at (husband) and saying that even footballers take to the nurses. That made me feel good because I have survived, and I didn't take to the nurses, but if you don't hurry up I will, or I will take to myself, or I will take to somebody (Cathy, p.7).

The connection between preparation for treatment and tolerating pain is an interesting one, which has also been explored. Caunt (1992) considered issues related to patient education, and the role this had in minimising pain during procedures, concluding that information was an important factor in reducing pain. When patients were aware of what was going to happen, and what it would feel like, they were less likely to be anxious about the procedure, and more likely to be able to 'cope' with the pain that occurred.

The relationship with health workers was another significant factor associated with participant's perceptions related to tolerating treatment. The following participant did not talk at length about preparation for the procedure, but did make it clear that her relationship with health workers resulted in her feeling safe in their hands. This positive relationship appears to have influenced her ability to tolerate the procedure, as she dismissed the pain associated with treatment because of the benefit that would follow, accepting that the pain was necessary.

I don't know. I am a very accepting person, and if it is going to make it better? I suppose there was a certain amount of pulling and pain here, where they sort of had to pull (Gloria, p.3).

The impact of the relationship between health worker and patient does have significance in relation to pain, particularly clinically inflicted pain (Madjar, 1998). When individuals felt involved with health workers, and felt they were well prepared for procedures, they reported less pain. Anxiety and the perception of powerlessness is also considered significant in relation to pain. Because pain has a psychological component, the increased anxiety associated with uncertainty, and the perception of powerlessness tend to heighten an individual's experience of pain (Walding, 1991).

For some participants in this study, the issue of pain inflicted in the course of treatment was given little or no significance, being considered no worse than the pain of the injury. Because the pain was associated with treatment, it was, in fact, considered something positive.

I don't know if it was any worse than what I was going through at the time. I don't know if it hurt more. It might have, for an instant, but it wasn't, as far as I can remember, it wasn't any worse, and it was something that was getting on with it. I don't remember being upset by it. It was just done (Ellen, p.2).

For one participant the ischaemic arm block procedure, which was described as painful or uncomfortable by other participants, was seen as beneficial because this procedure relieved the pain associated with the fracture.

It was a relief. Personally I can't understand why people make such a fuss about them. I mean, yes, they do get uncomfortable, but yes, they do take away the pain. And I actually didn't find it that bad (Debra, p.2).

Despite reports from these participants that having the wrist fracture set was tolerable and that they coped with this procedure, it is clear that some participants did experience significant pain and discomfort.

I had the new thing, the tourniquet around here, which I do not know how children survive with it. I have never had that before. They also told (husband) and myself that even footballers take to the nurses, because you've got to have that on for 20 minutes. I had mine on for 22 minutes, and they said that was quite good, but I felt I was going dopey in the head by then (Cathy, p.4).

The pressure, the pressure is just [pause] I don't know. I don't know if children have it. And they weigh you so you have a certain amount. I don't know how they would. An older person, I reckon could have a slight stroke or even a heart attack. I am a strong little thing, but boy oh boy, if I had had that for one more minute, cause I felt it coming. Something that was going to really [pause] you think 'well this is it, get it off or I will die' sort of (Cathy, p.7).

In this study, it is not clear whether the degree of pain experienced was affected by either preparation or the relationship with health workers. What is evident, however,

is that the participants' perception of being able to cope with the procedure was associated with being well prepared.

Although some participants spoke at length about the preparation they received prior to treatment of their fracture, many participants did not comment specifically about this aspect of treatment. In these cases it is not clear whether these participants didn't feel being that prepared for treatment was important or whether they didn't discuss it because they did not receive any specific preparation.

During this phase of the injury experience, participants relinquished themselves into the care of health workers, and accepted this as a situation over which they could have little influence. This contradicts the findings of other studies, which determined that caregivers had to be perceived as competent, and individuals needed to feel safe before they would relinquish themselves (Morse, 1997; Morse & Johnson, 1991; Morse & O'Brien, 1995). In this study participants accepted being in the hands of health workers, and accepted the treatment proposed, regardless of the nature of the relationship with health workers, or their perceived competence.

Getting ready to go home

As participants underwent treatment for their wrist fracture, they were also beginning to get ready to go home. Because of the brief nature of their treatment there was not always an obvious start or finish point for this process, however, what was evident is that some participants considered going home a positive step, while others left feeling dismissed or pushed out of the door.

One aspect of the preparation for going home was being given information at a time when participants were ready to absorb it, and in a format that was understandable. The receipt and processing of information was a significant aspect of preparation for discharge for many participants in this study, although a number did not comment on information, because they did not receive much.

Being prepared for discharge

The short time frame of treatment for wrist fracture within an outpatient setting presented a number of challenges, both for participants and health workers. Participants were at the hospital for a matter of hours, having experienced a traumatic situation. The shock and stress of both the injury and the hospital environment had an impact on the way participants were able to process information, with some participants not having much recollection of receiving information.

Interviewer: Did you receive any information about the cast, and how to look after it? Not that I recall. I probably wasn't 100 percent that day, but I don't think [pause] because of things that happened later, that they didn't say anything then (Barry, p.5).

Giving and receiving information had significance, but a number of differing concepts emerged related to this. One concept related to participants being sent home without any preparation for what to expect, or without anything other than the most basic details about caring for their injury, or themselves.

Well they didn't say, well I suppose they think you are an adult, and you know what to do ... they usually say 'now if you are worried at all, just give us a ring, or come down'. Other than that, I wouldn't imagine that there's really anything that you can do I suppose (Gloria, p.3)

Other participants in this study received information in preparation for going home, but the helpfulness or acceptability of this varied considerably. One participant was very unhappy with the information she received and that this was in a written format. She felt poorly prepared for going home and had strong views about alternative ways of giving information, which she stated on a number of occasions.

I believe that there should be somebody that's there when they all come out, till they all come out with a silly grin, and their arm in plaster. An old lady, that somebody should say 'well I'm (name), good afternoon, I'm (name), and I'm here on a Monday, Tuesday, Wednesday, Thursday and Friday, for four hours', voluntary or paid, whatever, 'and could I give you some little hints? I'm

not a qualified nurse, doctor, sister, anything qualified. Make sure because the shock of it all happening, when you go out, you are all really, really in a bind, but the main thing is you must keep it up.' They've told them in the plaster department while they are stretching it, but that is just going in your brain and going out. It's going in, and out. It's no good them telling them that. It's no use giving them this [leaflet], because this is, when you get home, this is the last thing you want to be doing (Cathy, p.9).

As a strong contrast to this, another participant found the information she was given was effective at conveying essential information that prepared her for discharge. This participant found the information both helpful and easily understood, and she commented to this effect on a number of occasions.

She said 'there is lots to go over, but I am only going to tell you the two main ones, that was to keep it elevated above my heart', and, and [pause] Oh yes, fingers moving was the other one. But she gave me this very good brochure with everything spelled out in it, all this information that was very useful to know, even down to how to put your arm through your sleeves, which I found very helpful. And she said 'I won't tell you everything, but those are the two things I want you to remember' (Helen, p.2).

Other participants commented on the usefulness of information, although not extensively. One felt that the discharge information she received was a useful guide, but not something that had to be followed religiously.

For me it was quite useful. You like to ignore it at times, but you've got it, and it's useful, and it's up to you what you do (p.3). Well they were gospel to be followed, but I wasn't prepared to properly follow them blindly, and that was my choice, and everybody has a choice (Ellen, p.4).

In this study participants were exposed to the stress of sudden and unexpected treatment in hospital within a very brief period of time. During this situation participants were required to assimilate a number of new experiences and absorb substantial amounts of new information. This was obviously a difficult period, with the

timing and presentation of information being considered a significant issue, although differing opinions existed about how this could best be achieved. The alien nature of a hospital environment, and the stress caused by injury and treatment have been described by Griffiths and Jordan (1998), while Benner (1984) talks about the need for patient teaching to occur at a time and place when the patients' readiness to learn can be maximised. Clearly there was some conflict about how this should be achieved following wrist fracture, with the conclusion that each participant had particular needs that required attention.

Going home

While receiving information in preparation for going home obviously has importance for participants in this study, it is evident that other factors also played a role in determining participants' feelings related to going home. Some participants were unsure about whether they would be able to go home as this was dependent upon treatment being successful. When it eventuated that they would be able to do so, this was considered positively.

They fixed my arm, and then someone came with the xray machine, they xrayed it, and next minute the tourniquet was off and it was done. Then the doctor looked at the xray, and approved it, and I was coming home (Helen, p.2).

Other participants felt dismissed at the end of treatment, as it appears that health workers considered treatment completed when the fracture was set and the cast applied, while participants considered that this was only a part of the treatment process. These participants felt their care was incomplete, and that they pushed out of the door with little or no preparation, as if they no longer warranted the attention of health workers.

Then he plastered it up, oh must have been for an xray before that. Plastered it up, and sort of said come back in three days (p.2). It was kind of out the door (Barry, p.5).

Going home was a fairly stressful situation for participants, with discharge information considered particularly important. As participants were often overwhelmed by their situation and confused by the information given, the timing and presentation of information were very significant. These findings have support in existing literature, which has identified that anxiety often exists around a person's ability to comply with discharge instructions, about how and when to contact health workers after discharge, and concerning the need to establish routines and achieve mastery over various activities (Lough, 1996; Miller, Nordquist, Doran, Ahern & Karsten, 1998).

If preparation and information are considered important for patients being discharged from hospital after overnight stays (Brillhart & Johnson, 1997; Lough, 1996; Miller et al., 1998; Youngblood & Hines, 1992), it can be assumed that planning and information are equally, if not more so, for people who do not require overnight hospital admission. In this study participants were subjected to a brief, traumatic and stressful treatment process. They often experienced pain and other symptoms or complications over the subsequent days, which caused anxiety and concern. It was evident that discharge planning and education, in preparation for going home, was not something that occurred consistently for participants, which resulted in anxiety about a number of issues, such as ongoing pain and swelling.

Conclusion

People who experience wrist fracture appear to go through an acute phase, similar to the acute phase of the illness trajectory described by Corbin and Strauss (1988). These people also appear to undergo a number of processes similar to those described in Morse and O'Brien's (1995) study into the experience of surviving serious trauma. These processes included finding ways to cope with the injury, and with the shock that occurred. Participants were focussed on the need to explain what happened and why it had happened, with this correlating strongly to perceptions of personal wellbeing and safety. If participants understood their accident they felt more able to keep themselves safe from subsequent similar events. This was made clear as so many participants not only looked for an understanding of what happened, but some also wanted to attribute blame to others for the injury, and most significantly, worried about what the injury might mean in terms of future wellbeing or safety.

Some participants sought treatment for their injury immediately, while others delayed before doing so, because of uncertainty about the need for treatment. Other participants experienced uncertainty about the extent of their injury, before determining the need for assistance. Once this need was clear participants then handed themselves over to others, initially family members and then health workers.

Receiving treatment within a hospital environment resulted in a number of issues for participants, including having to cope with delays in receiving treatment. At this point participants were accepting of the treatment that was prescribed by health workers, submitting to this without question. How well treatment was tolerated was determined to a certain extent by the degree of preparation participants received for treatment, although it is not clear that this affected their experience of pain. Preparation for discharge was also an issue for participants, some of whom felt pushed out of the door with little or no understanding of what the next few weeks would entail.

Chapter Five

Putting life on hold

"I had to completely give up my job" (Anne, p.5)

Introduction

The period that followed the participants leaving the hospital was marked by the contrasting actions of working and strategising to achieve independence and normality, while at the same time suspending normal life and activities. These were overlapping non-linear processes that occurred concurrently. Chapter Five will discuss the manner in which participants put their 'normal' lives on hold for periods that varied in duration. This chapter will consider participants' experiences as they struggled to overcome the symptoms and disability associated with their injury, and will explore the experiences of participants who developed chronic symptoms as a result of their injury.

Living through the pain

Two physiological symptoms of injury were frequently mentioned by participants as part of the injury experience, and were obviously considered important. These symptoms were pain and swelling. Pain was found to be a significant aspect of both injury and treatment although participants often did not acknowledge this. The injury narratives often focused upon pain, including pain resulting from treatment, but at the same time participants denied the severity or extent of the pain they were experiencing. Of interest is that while participants expressed concern about other symptoms, they generally accepted pain as a 'normal' aspect of the wrist fracture experience.

Accepting pain as normal

For most participants in this study there appears to be little or no attempt by health workers to identify or alleviate pain during the initial stages of treatment for wrist fracture. This seems to be accepted by participants who did not directly mention

experiencing pain, or needing pain relief. These participants only discussed pain when questioned directly about this.

Interviewer: Was it painful? Irene: Yes, it was very sore. Interviewer: Tell me more about that. Irene: Well they didn't do anything. We were just left sitting. But it doesn't matter, I think women are quite strong (Irene, p.3).

In the context of this study, pain was anticipated and accepted as a 'normal' aspect of wrist fracture, and was therefore considered something that had to be tolerated. When participants did acknowledge the presence of pain, they did so in a manner that underplayed the severity of that pain.

I mean it wasn't gross, it was nothing that I couldn't cope with, but yeah (Debra, p.2).

Well, when I say there was a lot of pain, it wasn't absolutely [pause] (Barry, p.3).

Benner and Wrubel (1989) believe that people become focussed on their bodies and the sensations experienced, interpreting these according to their internal value systems, and forming a conclusion about the significance of the symptoms. Although participants in this research generally did underplay or deny the severity of the pain experienced, in some cases they described the actions that were taken which relieved pain. Health workers who contributed to the relief of pain were looked upon favourably, particularly when this occurred in the acute treatment phase.

When I arrived, I was seen pretty quickly by the nurse at the desk and she just put some ice cubes in a bag on it, which made it feel better immediately (Helen, p.1).

Even in those situations when participants acknowledged the severity of their pain, they did not appear to expect anything to be done about this. Instead they seemed to consider that pain associated with wrist fracture was something that had to be tolerated as part of the injury experience.

But after that initial plaster it was so swollen, the hand was swollen, and it was very, very painful ... I think that you expect to be able to stand a certain amount of pain (Gloria, p.2).

Most of the participants in this study were women in middle to older adulthood, of a middle class social standing. Within this group there may be a perception that overt pain behaviour is not 'appropriate'. As women with disabilities can feel devalued within a patriarchal society (Schlesinger, 1996), it is likely that these women accepted the presence of pain without complaint to minimise any perception of themselves as disabled.

How symptoms such as pain are perceived by individuals will depend upon the life history and personal experience of the person, and upon the values constituted within that life history (Toombs, 1987). It became evident in this study that most participants considered pain to be a normal aspect of wrist fracture, although the degree of perceived 'normality' differed, and the participants' constructs of pain and normality changed as pain either persevered or dissipated. This view of pain as 'normal' was reinforced for participants when health workers did not attempt to identify or relieve the pain.

Within orthopaedics and orthopaedic literature it is recognised that pain has significance, because it can be difficult to control, it can impede recovery, particularly for older adults, and it can add to the overall stress of injury (Closs, Fairclough, Tierney & Currie, 1993; Griffiths & Jordan, 1998). Some of the reasons identified for poor pain control are inadequate assessment and the reluctance of patients to complain. In this study participants didn't appear to expect their pain to be addressed or controlled, instead accepting its presence as something which was unalterable. The poor pain control experienced by these participants, and others with orthopaedic injuries (Griffiths & Jordan, 1998), probably relates to the tendency participants had to down play the severity of the pain, and the failure of many health workers to even ask about pain.

Being concerned

Although pain does not appear to generate much anxiety, there were some circumstances when participants did become concerned by the presence of pain. If pain persisted beyond the period of time considered 'normal' by participants, this sometimes stimulated them to seek advice from health workers.

I had the plaster for six weeks, but my arm never felt right in the plaster. Never felt right, never, ever, right from that ... But it was always really, really sore inside (Irene, p.1).

Participants also expressed concern over severe pain, particularly when this was associated with other symptoms, such as swelling and discoloration. In these cases, these symptoms could cause extreme anxiety, requiring immediate attention.

So, quarter to two in the morning, black fingers, not purple. The pain is so bad. (Husband) has got to take me down. They then have to cut the plaster around here to release the plaster to let the blood get back to my fingers (Cathy, p.5).

Ongoing pain also generated anxiety related to the participant's future wellbeing. These concerns were triggered primarily the feeling that things were 'not right'. Ongoing pain appears to cause concern primarily because of a dominant perception that once a fracture has been set in a cast, pain should subside.

I had a lot of trouble with it being painful for the entire time that it was in the cast ... Yes and swelling. It was a significant problem ... I went back. I didn't know what to expect. In my experience, and in (wife's) experience, other people's experience, generally once a broken bone's been set it's not too much of a problem (Barry, p.5).

The other symptom that was frequently mentioned by participants, and which generated concern, was swelling. This often precipitated visits to health workers for both assessment and reassurance.

Yes, the swelling was concerning me. Concerning me more than the pain was, you can expect a lot of pain. They didn't take the plaster off that day. They must have said 'see if it will settle down'. But it was still swollen of course (Gloria, p.4).

The significance attached to the symptoms seems to reflect the person's understanding of what happens when a fracture occurs, and while pain was expected, swelling was often not anticipated, and therefore caused concern. Participants also experienced anxiety about other symptoms which were more gradual, or manifested over a period of time. These caused concern because they appeared to have the potential to impact upon the participant's future wellbeing.

At one stage I rang them and said I was having numbness [pause] a lot of numbness, that has come back to me. I was having a lot of numbness, and 'do you think the plaster was too tight?' I was seen by a house surgeon, and he said 'no', he thought it was all right, he thought I was getting carpal tunnel ... I had had a friend who had that done, so I thought 'Oh dear, that's another problem coming', because my fingers were numb, and they were often blue and so on (Anne, p.2).

Individuals perceive symptoms as an interpretation of alterations in the body's normal functioning, and attribute meaning to these symptoms, depending upon the situation or the individual's values (Benner & Wrubel, 1989; Kirmayer, 1994; Mechanic, 1995). Symptoms cannot be clearly separated into sensation and emotional response, as sensation is influenced by emotion, while emotion is shaped by sensation. The perseverance or progression of symptoms, such as pain, may be interpreted as progression of the condition or as a failure on the part of treatment, depending, again upon situation and values (Benner & Wrubel). In this study, participants 'knew' that fractures caused pain, and because pain was expected, there wasn't an overt emotional response, unless it persevered beyond a timeframe considered 'normal'. In these circumstances, participants became concerned that the symptoms being experienced might have an impact upon their future wellbeing.

When participants experienced anxiety about a symptom, the usual response was to return to the hospital. This had the dual purpose of seeking relief for the symptom, and reassuring themselves that the symptoms they were experiencing were 'normal'. In some cases these participants received the reassurance they sought, but most participants were left unsure of what was causing their symptoms, and often did not have the symptoms relieved.

I sort of said, you know, 'it's a bit painful'. And I never got to the bottom of what was going on with it (Barry, p.5).

As some participants returned to the hospital a number of times with the same problem, it is clear that there was also an issue for participants, when the concern remained unresolved.

But when the swelling went down it was too loose, and I think I went back to the hospital about three or four times to get it checked, and whatnot ... The first time, they changed the cast, but then I still had the same problem, it was still too loose, and they kept saying to me it wasn't, but I mean I could move the cast completely (Jill, p.2).

The manner in which symptoms are constructed within many hospital environments is primarily mechanical, with the belief that symptoms are caused by physical insult or biochemical agents, which produce symptoms or signs which are unique to that injury or condition (Cioffi, 1991). Due to belief that there is a cause and effect relationship, little value is given to psychosocial aspects of symptom construction. When health workers failed to identify a cause for the symptom, or to verify its existence with an objective sign, their response was often to dismiss the participants' concerns. In addition to this situation, Tishelman and Sachs (1998) believe that the process of diagnosis, including symptom diagnosis, may involve negotiation between lay and professional judgements. Things which cause distress for participants might be considered normal by health workers, and therefore do not become a focus of health worker energy or attention. In this study the health workers' perception that symptoms were either normal or unverifiable, resulted in symptoms not being managed effectively. This was obviously a problem for participants.

Living with disability

All participants in this study were treated in a cast for a period of up to eight weeks. Being in a cast had a number of consequences for participants, causing further ongoing symptoms and significant disability. According to the World Health Organisation (WHO), disability is "an umbrella term for impairments, activity limitations or participation restrictions" (2001, p.1). While the timeframe of inability to carry out activities was of relatively short duration for most participants in this study, functional impairment was present, and had significant consequences. For most participants the period of greatest disability was associated with cast treatment. Irrespective of whether participants reported that being in a cast was particularly troublesome or not, this was clearly an aspect of treatment which did have a negative impact on the participant's lifestyle and social circumstances.

Struggling because of the cast

Most participants reported struggling while in the cast, because of the functional impairment and symptoms they experienced. Being in a cast caused or contributed to a number of problems similar to those experienced during the immediate post injury period, that ranged in severity. The symptoms that participants focussed on during this period were pain, swelling, pressure points, and numbness. The pain and swelling attributed to the cast were, again, the cause of most concern.

Get home here some time Monday. Quarter to two Monday morning, it was lovely and firm and tight, the plaster. They will not allow for the swelling underneath the plaster. You have a lovely firm plaster because of the break, but they are not allowing for the swelling (Cathy, p.4).

As previously identified participants experienced a number of symptoms, most notably pain and swelling. The cause of these symptoms was frequently considered by participants to be the cast, rather than the actual wrist injury. This view was generally reinforced when health workers modified or changed the cast when consulted.

Again, plaster too tight. Wait, tried, day after day, oh the pain, here. Had to go back again. It's (name). They will be so sick of me. Terrible pressure point. Cut me a window. Got a terrible pressure point (Cathy, p.5).

The cast was also blamed for the disability that resulted following wrist fracture, with one participant, in particular, reporting that the extent of her cast prevented her from using her arm or hand for even the most simple activities.

This is the worst thing, plaster here, see [points to tips of fingers and high in elbow joint]. How are you going to get it up? You can't do anything with it. Then you've got all that stiffness. But if that was a bit down there [lower down the elbow] you could stretch it, and you could lift it around like that. But because they move it just in that part, and the same with here [fingers]. I know because the break's there, maybe they have to take it, but they don't really. They could take it to there [base of fingers] then you've got, you can pick up things, but when they've got it right to there, look, can't do a thing (Cathy, p.11).

This participant was very certain that her disability was caused by the cast rather than her injury, and it appears possible that this disability might have been resolved if her cast had been changed or modified. Most participants in this study had new casts applied at various stages of their treatment, but this was not universal. Although this participant retrospectively questioned the extent of her cast, she did not ask health workers about the possibility of having it modified or changed at the time.

Although some participants mentioned having their casts changed, this does not appear to have been considered of any importance by most participants. Any comment related to the changing of casts was that some casts did not alleviate the symptoms they were being changed for, and consequently these participants were somewhat disillusioned.

The first time, they changed the cast, but then I still had the same problem, it was still too loose, and they kept saying to me it wasn't, but I mean I could

move the cast completely, and so I just left it as that, I didn't know what else I could do (Jill, p.2).

As previously identified, the significance attributed to a particular problem or symptom will generally be determined by the participants' preconceived notions of injury, and normality. Unlike the pain experienced in the acute phase, pain experienced during this period usually caused concern or anxiety, because the continuation of the pain was unexpected.

I knew that there was something wrong. I had been told, oh and remember it was sore. And it should not be sore after three days. And so when the plaster sets you [pause] not the hospital don't, but people that have had breaks know. That after three days you shouldn't have any [pain] ... There should be no pain. But mine was all pain because of that bone, that was plastered wrong, and all crooked and funny (Cathy, p.8).

The cause of the symptoms being experienced generally remained unknown, and could clearly have resulted from either injury or cast. It appears evident, however, that participants considered the cast to be the primary culprit. Faulty or ineffectual casts were also blamed by some participants for problems or conditions that developed subsequent to the wrist injury.

Because all those times I went back before that and said about not getting it up at all, and all the rest of it, the plaster was put on wrong. That's why I was having a lot of pain, and couldn't get it up to my shoulder. So it actually sort of disintegrated (is that the word?) my bone (Cathy, p.3).

The cast has therefore assumed some importance in the participants' perceptions of wellbeing. There are a number of reasons for this, including the potentially serious problems that occurred for participants while being treated in a cast, the problems that developed subsequent to cast treatment, and the disability experienced during cast treatment.

As well as significant symptoms experienced by participants, such as pain, swelling and pressure points, there were also a number of 'minor' irritants associated with cast treatment. These ranged from itch and discomfort, to odour and the weight of the cast.

And I found that the cast got really smelly, and I found that a real pain, because I had to work with people all day, and that was really unpleasant because I could always smell my hand, and I kept trying to clean the bits that I could see (Frances, p.4).

While participants described these issues as irritations, which may be considered minor in the overall experience of injury, they had social implications and contributed to the general feeling of dis-ease often experienced by participants.

Little has been written to describe the patient experience of fractures or cast treatment. In this study cast treatment was the focus of a substantial amount of the participants' narratives. Living in a cast became a large aspect of the injury experience, being perceived as a major contributor to issues experienced by participants, particularly with pain and disability.

Being disabled

Disability was the most significant consequence of wrist fracture and cast treatment, as functional impairment impacted upon the participants' lifestyles and social circumstances. The WHO definition of disability is contextual, describing disability as a "dynamic interaction between health conditions and contextual factors" (2001, p.6), including body functions and structures, activities and participation, environmental and personal factors. Although participants in this study seldom spoke directly of being disabled, all identified activities that they were unable to achieve in the context of their normal daily lives. The reasons given for this inability to do things were the injury, the pain associated with this, and primarily, the cast treatment.

Three perspectives emerged related to participants' disability, or inability to do things. There were functional and social implications related to all of these, as participants

were unable to maintain normal activities or lifestyles, and relationships were therefore affected. The first perspective was that participants were unable to complete activities of a personal nature.

But you don't really realise how much you use your hand, until you can't use it. Just things like getting dressed, and even things like going to the toilet was really hard, because the toilet paper was on the other side. It was just things like that, the really little things, that made you realise how much you used your hand (Frances, p.3).

Of particular significance for female participants was getting dressed, and the difficulty associated with putting a bra on. This was commented on by all of the women interviewed. Functional impairment resulted in some women being dependent upon others for help, with social relationships having to be redefined.

As I was coming in my neighbour saw me and [pause] a wonderful neighbour who went on bra duty for the next few weeks, because I couldn't undo my bra at night you see. So she was wonderful (Helen, p.2).

Becoming dependent upon others for such a fundamental activity as getting dressed was considered a very difficult aspect of injury, and was something participants struggled to overcome.

It was just so frustrating. Like I couldn't get my bra on. And I am quite well endowed, and not being able to get your bra on is terrible. Terrible. So I had to get (husband's) help to do that. Then eventually once the pain has settled you find other ways of doing those things. Like, doing my bra up at the front (Debra, p.3).

Day to day activities associated with running a household and with work were also commented on by participants as being problematic to varying degrees. Participants attempted to rationalise their inability to carry out these activities, generally attributing any disability to the cast.

I could do very little. Because it, you know, because simply you think you are going to get the plaster wet. So, most household things I couldn't do (Gloria, p.4).

Rationalisation of the inability to do things occurred because participants felt they needed to justify their physical dependence, and the social consequences that resulted from this. Perhaps of greatest concern for some participants was that the injury and treatment prevented them from doing things they normally did, or things they enjoyed. While this appears to be of less physical consequence, it caused social impact and significant distress.

But that's another thing that I missed, being a driver. I missed being able to go out on my own because I've got a manual [car], you see. Changing gear, that's it. So I felt more or less confined to barracks ... You don't realise, you just take it [driving] for granted. You don't think of it as a skill or anything. You just think of it as a necessity, and you've always done it. And you think well, that's fine, but you've got to get around (Gloria, p.8).

All participants had to make adjustments for the loss of independence while being treated in the cast. The limitations that resulted from cast treatment had emotional consequences for participants, who found this aspect of the wrist fracture experience to be a very frustrating and difficult period.

Well it's terrible, because I was a very [pause] I like to be independent, and to do things for myself (Gloria, p.5).

Anxiety about the future also resulted from injury and the disability that occurred because of this. Some participants became very worried about what might have happened if they didn't have family support, and what might happen in the future. One participant, in particular, was very concerned about the possible consequences of her injury, primarily because of her role as caregiver for her disabled son.

As far as (son) was concerned, he would just have had to go into a home somewhere. He would have to go somewhere where he would be cared for,

because I couldn't look after myself, and I couldn't help him (p.5). She is my youngest and luckily she is not married, or was able to have me to stay. But I don't know what would have happened if she had been married (Gloria, p.6).

This situation is supported by the findings of Lough (1996), who determined that older adults, when discharged from hospital, had significant concerns when they were the caregiver for another. Gloria, as the primary caregiver for her disabled son, was particularly anxious about what might have happened if she had not had such a supportive family member available.

For many participants the consequences of not being able to do things were far reaching. These included feeling bad and struggling to carry on. Some participants felt they needed to understand the exact cause of their disability, and two participants effectively put their lives on hold for the complete period of their cast treatment. The ability of trauma victims to retain independence will be affected by the presence of family or social support (Brillhart & Johnson, 1997; Chafetz, 1996; DesRosier, Catanzaro & Piller, 1992; Youngblood & Hines, 1992), with all participants feeling that the help they received made a difference.

Needing help

Participants' inability to carry out 'normal' functional activities resulted in reliance upon someone else to provide assistance.

I've learnt in the couple of years since then that you've got to give in gracefully and accept the help (Gloria, p.5).

While being disabled was reported as 'terrible' and 'frustrating', participants also reported that they wouldn't hesitate to ask for help if they felt they needed it. The perception was that the person who was providing assistance wouldn't mind, and therefore they felt they could ask for help, even with extremely personal or intimate activities.

And that's what I felt like, when I got to the stage when I couldn't wipe myself and that, and dry myself, all these horrible cracks and that. And then I thought about (ex-husband) and then I thought well I never minded doing it for (ex-husband). I am sure (partner) doesn't mind doing it for me, and now I know he doesn't, he doesn't mind at all (Irene, p.13).

Participants received help from two main sources. One these sources was Accident Compensation Corporation (ACC), a government health insurer who provided some participants with assistance with personal hygiene and housework. The assistance provided was considered invaluable by the few participants who utilised ACC home help. Being an outside, and independent agency, these participants did not feel guilty about having to rely on other people do things for them.

I had ACC come in two days after I broke my wrist, for two hours a day. And she would help with things like that, and even cleaning the loos, and helping me with a shower, and everything. And I was very lucky, I found her very helpful, and had no trouble. She was happy to do anything. She took me shopping and I could go out and I could do things the same way but I was unable to do some things properly (Helen, p.5).

Despite the availability of ACC, family members were the main source of assistance for participants. The extent of the assistance provided varied, with general support provided in some cases, while in others families took over complete responsibility for day to day activities, driving, and assistance with personal hygiene activities.

At this point in time, I was completely unable to cut vegetables, make beds, do up a bra, in fact I was having a lot of trouble trying to dress myself. My poor husband took over most of the housework, and life (Anne, p.3).

The extent of the role of family within the context of injury recovery has been considered by Morse and O'Brien (1995) and Morse (1997), who recognised that this included continuous renegotiation of these roles. During the initial, or acute phase of injury, the family acts as an anchor and protector. In this phase the individual's energy is focused upon survival, and they temporarily accept dependence.

Eventually, as the injured individual strives to regain their former self, the demands placed on family change. The family role then includes encouraging, entertaining, distracting and assisting. In this study it was evident that the relationship with family was re-negotiated throughout the injury experience, and that family did adopt many of the supportive roles described by Morse and Morse and O'Brien. This was particularly evident during this period when participants were living in a cast, and experiencing disability and dependence.

Needing help was considered by some participants to be a necessary evil, which was generally accepted with grace. Just as participants struggled to understand why they had injured themselves, they also needed to explain what was limiting their independence, or causing their disability. Knowing why they were unable to do something helped them to justify their dependence, and rationalise it.

Not getting better

Putting life on hold was a common feature of wrist fracture because of the cast treatment, which prevented participants from carrying out usual activities. In a number of cases, however, participants did not describe the period of cast treatment in great detail as this period did not feature significantly in their recollection of their injury experience. Instead events that occurred subsequent to cast removal superseded this period in importance for this group of participants, as the symptoms that evolved became all-consuming. When symptoms did not resolve, suspension of 'normal' life was ongoing and in some cases extended for several years.

The divergence that occurred in the injury pathway for individuals with wrist fracture became obvious following cast removal. Few participants appear to have been well prepared for what to expect following removal of their cast, and generally described a range of symptoms or feelings that limited their independence. These were generally of short duration with a gradual return to a state of previously known 'normality' occurring. For some participants, however, the road to 'normality' was turbulent, as participants experienced a range of symptoms that disrupted life for an extended period of several months, and in some cases, several years.

Realisation

The removal of the cast signalled the beginning of a new phase in the process of recovery for some of the participants in this study, although there was often surprise at the extent of pain or limited movement that was experienced following cast removal.

Actually it's been strange. You cope with things beautifully after a while, and look forward to it coming off. But once they had taken it off, it was so weak to begin with... I was just thinking that it would go back to how it was before the accident straight away, but I didn't expect it to hurt, because you know, I had been able to use my fingers anyway, in the cast, fairly well. But these are just very minor, minor things (Helen, p.17).

For the other group of participants, cast removal was a period that represented the onset of a difficult and troublesome time. These participants experienced weakness, stiffness or ongoing pain, resulting in the continuation of disability. While the extent of the problems that developed were not immediately evident for these participants the warning signs were always present, and with hindsight, the development of ongoing disability could have been predicted.

I sort of figured that when the cast came off that everything would settle down. It had been sort of deadly. It was quite significant. When the cast came off, most of those sort of problems went away. And it was, you know, it was a bit tight and useless. And what I found was that I couldn't [turn it] (Barry, p.7).

These participants sometimes waited for considerable periods of time before responding to the warning signs they were experiencing, feeling that things would improve with time. The delay in seeking an expert opinion varied from weeks to months, and resulted from either the attitude of health workers, such as physiotherapists, or from the advice of friends.

And she said that these things take a long time, that 'mine has taken a long time'. She had had two ops on it, and it hadn't really come right. And she just said, 'well give it time' (Anne, p.15).

This very much reflects similarity with the first stage of Morse's (1997) injury/illness model, Responding to Threats to Integrity to Self. During this stage individuals began to suspect that something was wrong, and spent a period of time observing changes, exploring and testing the body to determine what was occurring. Morse found that individuals spent this period trying things and waiting for things to either improve or deteriorate before deciding upon a course of action. Participants in this study also spent variable periods of time observing and measuring progress and trying things.

I couldn't get it to turn. So I found out what the exercises were supposed to be, and I did them. Which mainly involved a lot of this sort of thing. And they didn't really have any effect (Barry, p.8).

The recognition that things were not getting better was almost always precipitated by ongoing, or chronic, pain. Chronic pain is considered to be pain that persists for six months or longer (McCaffery, Beebe, Latham & Ball, 1994), and in this study a number of participants experienced pain as a result of their wrist fracture which met this classification.

I was suffering with, apart from a weak wrist, with terrific pain, with shooting pains. I can't remember if it was swollen, but there was a lot of problems ... one way of getting some relief, was my husband would hang on to my hand, and we would go in opposite directions, and that would give some relief, but that was still ... I took a lot of pain killers, and it just didn't really heal ... I had battled along like this for, it must have been over a year (Anne, p.4).

The experience of chronic pain as a result of wrist injury resulted in these participants feeling a range of emotions, including depression, and anger with health workers, who were blamed for the development or progression of the symptoms.

I think that at first I thought that it was just a bit stiff, and that I would get used to it, but then after that I started to get a bit annoyed that maybe I hadn't been given physio straight away, or that maybe I had needed it straight away. I was pretty mad (Frances, p.6).

The emotional implications of chronic pain for women have been recognised by Schlesinger (1996), who found that anger and identity issues were not uncommon, and that these were often extensive enough to impact upon lifestyle and relationships. This was clearly evident in this study, as ongoing pain forced some participants to redefine their social roles, and re-negotiate their relationships with partners.

Looking for answers

This was a distressing period for participants, as realisation gradually evolved, and they began to comprehend the need for further advice to effect resolution of symptoms. The search for answers initially took participants to a range of health workers, including physiotherapists and general practitioners, who provided treatment, and advice, but who were often unable to resolve the participant's concerns. Generally the search for answers was initiated through the general practitioner, who was seen as a facilitator, or an intermediary between the participant and the provider of treatment.

I then went to my GP and said that they had given up on me, and that probably I needed to go to a specialist again, could she refer me to a specialist (Anne, p.5).

The delay in return to 'normal' forced participants to look for reasons why they were not improving, and in these cases an expert opinion was sought about why symptoms persisted, with participants consulting a specialist, who was seen as the definitive expert.

In the end I went back to my GP, and I said 'I'm getting nowhere with these guys. Something is not coming right'. I wanted to see someone else who was, you know, in the business ... Probably three months. I guess it was six weeks in plaster, and we messed around for at least another six weeks, but it could have been less (Barry, p.8).

The concept of looking for answers had two components. These were the need to have symptoms 'cured' or alleviated, and the need to understand what was causing the symptoms, and what the possible consequences of this might be. Seeing a specialist was a critical link in the search for answers about what was wrong. In most cases the specialist was able to give an explanation for the cause of the problems.

So it actually sort of disintegrated ... my bone ... I sort of haven't got the bend that you are supposed to have, the proper bend. He said 'no, well you won't get that back'. He said 'well your bone has sort of gone' (Cathy, p.3).

Knowing what was wrong was considered important by these participants, many of whom felt that they were not being taken seriously by others. Women experiencing chronic pain could feel at a disadvantage with health workers because of the invisibility of their symptoms, feeling devalued as a result (Schlesinger, 1996). Knowledge of what was wrong provided comfort, as it validated the ongoing symptoms and disability, and was a source of enormous relief.

And he said 'yes I know what's wrong with you'. He examined my hand, and so on, and said 'yes I know what's wrong'. And I burst into tears, very emotionally, and said 'well I'm glad somebody does' (Anne, p.5).

In some cases the knowledge of what was wrong was also associated with treatment being offered. In the case of one participant the possibility of having her symptoms alleviated was significant.

When he said 'I can fix it, with two ops' the relief was tremendous (Anne, p.11).

This participant was offered surgery, and eventually had two operations on her wrist. She was the only participant who accepted the offer of treatment, and who has achieved the 'cure' for her symptoms that she sought.

He did this op [pause] yes, and he found that I had pinched nerves, and all the cartilages and tendons had become ragged, and he had cleaned them all up

... I had two ops. So the first one was to clean this up, to get some pain relief, and then he had me back later, and put a plate in my arm, which has made it extremely strong (Anne, p.7).

This participant was very grateful for the improvement she has experienced as a result of these operations, and considers the decision well taken, as she contemplated how she would have felt if her symptoms had persevered.

I think I would have been extremely depressed [if the operation had failed]. Because all my activities were centred around doing artistic pursuits. I paint, do flowers and garden (Anne, p.18).

A second group of participants also continued to experience symptoms as a result of their wrist fracture. These participants also needed to know and understand why their problems were persisting, but knowing what was wrong appeared to be sufficient, as they declined to have further treatment.

I went to my GP, who arranged for me to see another specialist, in (city). He booked me in, and said to get xrays before you come, which I did. And then he went on and said this is what we can do about it ... What he said was that he could operate on it. The problem was that the two bones that had knobs on the end, which match each other, and that when I had broken the thing ... What he said was that he could operate on it, and cut the offending knob off, right, and seal it all up... It would be six weeks before it was settled. And at that stage I had just had it up to here. I said 'thank you for everything you've done, but I won't take you up on your offer, I'm sorry'. That was the end of it, wasn't it (Barry, p.9).

Participants decided not to proceed with treatment for two reasons. One was concern that the period of disability would be extended as a result of the treatment. The other reason was related to anxiety about the possible outcome of treatment. One participant decided against treatment because he was concerned that his symptoms might become worse rather than better.

I just could not get confident in my own mind that it would be better [pause] No that's not quite right. I could not get confident in my mind that it was not going to be worse. I wouldn't have minded if it didn't work, right, but I just couldn't cope if it got worse. I'm not uncomfortable with what I decided. I wish that it could be better than it is, but it's not, and that's just the way it is (Barry, p.11).

These participants were, in some respects, the fortunate ones. They not only had a definitive reason for their ongoing symptoms, but the possibility of having these symptoms alleviated also existed. Others were not so fortunate, being denied either a diagnosis, or a potential cure. For these participants the search for answers continued as they continued to hope that they would be able to resume their former 'normal' lives.

I've had, I've been back and I have had it xrayed, two or three times, at (city) hospital, and they have said nothing's wrong with it. They have said nothing is wrong with it, and you can see that there is (Jill, p.5).

Two participants in this study were diagnosed with a chronic pain syndrome known as Reflex Sympathetic Dystrophy (RSD) following their wrist fracture. This condition can be associated with trauma both 'minor' and 'major', causing symptoms of continuing pain, allodynia or hyperalgesia, oedema and changes in blood flow or skin temperature (Schott, 1995). For one participant in particular the experience of wrist fracture has proved to be life altering, with a devastating impact upon her lifestyle and her relationships. Because of the significant nature of this injury upon Irene's life it is appropriate to consider certain aspects of her experience in greater detail. Of interest is that while Irene's experiences have proved more enduring and intense, the experience and issues are similar to those of other participants who experienced delayed recovery.

Living with a chronic pain syndrome

Irene experienced a wrist fracture that did not require manipulation, but which was treated in a cast for six weeks. When Irene had her cast removed, she found she had very limited use of her wrist and hand.

They xrayed it, and it was fine to come out of plaster, but it just wouldn't go properly, and I went to physio, and they couldn't get it to do anything. I can't turn, I can't go like that [pronation/supination] (Irene, p.5).

Because of the limitations she was experiencing, attributed to being in a cast, Irene attended physiotherapy for a considerable period of time in the hope that this would result in resolution of her symptoms.

It wouldn't turn. I couldn't turn my arm, I couldn't turn my hand. I couldn't open my fingers. Yes, that's why I had to go back. I was very worried about that. Yes it did, because [pause] but then I thought, oh, it would be all right, I thought because it had been in plaster. Your hand's bent over like this. You know, you just go to physio. In a couple of weeks you know, she will be right (Irene, p.7).

She eventually realised that things were not getting better, and was referred by her physiotherapists to see her general practitioner. Following this Irene was sent to a specialist, and underwent tests, which eventually determined that she had developed RSD.

And it was the girls at physio who picked up what it might be, and they wrote to my doctor and recommended I go and see a specialist ... so we did all that, and (doctor) put me through with the bone scan, and he said yes. As far as he was concerned it was definitely reflex sympathetic dystrophy, but there is no reason, and there is no way, no known way yet to get rid of it. There is only ways to ease your pain a little bit (Irene, p.5).

This was a worrying period for Irene, who was working hard to recover, and was concerned by her obvious lack of progress. With a diagnosis, but little hope of cure,

Irene consulted a number of specialists, and was reassured by the consistency of their diagnoses and opinions.

I've just had, I've just been to two specialists in the last month. And they both said the same thing, two independent specialists through ACC ... One is a bone specialist (name), the other one is like a sports doctor ... but their reports were both just about word for word the same (Irene, p.7).

With an understanding of what was wrong, Irene began to search for information, and for a cure for her condition. This search led her to try many treatments, including conventional therapies such as pain management strategies and pharmacology, as well as other less conventional strategies.

What I do, is I do OD on, what do you call it? Digesic. But I can think nice things in my head, and take pain away, you know, yeah. I've got this funny mind, you know, pretty pictures (Irene, p.3).

Irene's pain was dictating how she lived her life. Because her pain resulted in extreme disability, this participant had to alter her lifestyle to ensure that the assistance she needed from her partner could be provided.

I have to get up every morning, half past four, quarter to five, when (partner) gets up. To have a couple of cups of tea and a cigarette ... and take the dog for a walk, so I can do a pooh before he goes to work, because I can't wipe myself (Irene, p.8).

The constant search for a cure, and the many pain management strategies she tried, from behavioural and relaxation therapies to physiotherapy, acupuncture and medication, were expensive and unfortunately, proved unsuccessful.

Yes, I am still searching. You search, because you always think, you know you are always ripping things out of the Woman's Weekly, or the New Idea, and you know. But then, I've spent heaps of money, heaps and heaps of money on [pause] I don't know if you have heard on the radio station called

(name). They advertise all these bee balm, and all this, and I send away for all this stuff and it doesn't work. It doesn't work on me. So, you know, I have spent lots of money on this (Irene, p.14).

One strategy that Irene found to be beneficial in controlling her pain had some complications associated with it, which prevent her from taking full advantage. The seemingly simple situation of taking a bath to alleviate pain proved problematic on one occasion, resulting in Irene being very reluctant to do this again unless assistance was available if needed.

The best pain killer of the lot is water. You know, being able to get into warm water. You know, some nights I have three baths, or four baths because I don't sleep, because when I'm asleep this starts throbbing, wakes me up. And I won't take sleeping pills or anything. So I just get up because I can't have a bath or a shower unless there is somebody in the house, because I get stuck. I got stuck one day, two hours I sat in the bath. I let the water out, pulled the plug out with my toe, and I got stuck. I just couldn't get up. I had no, absolutely no strength all down that side, and had to wait for the meter man. It was just lucky the meter man came, and it's out there by the bathroom. And I yelled out to him to go and ring my friend up to come round, because I would have been stuck until (partner) got home at half past four. And this was like half past eight in the morning (Irene, p.9).

When pain becomes chronic it can be totalising, with the person's entire life being consumed by the experience of pain, and the need to control, minimise or prevent it (Benner & Wrubel, 1989). This participant's desperate search for a cure, or for relief from her symptoms, was so consuming that she was willing to consider a solution most would think radical.

Oh, look, I pleaded with them, I pleaded to take my arm off. I pleaded with (doctor) who said 'look (name), look, I hate to tell you this... I am so sorry, but there is really nothing we can do'. And I said 'there is', and he said 'what?' And I said 'take my arm off'. And I meant it. I really, really meant it. Oh I was like that for about 18 months. I just didn't want it (Irene, p.16).

The lack of any obvious improvement from the many things tried does not appear to have impeded Irene in her search for a cure. She remains positive that experts will eventually know more about her condition and that one day someone will be able to do something for her.

I've gone to them and told them I need to go to a specialist. It's not my doctor or anybody else who ... because I always think in my mind, I think there might be a new cure or something that the doctor doesn't know, only the specialist knows, or there might be something they can do (Irene, p.23).

RSD is a chronic pain condition for which, as Irene discovered, there is no known 'cure'. Treatment options for this, as for other chronic pain conditions is generally focussed on control and containment of symptoms. In treating chronic pain conditions, the challenge for health workers is to modify the conceptions and coping skills of the individual, so that they can adapt to their new 'normality' (Mechanic, 1995). While Irene has had to learn to live with her chronic pain, she has not completely accepted 'normality' as it is for her now, or the inevitability of continued pain.

Conclusion

Participants put life on hold following wrist fracture, with the extent of this being determined to some extent by the severity and duration of the symptoms experienced. Following wrist fracture participants experienced pain and other symptoms. These were constructed according to the participant's past experiences and the meaning attributed to symptoms. When symptoms were considered 'normal' by participants there was a lack of concern, whereas when the symptoms were perceived as outside the range of normal, or were unexpected, concern was experienced. When participants became concerned by a symptom they generally sought advice from health workers. The response of health workers was found to be inconsistent as participants seldom had their concerns allayed.

Many of the symptoms participants experienced were perceived by participants to be related to the cast treatment. The period of cast treatment was considered to be a period of significant disability with impact upon lifestyle and social relationships. The cast was often considered the primary cause of the disability, and concerns related to casts were also reported to health workers with limited results. As a result of the cast, and the injury, participants were unable to carry out activities that they considered a normal aspect of their lives. These activities ranged from general housework, to getting dressed, working and socialising. During this period of time participants all needed help to maintain activities, with this assistance being provided primarily by family members. Relationships with family had to be redefined during this period, as participants accepted a dependent role, and allowed family to take over.

The removal of the cast signalled the end of the period of limbo for most participants, with a gradual return to 'normality'. Another group, however, continued to experience ongoing symptoms, which eventually became chronic conditions. These participants underwent a gradual realisation process that resulted in a long and convoluted search for answers. Health workers were encountered who were able to offer a cause for the symptoms, which was found to be reassuring. Some participants were fortunate enough to be offered treatment, as well as receiving a diagnosis, although only one participant chose to accept this offer. For the others, confirmation about the nature of the problem was sufficient. Another group of participants were also able to be given a diagnosis for their symptoms, but these participants were not fortunate enough to have a cure available. One of these participants then embarked upon a journey of seeking a relief for her symptoms, as they became chronic and life altering.

Chapter Six

Working back to normality

"I worked very hard on it" (Anne, p.9)

Introduction

Participants' struggles with disability and their need to retain independence resulted in two conflicting processes evolving. These two disparate processes occur simultaneously throughout the injury experience, with either one achieving prominence over the other at varying times. The first of these processes - Putting Life on Hold, has been described in Chapter Five, with participants suspending normal activities, being dependent, needing help, and struggling to overcome ongoing symptoms. The second of these processes - Working Back to Normality, is described in this chapter. This explores the experience of the participants as they attempt to achieve or return their lives to a state of 'normality'. Working Back to Normality occurs throughout the injury experience, and is not a linear process. The variations and inconsistencies that are evident have occurred simultaneously with the activities described in the two previous data chapters.

Striving for balance

While participants all described a degree of disability, both during and after cast treatment, it was evident that they also struggled to achieve balance between dependence and independence during this time. This was reflected in the attempts participants made to do what they could for themselves, to get on with life, and to refuse help they did not consider necessary. Participants described the strategies they employed to help them achieve tasks that would otherwise have been difficult or impossible.

Managing

Although participants put their normal lives on hold following wrist fracture, giving up work, and having to rely upon others for assistance, they also worked to achieve

balance between disability and independence. A number of participants declined the assistance offered during this period, from family members and from outside agencies such as ACC. The reasons given for declining help were that they didn't want to inconvenience anybody, and most commonly, because they felt they were less needy than others.

Friends told me that I probably could get some home help, and I said I didn't feel this was fair, as I had a husband who was retired, who would take over. That there were more needy people. That people who were on their own, I felt that they were the ones who needed help, not me (Anne, p.3).

These participants were often proud of their ability to manage in circumstances that were obviously considered to be difficult. They believed that their need for help was less than others, most particularly less than elderly people who were living alone.

I did it myself. But then it wasn't my dominant hand. I think, especially elderly people would find it difficult, especially if it was their dominant hand (Debra, p.5).

There is an anomaly associated with participant's perceptions of dependence, as Helen, who was elderly and living alone, felt that she managed very well, and that it was people who had family to care for them that were more likely to be dependent. She felt these people would demonstrate a 'learned helplessness', perhaps created by the support available.

I think [pause] it's an unkind thing to say, but I often wonder whether that helplessness is because you have someone who can do things for you. You know, nothing I did, I didn't feel like a martyr or anything, there wasn't that feeling. I just got on with things. But there are a lot of people around who aren't very good at that, that need a lot of help (Helen, p.8).

This perception has support in literature, specifically literature related to the theory of 'operant conditioning'. Vlaeyen, Kole-Snijders, Rotteveel, Ruesink and Huets (1995) speculate that if patients demonstrate certain behaviour they may receive positive

reinforcement and avoid unpleasant things, thereby being conditioned to continue to demonstrate that behaviour. While this work looks specifically at pain behaviour, with little credibility, it is possible that participants, who have someone who responds to their need, will demonstrate that need more readily.

Although there was some evidence of participants relying upon others for daily assistance, the desire to get on with things was more prevalent. While often unable to achieve activities alone, participants found that if they worked together with someone else they could complete tasks effectively, and felt they were contributing, and doing what they could. This resulted in a sense of independence and usefulness.

I can make a cup of tea. I can't cook whole meals. (Partner) and I do them together, but that's fine, because he goes to bed really early at any rate, but it is good, because we talk while we are getting the meal ready, so we don't mind that. That's pretty cool. But I will have to wash the bloody watercress now, he's gone to bed. I can do simple things like that, I can wash the watercress you know, that's easy (Irene, p.10).

Disability can be influenced not only by the injury, but also by psychological distress, education, self-esteem, and the availability of a social support network (Brillhart & Johnson, 1997, Richmond, 1997). The availability of support helps people achieve their goals, resolve emotional situations, and solve problems. Participants in this study found that working with family members enabled them to succeed at activities they couldn't achieve alone. Schlesinger (1996) found that women developed a strengthening of the emotional closeness of relationships when they worked with a partner through a period of disability. This appears to be the situation for Irene, who has obviously developed a changed relationship with her partner since her injury. Despite these changes, Irene reported a closeness and partnership in her relationship, similar to that described by Schlesinger.

Anxiety was sometimes a feature of participants' efforts to work back to normality. This anxiety could be related to fear of making their injury worse, or causing

symptoms to be exacerbated. While this did not impede participants in their efforts to achieve balance, they were more cautious about how this was approached.

You have to kind of get used to having an arm again. It's kind of like you have lost something, but it wasn't bad. I felt, I almost felt tender I think, if I remember. Or whether it was that it was tender, or a fear, a kind of shielding it kind of thing (Ellen, p.6).

Vlaeyen et al. (1995) found that fear of injury or pain could prevent individuals from attempting things, although in this study the degree of this was negligible. Instead, participants used caution, generally adopting a 'get on with it' approach to life. For some participants getting on with life involved getting back to work, while for others it was simply adopting a positive approach to things. While life was found to be difficult or frustrating, getting on with things was generally perceived as something that had to be done.

A lot of these things I found [pause], it was like telling me about not driving, but you just think 'I'm going to live'. You want to get on with it (Ellen, p.3).

Getting on with life often involved participants accepting that there were some things that they could not do, and balancing this with doing what they could.

Being as how you have to resign yourself to the fact that you can't do these things, so you just do things around the house and which you are able to do (Gloria, p.9).

Problem solving was found to be a key element of achieving activities, and reducing dependence. By working out ways to accomplish activities that were difficult participants were able to overcome many challenges. Solving problems in this way helped them to achieve some balance between the disability caused by the injury, and the need to sustain independence.

But it was things that you do with two hands with equal strength I found I couldn't do ... like opening a jar, you need to have power in both hands ... that

was something I learnt, so everything that had a lid on that I was using constantly, instead of doing that little extra twist to close I just left it so I could open it ... If I was doing a bottle, I would put it between my knees and just use the other hand. So you gradually compensate and then you gradually get more movement in your hand, and fingers, more strength (Helen, p.8).

Innovative strategies were often developed and utilised by participants to allow them to be independent in their daily lives. This involved finding new ways of doing things, modifying old ways, or employing things with a different approach.

I could take my teeth out, got false teeth. Always had a reserve of little brushes, anyway, and put bluetak on that with one hand, because remember you can't do nothing with this one, and just bluetaked it on to the hand basin, to take my teeth out, and put toothpaste on it and everything (Cathy, p.13).

Although participants reflected on the disability they experienced as a result of wrist fracture, and the things they couldn't do, it was also evident that participants attempted to focus upon what they could do. Managing tasks or activities generated a sense of real accomplishment.

We had to cope with one little grandchild for a month, while the parents were away overseas. That was very difficult. She learnt to hang onto my neck, and I would put the other arm underneath and just carry her around ... you can feed, and you can do things, but even changing nappies and bathing is not all that easy with a disabled arm. But you do these things for your families, to help them out, to take advantage of an opportunity that is given to them (Anne, p.19).

Schlesinger (1996) found that 'normality' may be continuously redefined according to the context the person exists in. In this study, participants were trying to exist in as 'normal' a manner as possible, within the limitations imposed by the abnormal circumstances of their injury. To achieve normality they often adopted 'abnormal' patterns of behaviour to help them accomplish activities and be as independent as

possible. This was found to be a difficult struggle that involved participants in a hard and tiring process.

Working hard

Working hard, particularly towards recovery, was a concept that emerged quite strongly throughout the injury experience. This was considered an important aspect of the recovery pathway, with participants working for the dual purpose of minimising complications and achieving independence. The work that was required gradually became easier as symptoms eventually began to resolve, and activities became more achievable.

Well it was easier, because you were getting back, working your way back into normality, shall we say, trying to do things (Gloria, p.6).

Despite the resolving symptoms, participants found that hard work was required to support continued improvement. Involvement in physiotherapy was considered an important part of the recovery process, requiring a firm commitment to ensure maximum benefit.

There is no use going once or twice a week, to the therapy, and doing nothing again until you go back again, because you will never. I am 65 coming up, and you will not get better. You have got to keep at it every day, and move it and it hurts. And sometimes you have got tears running down your eyes, and your shoulder's sore, but you must keep at it, because the therapy, we hope, will always be there, but the point is you've got to keep at it yourself (Cathy, p.6).

While it was also considered important to work hard and get on with life, participants acknowledged a need to be sensible about this, and not to try to do too much, or do anything that might cause harm.

I just sort of think, well as long as you are sensible. You are not going to be able to do everything all at once, but you can just do a little bit, as you feel that you are able to, and if your arm is tired, you need to sit down (Gloria, p.8).

Some participants felt that their work needed to be aimed at fulfilling specific, identified goals, and they were sometimes disappointed that the targets they set for themselves were unrealistic. These participants felt they had no input into setting their treatment goals, and felt that their recovery was impeded because of this.

It's all about having targets. They need to have a target to aim for, so that we are all working towards the same thing (Barry, p.14).

The 'get on with it' approach adopted by participants reflects the values of our society. Dependence and disability are poorly tolerated, while self-sufficiency and independence are strived for. Even when participants were significantly disabled, it was evident that they struggled to cope with their situation, and get on with things.

Looking forward

Irrespective of whether they felt they had 'recovered' from their wrist fracture, at some point participants began looking forward to the future. It was clear that part of the process of working back to normality was to have a vision of what 'normality' would be, and to look forward towards this. Some participants were forced to consider a state of 'normality' that differed from that known prior to the injury, while others were fortunate enough to be able to previous activities and lifestyles.

Accepting a changed normality

Initially, it appears that participants were reluctant to accept the possibility that recovery might mean accepting a lesser level of activity than prior to the injury. As these participants worked towards recovery of their previous level of ability, realisation gradually emerged that 'normality' would be altered. Despite this, these participants continued to look forward to the future, and to set goals to work towards.

Oh, yeah, because I'd like to be able to wipe my own bum. There's lots of things I'd like to be able to do, that I can't do, but I know that I am never going to get to do them at any rate ... and yeah, look forward to being able to do what some people would consider extremely simple, like being able to hang the clothes on the line ... yeah, so there's things to other people that would be utterly simple and easy I would like to be able to do (Irene, p.10).

The residual symptoms that participants were left with, including pain, weakness or limitation in movement, continued to cause distress for some, despite acceptance that things would not fully recover.

And I mean, sometimes I can't even hold a smoke, and I mean smokes aren't heavy (Jill, p.5).

Other participants were left with residual symptoms that were not considered problematic. Despite a significant deformity as a result of her injury, one participant accepted her situation with only minor concerns, because she had been offered, and had declined treatment for this.

I said all about it being misshapen and they said, well they could break it and reset it, but I was quite happy to leave well alone with it. Because I think I am old now, I am 76. And I sort of think well the thing is you don't want to be mucking around and putting your family to more trouble because it might not have been any better than it is in the end (p.7). I mean our own bodies sometimes are a deterrent to healing properly. And it might be that some bones knit more easily, or that age, everything, comes into it ... and I think 'what am I worried about?' I have learned to live with it, but it is pretty difficult to keep a watch on it (Gloria, p.10).

Residual symptoms had different implications and consequences for participants, depending upon their situation and past experiences. The following participant was content with the decision he made not to seek treatment, because his distrust of health workers persists. He remains bitter about his injury experience, because of his

residual symptoms, and the perception that he was not treated as an individual by health workers.

I wish that it could be better than it is, but it's not, and that's just the way it is. Now I am pretty comfortable with it. I've got to say, that over the next ten years or so, we observed, if you like, a kind of [pause] it didn't reinforce for me that I had made the right decision, but it said that I was ok with the decision that I made (Barry, p.11).

Tishelman and Sachs (1998) consider that illness and injury have a 'natural progression', and that normality represents health, with a 'return to normal' being considered a return to the previous patterns. In this study returning to normality proved to be a dynamic and evolving process, as participants came to terms with an altered normality, and rationalised the acceptability of their current situation by qualifying the impact of their altered situation.

Yeah, but it's not really, really too bad, either. It is only if I type too much, and I have just made some adjustments to what I do, and the way I do things (Frances, p.7).

Tishelman and Sachs (1998) considered that participants' acceptance of an altered state of normality would be influenced by their current social circumstances, being influenced by time and personal situations. In this study the acceptance of an altered level of normality was fluid and dependent primarily upon the participant's perception of their involvement in treatment decisions, and the level of trust they had in the capability of health workers.

Working, striving for balance and accepting a changed normality emerged as significant processes in this study, with Working Back to Normality being identified as the core category. This process was evident throughout the injury experience, and accounts for some of the inconsistencies in participants' narratives. Griffiths and Jordan (1998) also identified working, and accepting a changed normality as themes in their study into the experience of people recovering from leg fracture. These authors found that their participants achieved normality by adapting to the new

situation, and by trying to achieve balance between rest and activity. It is clear that there are strong similarities between the experiences of individuals with wrist fracture and lower limb fracture, although individuals with wrist fracture faced different struggles.

Getting better

The ability to lead a normal, active life was considered by participants to be the stage of having 'recovered' from their wrist fracture. Participants tended to look forward, being positive about their situation, rather than looking back at the difficult struggle they described. Returning to normality, either previously known or changing, could take weeks or years, with gains sometimes occurring gradually, and in small increments.

And the strength is coming back. I would go to turn on a tap with it and I would have to, you know, use that hand, but now I can usually do it with this one (Helen, p.7).

As participants looked forward, this sometimes required caution, as they had developed an awareness of their vulnerability to accident or injury.

I am much more aware of my age, and everything else, you know ... But I am aware that I can have accidents. That it was so simple to have that accident, that I am aware and that I think I do things differently because of that (Ellen, p.4).

A more common response, however, was for participants to express gratitude for their current situation, recognising that things might have been worse. Those participants who felt they had struggled substantially throughout the injury process expressed gratitude that they could now begin to look forward.

Whereas it's wonderful now to get it back, and to be able to carry on with life (Anne, p.18).

The gradual recovery process experienced by participants in this study was similar to the process employed by individuals who suffered serious trauma. These individuals regrouped and make a conscious decision to commit themselves to the work of regaining their former self was described as part of the injury experience (Morse & O'Brien, 1995; Morse, 1997). As a result of the work of recovery individuals merged their old and new realities, coming to grips with the consequences of the injury, and the changed level of ability. These themes are also prevalent in studies that explore recovery from illness, with King and Jensen (1994) and Corbin and Strauss (1988) identifying similar processes.

Conclusion

The process of working back to normality involved participants in a struggle to achieve balance between disability and independence, doing what they could for themselves, working hard, getting on with things, and setting goals. These activities were ongoing, sometimes commencing immediately post injury and continuing as participants struggled to cope while living in a cast, and during the period during cast removal. Eventually participants all began to look forward to the future, although as time progressed, those participants who underwent a prolonged period of suspension of 'normal' life began to accept that this future might include living with a changed normality.

Returning to 'normal' was an important part of the process of recovering from wrist fracture, as participants began the work of achieving balance, and regaining independence. Life was beginning to be resumed, and strategies were developed to support participants' ability to do things. Participants often saw the positive side of things, describing activities they could do, and the ways they did them. While this was not considered easy, and generally required creative thinking, participants appear to feel a sense of achievement and accomplishment, which somewhat outweighed the feeling of disability. People did what they could, and found new ways of doing things, although this was sometimes tempered by caution. Achieving balance involved participants in working hard to achieve recovery or minimise complications.

Participants eventually began to look forward to the future, and to what this might mean. In many cases, looking forward involved accepting a changed normality, as it became evident that participants were unlikely to achieve their former state. The degree of residual symptoms experienced varied, and the acceptance of these was often determined by participants' having made a decision not to go forward with treatment. As these participants began to physically improve they began to consider what the future might hold, and to look ahead with caution and optimism.

Chapter Seven

Being in their hands

"She just took me under her wing, and looked after me" (Helen, p.1)

Introduction

Health workers' interactions were identified as being separate from, although interwoven with, the process that participants were undergoing as part of their experience of injury. It was evident that health workers had a significant influence upon the injury experience of participants, particularly upon the manner in which the experience was interpreted. For this reason participants' interactions with health workers are detailed separately from the injury processes, being described in this chapter. These interactions commence at the time of seeking help from health workers, and continue throughout the period that followed.

As the participants' injury experiences could have an impact spanning a considerable period of time, it is not surprising that many health workers were encountered, and that the relationships that existed were sometimes strongly contrasting. Generally both positive and negative experiences were encountered at different times, although participants often focused upon one to the exclusion of the other. The relationships that developed between participants and health workers played a key role in determining how the injury experience was perceived overall by participants.

The first section of this chapter considers the positive interactions that evolved between participants and health workers, while the second section considers what happens when participants do not feel safe or comfortable with health workers. Whether participants were comfortable with the relationship which developed or not, they initially felt compelled to put themselves into the hands of the nearest health workers, because of the suddenness of their injury. They had to trust that these hands would be capable.

They told me what they were doing, and I was in their hands. Well, what else can I say. I have a limited knowledge from way back, but you know I am still in their hands. You have to accept that (Ellen, p.2).

Feeling safe

When participants trusted that health workers were capable, and considered they could be heard and have some input into their treatment, they felt safe and in good hands. A positive relationship was necessary as a vital part of this feeling of security. Participants put themselves into the hands of health workers, and then trusted that health workers would work with them to meet their needs. This involved listening and communicating, demonstrating kindness, professionalism and empathy, and skilled, competent care.

Handing self over to health workers

Being in the hands of health workers for diagnosis and treatment of wrist fracture was not a simple situation. As described in Chapter Four, the acute processes associated with injury were multifaceted involving participants in many transfers and processes, as well as interaction with a number of staff members.

We went to the A&E, checked in there, and they did cart us off to xray, and we then came back and waited again. At some stage, somebody said to head off down the road to Fracture Clinic. We spent most of the time waiting at the A&E, didn't we? rather than anywhere else. I am pretty sure that when we got there, the guy that was going to do the job was pretty well there waiting (Barry, p.3).

Although all participants described being transferred from one area to another, it is of interest that no one questioned the necessity of this. Lawler (1991) believes that a patient's response to a situation will be influenced by the nurse's response to that situation. If the nurse is 'matter of fact' about a situation, making it clear that it is 'normal' within the context it is being experienced in, patients are more likely to accept it. This includes process issues as well as care and treatment. At this early

stage in injury experience, participants all felt that they had put themselves in the hands of competent professionals, and trusted that this time consuming part of the process was necessary.

Although a small number of participants related compelling narratives about negative aspects of their initial treatment at hospital, in general treatment in the acute phase of the wrist fracture experience was found to be positive and reassuring, with caring staff stepping in and taking over.

So they transferred me up to the orthopaedic clinic, where the nurse (name) was absolutely wonderful. She just took me under her wing, and looked after me (Helen, p.1).

Some health workers created empathy with participants by employing humour during this traumatic and stressful stage. This was much appreciated by participants, who found that humour 'normalised' their experience, and personalised their relationship with health workers.

People there were quite humorous, and they were like 'gosh you have broken quite a few of the bones' and 'haven't you done it well' that kind of thing, but they were all actually good value, really excellent (Frances, p.2).

This type of relationship and interaction reflects a connection of emotional empathy between nurse and patient. The role that empathy plays in nurse / patient relationships has been defined as an intuitive understanding of, and response to, the patient, which is found when nurses engage in a close, caring relationship (Morse et al., 1994; Watson, 1988). Emotional empathy was perceived positively by participants in this study, who felt that nurses with empathy were kind, caring and competent. These nurses paid attention to the participants' needs or problems.

I asked the sister when she came back in if I could have a glass of water, and she explained that I couldn't in case they needed to do an operation, but she came back in with an ice cube for me to suck on which I thought was just

brilliant. That helped no end. It was a very hot day, a hot and dry day (Helen, p.1).

In some instances, participants described health workers doing something they considered to be beyond the 'norm', or something extra that was a nice touch. When this occurred the health worker was seen in a very positive light, with the participant feeling special as a result of the interaction.

I thought this was a nice and a magic thing to do, the house surgeon asked the nurse to get me a mirror so I could see the extent of my messed up face. And I thought that was very nice of them to do that. Because it is the sort of thing, you know, when you've got a front tooth missing, and your face is starting to swell up... Oh and the other thing was that I was wearing a white suit, you know, white pants and a jacket, and things, and it was covered in blood. And the nurse, this nurse (name) explained to me, you know, the best way to get the blood out once it had dried, and she told me about putting it in Napisan and all sorts of things. And she, my neighbour, got me some, and we tried it, and it just came up brilliantly. But yes, just sort of practical nice things like that (Helen, p.2).

This type of caring activity was most likely to occur when an empathic connection between the health worker and participant had been established. Health workers then engaged in 'doing more' activities such as those described by Bottorff and Morse (1994). 'Doing more' activities included caring, doing something beyond what was required in the normal course of events, that helped patients to feel safe and cared for. These types of activities reflect the human caring relationship described in Watson's (1988) theory of human care and human science. Specifically, health workers worked with participants, demonstrating sensitivity, helping, and creative problem solving. In this study the general feeling of well being that was created when health workers incorporated special touches into care resulted in participants describing health workers positively, even when this did not relate to any specific incident.

And the girls, I know they are not girls, but you think of them [pause] I mean she was tiny. But they were lovely, and the girls in the plaster room, they were, as I say I was becoming quite a familiar face because I think they have been there so many years some of them (Gloria, p.6).

In other circumstances a specific incident was described by participants as they felt it demonstrated the knowledge and expertise of the health workers, including their ability to identify and meet the participant's needs.

I went to the (town) hospital, and the doctor there ... it was actually the doctor that took it off, and I was pretty scared by that saw thing. I was thinking, 'Oh my god', and I was talking to him about it, and he said to me straight out that it was too loose. It should have been tighter than what it was. And he xrayed my arm, and said that it has mended, but not how it should of. And he said to me that I would probably always have trouble with it. He was just really good (Jill, p.5).

This health worker was engaged in the type of activity described by Bottorff and Morse (1994) as 'doing for', which included responding to the patients' requests or needs. When participants in this study encountered health workers whose interactions reflected 'doing more', and 'doing for' activities, these participants generally felt safe and cared for. This led them to respect the health workers' professionalism, and have positive perceptions about health professions in general.

You know how some people can give you a good feeling about a place or a ward, or a bad feeling. You know I just sort of thought the way they were talking with other patients, I sort of feel that all the staff, I imagine the staff are pretty good, pretty caring. When you have that it shows right through doesn't it? You usually find that, you know, that it shows. And if you go somewhere where everything just sort of goes swimmingly it's because of the staff, and how good they are. I am sure that sometimes they have off days, I imagine working until two in the morning wouldn't be very good, but yes (Helen, p.10).

The feeling of wellbeing that existed in these circumstances resulted in participants feeling secure that they could seek advice or assistance in the future if they needed to.

And they said if there are any problems at all to ring, you know, so I feel if anything happens with this, and if I have to go back, that I am not going to be a damn nuisance (Helen, p.9).

Health workers influenced the participant's perceptions of their well being because of interventions which helped the participant to feel safe, and which supported the identification and meeting of needs. The interventions that contributed to these feelings included listening, explaining, and reassuring. Similar activities were identified by Benner and Wrubel (1989) as important nursing activities in influencing patient outcomes.

Being heard

Empathy was expressed through understanding and communication, with the result that patients felt accepted (Olsen, 1995). In this study the ability of health workers to effectively communicate with participants contributed greatly to the success or otherwise of the relationship. Communication involved not only relaying information, but also listening. As they listened to participants, health workers were able to identify and meet participants' needs, resulting in the participants feeling they had been heard, and trusting in the capability of the health worker.

But before I left the hospital (nurse) said 'I know you live alone, you will be entitled to ACC', and she filled out the forms. And the next day someone rang me and then came and saw me. And I said to (nurse), now really and truly I will be fine, but she said no. And I thought 'goodness me, this is all a bit much, this is crazy'. But then I realised you know, that I was so glad she insisted (Helen, p.8).

Participants sometimes found that communication and the relationship with health workers varied considerably. The following participant she felt she was not being

listened to by health workers during follow up visits for her wrist fracture, but during acute treatment her needs were appropriately identified and met.

At (name) hospital I just felt like I was someone else in a big queue to go along there and wait and they didn't really have time, and didn't seem really interested in what was going on for you. It was all quite impersonal, because there seemed to be a lot of pressure. And at the other end you've just broken it, and you are in quite a lot of pain, and I found the attention was pretty good. You were an individual, and in a bit of pain, and they would kind of help you along. But at the other end, you are just ... 'You'll be right' kind of attitude (Frances, p.6).

Lawler (1991) believes that the relationship between nurse and patient is situationally context related, and time related. There is a beginning and an end, which is usually determined by the duration of the person's hospital stay. For individuals with wrist fracture this situation is true, but blurred, because of the nature of health worker interactions in an outpatient setting. The relationship between health worker and patient differs in intensity and level of interaction, depending upon the health workers' interpretation of the individual's needs at the time. Unfortunately, it was evident in this study that sometimes the participant and health worker had conflicting perceptions about the level of need, and the subsequent level of attention required.

When participants encountered mixed responses from health workers, and sometimes had to struggle to be heard, they valued any interaction with health workers who treated them as individuals. Health workers who listened and responded to needs were considered favourably, despite health workers in general being perceived with negativity. The following participant relates numerous encounters with health workers, which resulted in her having a very low opinion of health workers, in general. However, in the following encounter one person listened to her, and this person was consequently considered the most proficient health worker she encountered.

Back I go, I go to the hospital on the Monday. By now they are not very happy with me. (Name) is back with something else wrong with her now. And I said

that this is very, very sore. I saw a doctor, or a Mr or whoever. And he is the person that spoke in medical terms, which I couldn't understand anyway, because he wasn't speaking to me. And I just said 'well I'm not leaving this hospital until I have an xray, another, because I know there is something desperately wrong with this right hand.' Wrist, thumb, there's just something desperately wrong. In the end they called in a Chinese doctor who was lovely, and he said well 'have you got a problem (name)?' And I said 'no I haven't got any problem.' I said 'all these people have got a problem. All I'm saying is there is something wrong, and I need to have an xray.' He said 'send (name) down to have an xray.' So they give me a sheet, I go down, and then I come back. The lovely Chinese doctor puts the xray up on the screen. He says '(name), you've still got a broken hand, and you will go back into plaster for two weeks' (Cathy, p.2).

In this circumstance the health worker identified the participant's concern and acted positively to address this. This enhanced the participant's trust in him, and enabled her to retain some control. While this participant did not develop positive therapeutic relationships, in this case she felt safe in this health worker's hands. She felt she had been heard, and could therefore have some input into her care.

Being heard by health workers enabled participants to have some input into their care or treatment. Because they felt they could be heard, participants realised that they could negotiate about some aspects of their care with some certainty of having their input considered. Negotiating with health workers generally related to cast treatment, and involved having casts altered or removed. In two cases, participants successfully negotiated for early removal of their casts.

I was just sick of having this thing on, and I said 'can't I have mine off? – I've just about had enough'. And he said 'ok, but you must wear a wrist splint for a week' (Debra, p.5).

Negotiation between patients and health workers has not been widely considered, particularly in relation to patient perceptions about this. Mechanic (1995) has acknowledged that patients are often reticent about negotiating with health workers,

concluding that patient satisfaction with health workers could be affected by patients failing to negotiate in order to have needs met. In this study it was clear that negotiation was not a significant part of the patient / health worker relationship, and that successful negotiation did not greatly alter participant's perceptions about health workers.

What was made evident by the negotiations between health workers and participants, however, was that participants considered being heard by health workers to be a significant issue. Being heard allowed participants to be involved in their care, and improved their perception of the treatment they received and the health workers they encountered. Pierce (1997) reported similar findings, with the conclusion that individuals rated satisfaction with health care according to their relationship with health workers, rather than the physical outcome they achieved.

The role that nurses have in supporting patients, through developing a positive or 'therapeutic' relationship has been widely recognised (Madjar, 1998; Spiers, 1998; Watson, 1988). When patients feel they are being seen as individuals, with individual needs, they feel safe, and secure in the knowledge that the health workers they are interacting with are competent and trustworthy (Morse, 1997; Watson, 1988). In this study the impact of health workers' relationships with participants was obviously significant. Health workers could not only minimise the participant's distress, but also contribute to their perception of the health outcome.

Within the context of an outpatient setting, the relationship between health workers and participants was constrained by the brevity inherent in the encounters. Despite this, some health workers were obviously able to achieve a positive relationship with participants, through activities that included listening, negotiating, and discovering the person's needs, concerns and situation. These reflect the human care activities identified by Watson (1988), which include sensitivity, helping and trusting, problem solving and caring, teaching and learning, and the provision of a supportive, protective environment. It appears obvious that when health workers incorporated human care activities into their interaction with participants that this resulted in participants reporting positively on their injury experience.

Being disappointed by health workers

Being in the care of health workers was not a straightforward situation for individuals with wrist fracture, as the hospital environment was considered very stressful. While most participants in this study encountered a therapeutic relationship with health workers during their initial treatment, this did not always continue throughout the health care experience. Some participants experienced a disturbing offhandedness and lack of professionalism from health workers that resulted in feelings of defensive and unwelcome.

Despite any misgivings, participants felt they had little choice about whom they could seek treatment from, particularly during the acute phase of injury. When the care they received did not live up to their expectations participants did not seek treatment elsewhere. Instead their unmet expectations resulted in feelings of disillusionment and disappointment. In some cases this was the participant's first encounter with health workers as a patient, and the negative relationship that developed affected these participants' perceptions of the health care environment within a much larger context than the current area of treatment.

Watson (1988) has described 10 carative factors, which become "actualised in the moment to moment human care process in which the nurse is being with the other person" (p.75). These carative factors form the basis of health care relationships, but in this study were noticeably absent in the interactions that evolved between some health workers and participants.

Corbin and Strauss (1988) considered relationships between patients and health workers, particularly the impact of trust. These authors determined that patients generally trust that health workers will know best and, for this reason, accept the treatment pathway proposed. It is clear from what follows that although participants in this study considered themselves in the hands of health workers, and accepted the treatment proposed, they did not always have trust in health workers, and did not always find that the care they received met their needs. As participants' injury experiences progressed they encountered a growing number of health workers, whose behaviour in many instances had the effect of creating a negative impression with participants. This generally resulted from participants having to struggle to be

heard, failing to have concerns addressed, and feeling unable to influence their treatment.

Struggling to be heard

Just as good communication skills and empathy created a positive health relationship, poor communication skills resulted in participants considering the relationship with health workers negatively. The impact of poor communication was that participants struggled to be heard, and felt that health workers weren't interested in them as individuals.

There wasn't a lot of focus on figuring out that there was a problem, and what was the cause of it. So I guess the communication probably wasn't that [pause], both ways. I mean they didn't tell me much, and they didn't listen to me much (Barry, p.6).

On some occasions it appears that health workers became focused upon their tasks to the exclusion of the participant, who felt they had become incidental to the interaction. As health workers concentrated upon tasks, they did not listen, or consider the impact of the task or activity upon the participant. In these circumstances it was not uncommon for health workers to cause the participant unnecessary pain or distress.

(Physiotherapist) seems to be quite tough, I mean she just grabbed my fingers and pulled them out on the table, and there is no way [pause] you should have heard my mouth. I don't think she wants me back. But I don't know, because I have only been to her twice. So we will see (Irene, p.20).

Individuals who live with a chronic condition, as Irene does, become expert about their condition, and sometimes fear that health workers will not 'listen' to them or credit their experience or expertise (Benner & Wrubel, 1989). It was evident in this study that this situation occurred. Not only did this result in participants experiencing pain, but their concerns were not identified and problems were not resolved.

So you see, I've been telling them about this, but they still have not done nothing about it (Cathy, p.23).

The therapeutic success of a health worker / patient interaction is dependent upon the health worker's ability to interpret and respond to patients' spoken and inferred messages (Spiers, 1998). Participants in this study not only felt they could not be heard, but also felt that health workers didn't believe them, and felt bad as a result of this. Howell (1994) also found that women could be made to feel bad as they were sometimes treated in a derogatory manner by health workers when reporting pain.

You need a bit of support, and not to be told that you are a neurotic woman, just because you can't do things for yourself anymore (Anne, p.16).

Another effect of limited communication between health workers and participants was that participants had no knowledge of what was considered to be a 'normal' aspect of injury recovery. This resulted in increased anxiety and a gradually diminishing trust in health workers.

It would have helped if I had known what to expect. If they said that 'this is going to be bloody painful for six weeks', fine. Then I would have thought 'ok' (Barry, p.6).

Because participants did not know what to expect, or what they should be concerned about, they put up with symptoms that might have been alleviated, or they made frequent returns to the hospital for reassurance.

Two or three days later the pain was still bad, and I went back again. They weren't very happy with me, but they weren't nasty to me, but they weren't very happy with me, and I said 'there's something desperately wrong' (Cathy, p.1).

As health workers failed to address the participants' concerns or symptoms, the relationships deteriorated further. In these circumstances, participants continued to be concerned that something was wrong, and felt that health workers were not

- interested in listening to them or resolving their problems. Watson (1988) recognised the importance of creative problem solving as an element of the health worker / patient interaction, and the absence of this had the effect of contributing to the negative relationship.

When I went back on the Monday to say 'there's something wrong, I want an xray', and again one of the ladies that's been there too long said 'well you don't need it'. And I just looked at her and I said 'I'm not leaving ... I'm not leaving this hospital until I've had an xray'. So that's when that doctor in the next room said, the man doctor came out and said 'have you a problem (name)?' With them all standing around, including that sister. 'I said I have no problem whatsoever, it's all those ladies that have a problem'. And he asked what's the matter, and I said 'I know there's something not quite right with it and I would like to have an xray', and I think he said 'you don't need one', but I said 'I'm not leaving this hospital until I've had an xray' (Cathy, p.21).

As a consequence of participants feeling they had no voice within the health care environment, they also felt they were unable to have input into their treatment. The perception was that health workers did not recognise the individual needs of the participants because they were focused upon tasks or upon achieving their own treatment objectives.

I think that there was no focus on what was happening at my end of it. What they were doing, was what they had to do, and they did it well. It's a little bit like driving a car, but not turning the steering wheel when you come to a corner ... I think the real issue was that I had no way of influencing this. I didn't know what to expect (Barry, p.10).

While one participant obviously felt strongly about this issue, others also felt they needed to have some involvement in determining the course of treatment, and to be given realistic expectations about their likely outcome.

Actually, I think it would be really useful if people with injuries could be given realistic expectations of what they can expect to achieve, about how good it is going to be (Helen, p.10).

This participant felt that health workers needed to understand her, and to give her realistic goals to work towards. Health workers predict a probable course that the illness will take based upon the diagnosis and knowledge of the disease (Corbin & Strauss, 1988), and plan treatment as a result of this. Unfortunately patients assume, incorrectly, that health workers will know their personal value systems, and will consider these when planning treatment (Toombs, 1987). What was evident in this study was that participants believed that treatment plans should include input from the individual so that they might have some knowledge of their predicted injury course, and so that goals set will incorporate their values and expectations. Barry was particularly concerned by process issues, which he felt contributed to his negative experience in the hands of health workers.

They have to understand what it is you want to be able to do at the end of things, but they know what is possible. There just needs to be some talking about the target, so that the process works better [pause]. It's just about making sure that the process works (Barry, p.14).

Because they did not 'listen', health workers had little understanding of the participants' values, needs or personal objectives. According to Corbin and Strauss (1988), failure to develop this understanding can result in turbulence due to incongruence between the individual's and clinician's expectations, a situation that occurred in this study. Some participants developed a negative impression of health workers, and questioned their competence, because these health workers did not identify their values, or give weight to the participants' goals.

They didn't even like me. They don't like you coming back complaining. No, they did not like me [pause]. You don't expect them to be sympathetic. No, none of us do. They didn't seem to want to listen, because they are the qualified one, you've only got the break (Cathy, p.9).

As participants' confidence in health workers became undermined the relationship with treatment providers deteriorated further. The advice of health workers was distrusted, and participants were sometimes forced to battle to be listened to, and to ensure that their wishes were adhered to. This struggle made an already difficult situation even more untenable.

This was an extremely distressing time ... we battled on our own, and got extremely angry with the people down there, but we decided we were going to fight (Anne, p.13).

Having to battle with health workers, or others, to have needs met resulted in participants having little confidence in health workers. The element of trust that should exist in relationships with health workers was noticeably absent in these cases. Issues of blame, responsibility and accountability became blurred for participants, as they attributed blame according to their own value systems. In the following case the participant attributed blame in a broad context.

Angry, angry because it could have been avoided. I was very angry towards (city) hospital. I won't go there now unless I really, really have to (Jill, p.6).

In addition to considering health workers accountable, this participant also felt the health system in general was responsible. Her perception was that hospitals should ensure individuals working there were skilled and professional. It also appears evident that participant / health worker relationships were subject to patriarchal social constructs. Within the context of a patriarchal biomedical environment, participants appear to value the role of doctors more than nurses.

*He was just really good, **and it was the doctor that was doing it, and not just the nurse.** And I mean he was sort of explaining everything to me and how it didn't mend, and all that sort of thing, and so that was really good (Jill, p.5).*

She didn't even talk. Didn't talk. Just told me what to do. I don't know if she was a nurse, it was a lady, it wasn't a doctor. Well surely a doctor ... no a doctor wouldn't do that would they? (Irene, p.4). (emphasis mine)

Participants appear to accept that nurses might behave in an unprofessional manner, but that doctors would not. One participant believed that the health workers (generally nurses) he was involved with were influenced by the negativity of their hospital environment. He felt that patients would not receive optimal health care there unless health workers recognised and changed the culture of their environment.

(It's) an administrative choice. I don't know what it is. It's a culture down there. They have got to aim to do things well [pause]. They've got a culture that says 'we're victims, and we are not going to change' (Barry, p.12).

This view would be supported by Watson (1988), who recognised that health care environments need to be supportive and protective, providing physical and spiritual safety. Instead participants encountered health workers who did not listen, and who were focused upon issues of concern to themselves, rather than patients.

Losing confidence

Lacking trust in health systems and health workers had significant consequences for some participants. These participants had little faith in the good will of the health workers, and lost confidence in them, professionally. Each participant had different reasons for their loss of confidence, but in general this resulted from poor communication and the lack of a therapeutic relationship.

I'd lost confidence in them. In the process ... Up until then I hadn't had a significant amount of involvement with hospitals. And I guess that the dealings that I had had with the staff [pause] was the thing that worried me. You know, once bitten, twice shy (Barry, p.12).

Watson (1988) described the significance of a helping-trusting relationship in positive caring environments. The absence of this resulted in participants feeling insecure,

unimportant, and unsure of what to do next. Most participants initially had trust that health workers would be capable, but the failure of health workers to live up to expectations resulted in them questioning the competence of the health workers.

I was trying to tell them that it was loose, and they just [pause]. It seemed as though they didn't care, sort of thing, and I thought well you are meant to always listen to your patients, and sort of check things out, but they didn't even check it (Jill, p.6).

The deteriorating relationship with health workers resulted in participants blaming them for problems that developed subsequent to the wrist fracture. This occurred because participants' concerns were not addressed, and they felt that ongoing problems might have been avoided if the original symptom had been dealt with by health workers.

And I wasn't happy with the guy that done it, but, yeah, they set it, and didn't set it properly (p.1)... the plaster was too loose. I mean I know that they shouldn't come off, so I knew that they had done it wrong (Jill, p.2).

In other circumstances participants held health workers responsible for ongoing problems purely because of the negative relationship that existed. These participants found that, having handed themselves over to health workers, they lacked confidence in the health worker's competence and therefore blamed them for what eventuated.

And we went up to the hospital, and they xrayed it, and it was broken, and they got this lady down. I sort of blame her for my ongoing problems [pause]. She just couldn't have cared less. She was just slip, slop, slapping on my arm (Irene, p.1).

The competence of health workers was most often damaged when participants perceived that tasks or activities were not performed with skill. In some cases this resulted in participants experiencing harm or injury.

Then when the nurse was cutting the plaster there, she was hacking at it, I said 'but its burning my arm very badly'. I could feel it burning. And a qualified sister, or whoever, came in, and she said 'oh yes, you would be burning (name's) skin because you haven't turned the thing on.' This one didn't even know that you had to. But she was burning my skin because she had forgotten to [pause] she didn't know. She hadn't forgotten, she didn't know, that you had to turn that thing on (Cathy, p.13).

The potential consequences of health workers' lack of knowledge was not always obvious for participants, but even with incomplete appreciation of the potential danger of unskilled technicians, participants found that their confidence was undermined by the overt lack of knowledge.

So they did a few things on it and got it a bit straight. They had [pause]. It was my left arm, and at the time they had got a new fitting, or equipment, right, that sort of goes [pause]. I was sitting in a chair and there was a device that helped them keep the arm where they wanted it while they were putting a plaster on, and they didn't know how to use it [pause]. We sort of sat there and looked at it for a while, and gradually they figured out, or one doctor figured out how to use it (Barry, p.1).

Loss of confidence in health workers was compounded when participants were given information that they felt to be untrue, or incorrect. The perception was that if the health worker was wrong in this instance, then their ability in general should be called into question.

They examined it and said I was a 'slow healer', perhaps I had osteoporosis. I had been because I was in the right age group for that, I said to them, I had a scan at the (city) hospital for osteoporosis, and it was not the case (Anne, p.3).

Despite lacking confidence in health workers, participants continued to have expectations, which when not met, resulted in feelings of disappointment. Although

this occurred during the treatment phase, the disappointment continued long after the experience of injury.

Maybe a little bit more education about when the cast was off, and maybe if someone had checked on the movement, and how I was going to get on with my job. And then probably a little bit more about what to expect, and some exercises that I could do. I remember the physio gave me quite a few exercises. The difference might not have been all that great, but I think it would have helped. Yeah, I didn't have a lot of movement, and I think if they had given me, if they had told me to move it a bit (Frances, p.5).

One expectation that participants had that was not always met was that health workers would behave in a professional and courteous manner. Confidence was lost when participants encountered behaviour they considered rude or abrupt.

I mean the nurse that actually changed it was a bit rude, because she said that I had been sticking knitting needles down there to scratch it, and I was trying to explain to her I didn't need to, and she was actually quite nasty. She goes 'oh you are lying, I can tell that you have had knitting needles down there'. I was trying to say 'look I can take the cast off'. So I mean I was a bit upset about that, because I mean you don't be rude to your patients (Jill, p.4).

Two participants reported behaviour from health workers that was not only unacceptably rude, but which could also be considered extremely unprofessional. This behaviour demonstrated a complete lack of empathy or the existence of a therapeutic relationship.

Anyway it was very sore in the plaster after days and days, so I went back to the (city) hospital and they told me there that the only trouble with me was that I couldn't take pain (p.1). They told me 'the trouble is (name), that you can't take pain, because you've never had this before' (p.9). I mean for her to say 'you can't take pain'. Who was she to me, to say that (Cathy, p.19).

The participants who encountered such behaviour were those who returned on numerous occasions with symptoms they were concerned about, symptoms that were not addressed by the health workers. In these circumstances, relationships with health workers had deteriorated markedly, and it was not surprising that these participants felt anxiety about returning for advice.

You don't go, it takes quite a bit of courage, to go along and say that it isn't working, something is wrong (Anne, p.17).

Because they felt unwelcome and unsure of the reception they would receive, these participants sometimes delayed seeking assistance for symptoms they were experiencing that were potentially quite serious.

Oh no, not at all. Not at all. And you don't. If anywhere, when you go back it's 'oh here she comes again, oh God'. No, they didn't like me anyway. But when I went back for this one, and I had the swelling, two o'clock in the morning, because they had to release it. And they had to cut the, what do you call it, the pressure hole, there I said to them I have had ... one nurse was going to say something to me, and I knew she was going to say something not, not quite nice (Cathy, p.9).

The response these participants had previously encountered has resulted in participants feeling they were wasting the health workers' time. As a consequence of this participants often felt bad about themselves, and hesitated before returning. This hesitation could have had serious consequences for participants if their symptoms had required attention.

Because it was, I had almost decided that they thought, well you know 'it's all in your mind'. I had been made to feel like that. By the people down at the (city) hospital (Anne, p.5).

Another significant consequence of losing confidence in health workers was that participants began to question many aspects of health workers' activities. Because

there was little faith in the ability or intentions of health workers, participants became anxious that something was not done that should have been.

I don't know, I think possibly if you go to them and say your hands are numb, I don't know medically whether they should cut the cast off again and have a look at whether you have got something wrong in there, or whether this is a common complaint with people (Anne, p.7).

In some circumstances participants had such little confidence in health workers that they not only questioned competence but also had little respect for health workers' knowledge or expertise.

Of course they knew it [sarcasm]. They got taught in a book, and they got taught there. But they never had it, none whatsoever (Cathy, p.9).

The relationship that existed between participants and health workers was obviously influenced by a number of factors. Among these were the perceptions held by participants about the competence of health workers, and the behaviour of health workers towards participants. These obviously impacted upon the relationships that were subsequently established.

Conclusion

The interactions described above evolved between participants and health workers throughout the participants' wrist fracture experiences. Most participants in this study described relationships with health workers within the context of the impact of that relationship upon their injury experience as a totality. Even when the care received during the acute phase was considered positively at the time, if participants encountered health relationships at a later stage that were perceived negatively, this became the most memorable part of the experience. Conversely, participants reflected upon the positive elements of their relationship with health workers when this was seen over an extended period.

When the health care relationship was a positive one, based upon appropriate communication, use of humour, confidence and trust, participants perceived themselves to be safe. Positive relationships existed when health workers focused upon the individual, listening, and giving the participant an opportunity to be heard. These participants felt their needs were identified and met, and their problems were resolved.

Although some participants were extremely content with the care of health workers, feeling safe and secure throughout their health care experience, it was far more common for participants to have mixed experiences. When the relationship included destructive personal behaviour, or poor communication, participants subsequently developed a poor opinion of the ability of the health worker, and perceived their injury experience negatively. This often resulted from health workers being task oriented, as participants felt they were unable to have input into the relationship, struggled to be heard, and felt they could not influence their treatment. In these circumstances, participants generally had limited confidence in the health worker, questioning even the smallest action.

Health worker relationships with participants were obviously complex. This study demonstrated that health workers appeared to lack the ability to consistently interact effectively with participants, who encountered positive relationships on some occasions, but who also encountered behaviour that was very destructive. During the initial period of treatment, the care and attention delivered generally met the participants' expectations, however, in the period that followed this, the situation was often different. It was evident that participants continued to have expectations that their needs would be met, whereas health workers did not appear to consider it a high priority to identify and meet participants' needs once the acute period had passed. The discrepancy between care received and care required resulted in participants being disappointed by their health care relationships.

Chapter Eight

Discussion

Introduction

This chapter discusses the findings of this study, highlighting some issues that have significance in relation to an individual's experience of wrist fracture. The implications of the findings of this study will be explored in relation to clinical practice, and will include a number of recommendations in relation to nursing care. Recommendations will also be presented for nursing education for further research. Although participants' discussion focused upon the impact of health workers on their experiences, the recommendations of this study have been developed to address the nursing practice issues identified. A number of these recommendations could be applied to other health professions, however, this study was developed as nursing research, with an aim to inform nursing practice.

Discussion

Getting Through Injury included processes related to coping with injury, undergoing acute treatment, and preparation for going home. Getting through the acute phase of injury was the first step of working back to normality for participants. This began with the initial actions following the injury, which included a range of coping mechanisms being employed before submitting to treatment. Shock was a significant factor impacting upon participants' ability to cope with injury and with the symptoms they were experiencing and the support of family during this time was invaluable.

The category, Putting Life on Hold, had two components to it. The first of these, Living with Disability, was experienced by all participants, whereas Not Getting Better was experienced only by some of the participants whose recovery from injury developed into a chronic state. As participants progressed, there was sometimes a realisation that the normality that was being strived for was unattainable, and participants' concepts of normality had to be redefined in order for them to move forward.

Working Back to Normality occurred as a non-linear process with progression and relapses over a variable period of time. The impact of health workers upon this process was significant. The category Being in Their Hands emerged to describe the interaction of participants with health workers, with this having both positive and negative implications. While the core process is Working Back to Normality, Being in Their Hands was an over-arching process that impacted upon the participants' injury experiences. Being in the hands of health workers resulted in feelings of safety for some participants, whereas for others there was a general loss of confidence in the intentions and ability of the health workers. The model depicting the injury process of experiencing wrist fracture can be seen in Figure One.

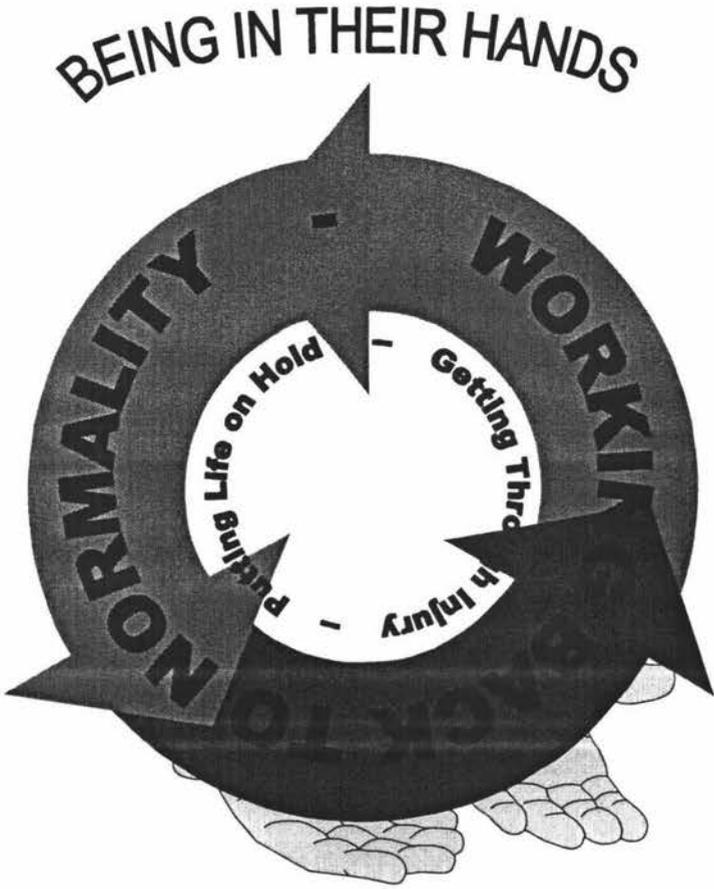


Figure 1 – Model: Working back to normality

Being in the hands of health workers

The influence that health workers had upon participants' wrist fracture experiences was significant. In some circumstances the relationship with health workers was positive, and participants felt safe and well cared for, even when chronic symptoms developed, or the clinical outcome was less than ideal. These participants appear content that they have achieved the best result possible from their injury.

In other circumstances participants were disappointed by the care they received from health workers, and because of the negative relationship the outcome was also perceived with negativity. This reflects similarly to the findings of King and Jensen (1994), who found that trust and distrust impacted upon the participant's recovery pathway. Pierce (1997) found that satisfaction with health workers correlated to the meeting of patients' expectations, but that patients consistently expressed satisfaction with the nursing care they received. Speculation exists that if satisfaction correlates to the meeting of one's expectations, and patients express satisfaction with care that is objectively measured as being less than ideal, then patients may be adjusting their expectations of health care, as they are unable to tolerate the stress and vulnerability associated with not having their expectations met. This theory was not supported in the findings of this study, as it was clearly evident that participants had expectations, and that when these were not met, that they expressed dissatisfaction with the work and care of health workers. Participants in these circumstances reported a loss of confidence in health workers, had little or no respect for their expertise, and questioned even the smallest action. Given this loss of confidence, it is hardly surprising that some participants held health workers responsible for their current situation.

In recent times, nursing has begun to explore its values, goals and philosophies, and has recognised anomalies between scientific values, and the tradition and nature of nursing as a caring role. Watson (1988) defines human caring in nursing as:

the moral ideal of nursing whereby the end is protection, enhancement, and preservation of human dignity. Human caring involves values, a will and a commitment to care, knowledge, caring actions, and consequences. All of human caring is related to intersubjective human responses to health-illness conditions: a

knowledge of health-illness, environmental-personal interactions; a knowledge of the nurse caring process; self-knowledge, knowledge of one's power and transaction limitations (p.29).

This reflects the high value placed upon the subjective world of the patient, and the personal interpretation of meaning and experience of patients. The emphasis of nursing should be to help patients gain knowledge, control, and readiness for self-healing, through a close and significant relationship between nurse and patient. This can be achieved through a human to human caring process and through caring transactions which respond to the subjective world of the patient (Watson, 1988).

The contribution that nursing can make to the injury experience of patients is obviously significant, as the findings of this study demonstrate. When participants felt secure and safe in the hands of health workers they reflected positively upon their health care experience as they got through injury and worked back to normality. Alternatively those participants who did not have confidence in health workers, or who felt they could not be heard by health workers all reported their injury experience in a negative way.

Acute and clinically inflicted pain

The most obvious symptom of injury is pain, and in this study participants reported having pain, and alluded to its severity without discussing this overtly. There are social constructs around the experience and expression of pain, as participants behave in a manner that is considered acceptable within their culture (Eccleston et al., 1997). Perhaps as a result of this participants did not voice their pain, either at the time of injury or during interview, being constrained by perceptions about how they should behave. To ensure that patients do not experience unnecessary pain or suffering, it is essential that an objective pain assessment is undertaken, and that this is incorporated as part of the ongoing management plan. In addition to evaluating pain, it is essential that nurses (and other health workers) respond appropriately. When pain is identified or expressed it must be actively addressed.

Clinically inflicted pain was considered as part of the experience of having a wrist fracture treated. There were obviously issues for participants associated with pain

during treatment, although again the extent of this was not clearly voiced. What did emerge was that participants felt they coped better with their treatment if they felt well prepared. The role that health workers played here was obviously extensive, as empathy and good communication supported participants, and helped them to get through the procedure. Pain management strategies need to be comprehensive. Not only must nurses focus upon reducing the pain associated with treating fractures, they must recognise the individuality of a patient's experience and response to symptoms. Nurses' actions must be guided by the patient's response, and the specific needs of the patient must be identified and met.

Nurse/patient relationships can be threatened when nurses perceive themselves to be powerless to alleviate the patients' symptoms. These nurses may distance themselves from the pain that patients feel as a result of their actions, to protect themselves (Madjar, 1998; Nagy, 1998; 1999). Alternatively, nurses who feel confident in their ability to address patients' needs are more likely to allow themselves to become 'connected' to the patient, and establish a therapeutic bond (Madjar, 1998). It is obvious from this that nurses need to feel secure in their position as a 'causer of pain' and have confidence that everything that can be done for the patient is being done. This then gives nurses the reassurance needed to develop a therapeutic relationship that supports the patient through their experience.

It became evident in this study that relationships with health workers were an essential component of the patient's injury experience. It is a strong recommendation of this study that nursing education addresses issues related to clinically inflicted pain. This includes identifying the potential for nurses to develop internal conflicts with regard to their role as carers, yet causers of pain. Nursing education must assist nurses to develop skills and knowledge related to pain and pain management. Nursing education must emphasise the importance of developing therapeutic relationships with patients.

Patient preparation for treatment and discharge

Another issue that had an impact upon participants' perceptions of coping with treatment was the preparation they received. Education, and the role of health

workers in this, was significant. Caunt (1992) discusses the impact stress may have in exacerbating pain, and the importance of education in reducing stress and anxiety associated with procedures or treatment. Madjar (1998) also considered the importance of preparation, involvement and control in managing clinically inflicted pain.

It is evident that health workers have a major role in providing education and preparation for procedures, an aspect of treatment which will have a profound effect upon the participants' injury experience, and perception of well being. For this reason it is imperative that patients are well prepared for their treatment, and for the experiences they will encounter in the period following their injury. Many of the treatment procedures for wrist fracture have some clinical risk associated with them. To minimise this, clinical protocols exist that address safety aspects of fracture reduction treatment procedures. These protocols also need to address aspects of patient education, preparation and consent, to ensure that the patient is involved in the treatment, feels in control of their situation, and is able to anticipate what will follow.

Participants' recollections of their injury experience may be influenced by the passage of time and subsequent experiences, especially in the case of participants who develop a chronic condition as a result of their injury. Poirier and Ayres (1997) recognise that individuals' narratives interpret events within that person's present understanding of the events, and that these may differ from the interpretation that might have occurred at a different time. As individuals add new events to the evolving narrative these may alter the interpretation, but are more likely to be interpreted in a way that fits with the existing viewpoint.

Participants put life on hold during the period immediately following injury. The main reason for this was the disability caused by the injury and the treatment of the fracture, which involved being in a cast. Richmond (1997) explored some of the variables that can influence post injury disability, concluding that this was influenced by the availability of a social support network, and psychological distress. Social networks had the effect of providing emotional and physical support, having a twofold impact upon disability. While this may have some validity, one participant in this

study lived alone, and the limited social support available to her did not appear to have a significant impact upon her perceived disability. In fact, this participant felt she coped with this period particularly well, developing a number of strategies that enabled her to carry on with life.

Two issues appear to have had an impact upon post injury disability. These are the preparation participants had for their discharge, and the reception they received from health workers when they reported experiencing ongoing symptoms. Preparation of the patient for discharge needs to commence with the initial assessment of the patient upon arrival. At this time social support and potential needs can be identified, and appropriately addressed prior to discharge, including specific needs related to information and education.

Education is widely acknowledged as a key to self-care and the development of skills necessary for activities of daily living following discharge from a hospital stay (Brillhart & Johnson, 1997; Lough, 1996; Miller et al., 1998; Youngblood & Hines, 1992). Participants in this study experienced treatment over a space of hours rather than days, with a vast amount of new information needing to be processed, during a stressful period. Anxiety has been found to exist around a person's perception of their ability to cope following injury or illness (Lough, 1996; Miller et al., 1998). Given this scenario the importance of preparation for discharge and education has even greater significance. The timing and presentation of discharge information is particularly important, as participants are often overwhelmed by their situation, and confused by the information given.

The recommendation from this study is that health workers recognise the need of patients for information, time patient education to maximise the person's ability to absorb information, and present it in a way that meets the individual's needs. Regardless of the format in which information is presented, the important factors related to this are content, and patient understanding. The content of discharge information needs to prepare patients for symptoms, including how to manage these and at what stage advice or assistance might be required. The patient's understanding of this information needs to be confirmed, and patients need to be aware of when, where and how to obtain assistance.

It is essential that participants are treated as individuals, and have their individual needs identified and met, particularly in the period of cast treatment. Nurses must accept that their responsibility to the patient did not end with that patient going home. Participants returning with symptoms must be taken seriously, rather than dismissed, and every effort made to resolve these symptoms.

It was evident in this study that removal of the cast was considered a key milestone by participants, with the expectation that they would rapidly recover, or move towards regaining full use of their wrist. Some participants were surprised and disappointed when they did not achieve the progress they anticipated. To minimise the concern that can evolve for participants related to slow recovery, health workers need to provide greater clarity about the expected recovery pathway following wrist fracture and cast removal. This needs to include appropriate assessment, education about what to expect and what activities participants need to undertake to support a rapid return to full function. It is also evident that some participants need to be prepared, at this stage, for the possibility that their return to 'normal' may be a slow or incomplete process, with recovery goals having to be redefined.

Developing chronic pain

The experience of ongoing symptoms, specifically pain, during the period of cast treatment was evident in all participants who developed a chronic condition. While health workers often identified that the participant's experience of wrist fracture was evolving along a pathway that was outside the range of 'normal', this was seldom discussed with the participant, who remained unprepared for what was to follow. Participants did not reflect upon the symptoms they may have experienced during their cast treatment as a significant factor in the development of their ongoing pain following cast removal. Instead their focus was upon the interaction with health workers and the failure of these health workers to effectively resolve their symptoms or concerns. Participants often felt that health workers were too busy, or did not have time to focus upon addressing their needs. Nursing care can be a significant factor in influencing patient outcomes (Blegen, Goode & Reed, 1998; Pierce, 1997), and it is important that this is not affected detrimentally by inadequate nurse/patient ratios,

which will result in nurses having insufficient time to spend with patients to provide education, preparation and support. Instead it is essential that sufficient time be allocated for cast removal to ensure that a thorough assessment is undertaken, and that patients are well educated and well prepared for the period that follows.

The relationship between chronic pain and gender was considered by Howell (1994), who conclude that women felt a need to validate their experience of pain because of its invisibility and subjectivity. For the participants in this study who experienced chronic pain, the need for validation resulted in participants seeking advice from experts about the cause of the pain, and in some cases, relief from the pain. The search for answers about the cause of symptoms was often commenced by participants while still in a cast, as they presented on numerous occasions to health workers for assistance. The response that was encountered in these cases was frequently dismissive, with participants feeling they had not been heard, and were being categorised as 'troublesome' or 'neurotic' by health workers. This supports the findings of Howell (1994) who found that women with chronic, non-malignant pain, which was not easily categorised, were treated in a derogatory manner by health workers and consequently blamed themselves for their pain experience.

To ensure the health care experience remains a positive one for participants, even in the face of chronicity, it is imperative that health workers develop and maintain a therapeutic relationship. The key element in this is communication between patient and health worker, with listening as the most important component. Participants in this study who felt they could voice their concerns and be heard expressed satisfaction with their injury experience, whereas all participants who were dissatisfied with their experience voiced the belief that they had to struggle to be heard.

Working through disability

Because narrative interpretation reflects human meaning and values, the stories that emerge from narrative are liable to reflect contradiction. In this study this was evident as participants described putting life on hold during the period immediately following injury, but also focused upon the work they did to get on with life. Working back to normality commenced at the time of the injury, as participants began to strive for a

return to their pre-injury life. This was often a gradual or incomplete process as some participants resumed some aspects of life, but continued to suspend other activities. Participants began the work of returning to normality by striving to achieve a balance between being disabled, and regaining independence by developing strategies to support this.

Participants in this study felt that having goals to work towards was an important part of the wrist fracture experience, and was one that was not well managed, even when positive health care relationships existed. Setting realistic goals for participants as a part of their working back to normality requires the support of health workers who have an integral role in preparing participants for the work ahead. This requires health workers to be honest about the likelihood of participants achieving a 'full recovery', and informing them of what can be expected as part of this process. Setting goals that are realistic and that can be achieved is an important aspect of maintaining participants' trust in health workers.

As participants began to physically improve they also began to look forward with caution and optimism, considering the future, and what this might hold. Initially participants worked towards recovering their former state of normality, but in many cases, they were forced to consider and eventually accept a changed concept of normality. The degree of residual symptoms experienced varied, and the acceptance of these was generally determined by the extent of the participant's involvement in treatment decisions. In circumstances where participants had received a clinical diagnosis, or cause for their symptoms, and had been offered treatment, the degree of acceptance was quite noticeable, even when residual symptoms were significant. Alternatively, when the symptoms remained unexplained, or with no possibility of resolution, the degree of acceptance was limited. Of importance in these circumstances is the establishment of a relationship based upon trust, where participants can be confident that health workers would offer resolution of symptoms if this were possible. Without this patients may continue with the perception that their symptoms could be addressed if health workers took them seriously, or were more capable.

Recommendations

This was an exploratory descriptive study, with the objective of clarifying the issues that were significant for a selected group of individuals who experienced a specific injury. Having identified the issues for these participants, the intention of this study was to illuminate their impact on the participant's experience, and inform clinical practice, so that the care of individuals who experience this injury subsequent to the completion of the study might be influenced and improved. For this reason, a number of recommendations for clinical practice, education and research have been described. These recommendations focus upon the key issues identified as part of the wrist fracture experience, some of which have been discussed above:

For clinical practice:

- An objective pain assessment is undertaken with patients upon arrival within an emergency setting, followed up by regular reassessment.
- That nurses actively engage with patients, and focus upon pain management upon presentation, during procedures, and following treatment.
- That protocols for treatment procedures include appropriate preparation of the patient, focusing upon education, support and involvement.
- That preparation for patient discharge commence with complete assessment upon arrival, including evaluation of the patient's social support, and needs.
- That information be developed to support patients following their immediate treatment, related to pain, swelling, exercises, complications, what to expect, and how to obtain advice or assistance; and that patient understanding of information be confirmed.
- That an appropriate amount of time is allocated for the patient during the period when the cast is removed, to ensure effective assessment and education occurs.
- That health workers deal with patients in a more open and honest way, clarifying the anticipated recovery pathway for that patient.

For nursing education:

- That nursing education addresses clinically inflicted pain, and the issues that impact upon nurses causing pain for patients. The focus needs to be upon clarifying role conflict, enhancing nursing knowledge and understanding of pain management and the factors that create barriers to effective pain management;
- That nursing education incorporates concepts of effective communication, listening, and empathy, giving nurses the necessary skills to effectively engage with patients, and develop therapeutic relationships.
- That nursing education gives nurses and other health workers the necessary skills to work with patients experiencing chronic pain, including recognition and acceptance of this (often) invisible condition, while supporting the patient, and respecting their individuality.
- That nursing education addresses physiological changes that occur with fracture, and give nurses the skills and understanding necessary to ensure that patients' symptoms are able to be effectively identified and addressed.

For research:

- That further qualitative research should include field observation of the participant experience of undergoing treatment for wrist fracture.
- That issues associated with clinically inflicted pain in fracture reduction are explored.
- That the patient experience of wrist fracture be explored, and expanded to include the experience of patients who undergo surgery, or who require hospital admission.
- That the patient experience of other 'minor' orthopaedic injuries be explored qualitatively.

Limitations of this study

There are a number of limitations with regard to the findings of this study, which relate to the self-select, voluntary recruitment strategy, the small number of participants, the

time constraints imposed by this thesis being part of an academic study programme, and my own involvement.

A recruitment strategy implemented in this study has posed limitations, because the reliance upon participant self-selection has resulted in most participants being included because they had something they felt they wanted or needed to say. In general this was because there were elements of their injury experience that did not live up to their expectations, and that they felt they wanted to talk about, and share. This recruitment strategy has also posed limitations related to participant demographics. Because participation was voluntary representativeness of participants was not possible, and the findings of this study cannot be generalisable to other patient populations.

The small number of participants in this study has also posed limitations as categories were unable to be truly saturated. The participant sample size was constrained by the need to wait for participants to contact the researcher, and by the time limits imposed by the need to complete the research process within the academic timeframe. This resulted in participant recruitment, data collection, and data analysis being limited to an eight month period.

Conclusion

This study utilised qualitative descriptive research to explore the patient experience of wrist fracture, treated within an emergency department setting. The findings of this study have highlighted a number of issues that are of significance for individuals following wrist fracture as they work their way back to normality. The impact that health workers have on the experience has proved to be substantial, with many participants finding that their relationship with health workers was less than ideal.

Participants' experiences of wrist fracture involved periods of progression, relapse and stasis. In some cases this experience continued for several years, while other participants achieved a degree of normality in their lives within a relatively short time frame. As participants attempted to achieve normality they underwent a number of processes that are reflected through the data in Chapters Four to Seven. The

categories identified during this study were Getting Through Injury, Putting Life on Hold, Being in their Hands, and the core category, Working Back to Normality. This is the ultimate goal of participants and is the process that underpins activity throughout the period following injury.

What is evident from this study is that, while health workers might consider wrist fracture to be a 'minor' injury, it has the potential to have a devastating impact upon the individual's life. For this reason it is important that health workers enhance their understanding of the issues highlighted in this study, and work to establish positive therapeutic relationships based upon trust and understanding.

Appendix 1



The patient experience of wrist fracture treated in the emergency department/fracture clinic

In this research project I will be undertaking an exploratory study to identify the issues for patients who experience a distal radius (wrist) fracture which is set, or treated by closed reduction, in either the Emergency Department or Fracture Clinic. This research project is being undertaken as a component of a Master of Arts (Nursing) degree at Massey University, and has been approved by the Massey University and Wellington Regional Ethics Committees.

ARE YOU INTERESTED IN TAKING PART IN THIS STUDY?

Participation will involve:

- at least one audio-taped interview lasting between 1 and 2 hours
- reviewing the transcript of the interview and amending it if needed

To Be Eligible for Inclusion in this Study, you should be:

- aged over 18 years
- have had a fracture of your distal radius (wrist) set in the Emergency Department or Fracture Clinic of this hospital
- have been discharged home without admission

You will not be able to participate in this study if:

- you cannot communicate effectively
- you have had a surgical procedure to treat your wrist fracture
- you suffered other injuries at the time of your wrist fracture

Participation in this study is entirely voluntary, and will in no way influence your treatment or care at the hospital.

The Information Pamphlets below, will provide further information about this research.

If you are interested in taking part in this study you should contact the researcher:

Jane Potiki, ph (04) 971-2593/email: jane.potiki@paradise.net.nz

Appendix 2

The patient experience of wrist fracture treated in the emergency department/fracture clinic

In this research project I will be undertaking an exploratory study to identify the issues for patients who experience a distal radius (wrist) fracture which is set, or treated, by closed reduction in either the Emergency Department or Fracture Clinic. This research project is being undertaken as a component of a Master of Arts (Nursing) degree at Massey University.

ARE YOU INTERESTED IN TAKING PART IN THIS STUDY?

For more information you may contact the researcher, Jane Potiki, on:

Phone (04) 971 – 2597 / email: jane.potiki@paradise.net.nz

- have the tape turned off at any point in the interview
- suspend or discontinue the interview at any point
- ask any question you may have during the research project
- have your identity protected
- withdraw from the research at any point
- be given a summary of findings from the study, and access to the completed thesis or any other publication
- have the tape and transcript of your interview returned to you
- consult an independent Health and Disability Advocate about this research. You may contact an Advocate on the following number (0800) 433-638.

Benefits of taking part in this study

By participating in this study you will have the opportunity to speak about and share your experiences. Your experiences are a valuable source of information. You will be able to compare these experiences to those of others when the research is completed and the results known.

Other patients will benefit from your participation in this research, as nurses will increase their knowledge and understanding of what it is like for patients to experience this injury. With increased knowledge nurses will be better able to provide appropriate nursing care.

Risks of taking part in this study

No actual risk is anticipated for you if you participate in this study. However, should you find it difficult or stressful talking about your

experience we will stop taping the interview, until you feel happy to continue. Should you wish, the interview will stop, and you may withdraw from the research project. You will also be provided with details of independent support organisations, who may help you.

Exclusion from participation

To protect you from possible harm, the following exclusion criteria have been developed. If you fit into any of these categories, you will not be able to participate.

- patients who have been treated by the researcher (myself)
- patients who are unable to communicate effectively in English
- patients who experienced injuries other than a broken wrist, or were admitted

How to enroll in this study

If you are interested in participating in this study you may contact me in the following ways:

By letter: 38 Colchester Cres
Newlands, Wellington

By telephone: (04) 971-2593

If I am unavailable, you may wish to leave your name and a contact number on the answerphone.

By email: jane.potiki@paradise.net.nz

This research is supervised by:

Tony O'Brien, Senior Lecturer, School of Health Sciences, Massey University, Private Bag 11-222, Palmeston North, (06) 356-9099

Please feel free to contact me if you have any questions about this study, or require further information.

The patient experience of wrist fracture treated in the emergency department/fracture clinic

You are invited to participate in this research study.

which is undertaken in partial fulfillment of a Master of Arts (Nursing) degree at Massey University

by: JANE POTIKI

This study has been submitted to Massey University Ethics Committee and Wellington Regional Ethics Committee and has approval from both.

Aim of the study

The aim of the study is to explore the patient experience of wrist fracture, and to clarify and understand the issues for patients, so that nursing care will be improved.

The researcher

I am a registered nurse, working in a Fracture Clinic. I have no involvement in the treatment of patients at this hospital. This research is one component of my MA(Nursing) degree at Massey University. The information from this research will be written up as a thesis, and will be further disseminated in academic literature.

Justification for the research study

A large number of people have severe wrist injuries which need to be set and treated in plaster, but which do not require the patient to be admitted to hospital.

Very little is known or understood about the way this injury is experienced by patients. The issues that are considered significant by patients, and the way the person experiences their treatment, are important. Nurses need to know these things if they are to provide care for patients which helps them to recover from this injury.

Participation in the study

You are invited to participate in this study if:

- you are over 18 years old
- are able to speak English fluently
- have had a fracture of your wrist
- have had the fracture 'set' in either the Emergency Department or Fracture Clinic
- you were discharged following the injury (ie did not require hospital admission).

Participation is entirely voluntary. Staff of this hospital will not be informed of a patient's participation in the study. The decision to participate, or not, will not affect your treatment or care. Should you decide to participate in this study, there will be no cost to you, nor will you receive any payment.

What will be involved?

I wish to interview 15-20 people who have experienced a wrist fracture. This will involve an in-depth interview, taking approximately 1-2 hours, which will occur at a place of your choosing. Should you wish to have a friend or family member present during the interview, you may do so. During the interview you will be asked to tell me about your experiences following the injury to your wrist. I am interested in:

- how you felt,
- how this injury affected your lifestyle and independence,
- how you experienced the treatment of your wrist fracture, and
- whether any actions by nurses affected your experience.

The interview will be audio taped. Following the interview, I will type up the information contained on the tape. This will be returned to you for confirmation, or to make any change you feel are appropriate. You may delete any part of the interview you desire, and *may withdraw from the research project at any time*. Should you withdraw from the study, your interview data will be returned to you or destroyed.

If I need to clarify any information contained within the interview transcript I will contact

you by telephone, and may ask to conduct a second brief interview. The interview will be analysed using a technique of coding and comparison to identify common themes (or categories).

You will be allocated a pseudonym which will appear on all information related to your participation in this research. No information which may identify you will be on any tapes or interview transcripts. All interview tapes and transcripts will be stored in a locked file, and any information contained on computer will be in a secure, password protected file. My research supervisor is the only person other than myself or you who will have access to your interview information, but your identity will remain known only to myself.

The research project will last approximately 1 year. Following completion of the research project you will receive a summary of the findings, and be given access to the completed Thesis and any other publications which result. The audio tape and interview transcript will be returned to you at this stage. Should you not wish to receive these back they will be destroyed.

Your rights if you participate in this study

With regard to participation in this study, you have the right to:

- decide not to participate
- be interviewed in a place of your choosing
- have a support person present during the interview
- refuse to answer any question

Appendix 4

Consent Form



Massey University

COLLEGE OF HUMANITIES & SOCIAL SCIENCES

The patient experience of wrist fracture treated in the emergency department/fracture clinic

1. I have read and I understand the information sheet provided, and I have had the details of the above study explained to me. I have had the opportunity to discuss the study, and my questions have been answered to my satisfaction. I understand that I may ask further questions at any time.
2. I accept that I do not have to take part in this study, and that if I do participate, I may withdraw from the study at any time. I understand that my future or continuing health care will not be affected by participation, or withdrawal, from this study.
3. I understand that my participation in this study is confidential, and that no material which could identify me will be used in any publications emerging from this study.
4. I give my permission to be interviewed, in a place of my choice, and understand that I may have a support person present. I understand that the interview will be audio tape recorded, and that I may turn off the tape, suspend or discontinue the interview at any time. I understand that I have the right to decline to answer any particular questions.
5. I understand that the interview will take approximately 1-2 hours, and that the interview transcript will be returned to me for correction or alteration.
6. I agree to receive a summary of findings about this research study, and understand that I will be given access to the completed thesis report, or any other publication written about the study. I understand that publications will not be available for some time following my interview.
7. I agree that interview tapes and transcripts, will be returned to me or destroyed when the research report has been completed.

I have read the above consent form, and agree to participate in this study under the conditions set out above and in the information sheet provided.

Signed: _____ Date: _____

Name: _____

Appendix 5

Glossary

Angulation – movement of the fracture involving creation of an angled deformity, describing malalignment in degrees.

Articular – joint surfaces, ie where two bones connect and articulate (or move) against each other.

Conscious sedation – use of pharmacological anaesthetic agents to achieve a degree of sedation, while retaining a patient response.

Digital nerve block – an anaesthetic technique involving injection of lignocaine (or a lignocaine derivative) into the base of the digit in a circular pattern to numb the digit.

Displacement – movement of the fracture along a single plane, describing separation of the bone cortex in millimetres.

Distal radius/wrist – the distal end of the radius, within 2 centimetres of the radio-carpal joint.

Emergency Department setting – a private acute care facility; or the emergency department or fracture clinic of a public hospital.

Entonox – a gas anaesthetic, which is a mix of oxygen and nitrous oxide.

External fixation – a technique for holding a fracture in alignment, which involves inserting pins into the bones on either side of the fracture and connecting these with an external frame or bar across the fracture to distract it.

Fracture – fracture, with associated displacement, impaction or angulation.

Functional bracing – a form of immobilising a fracture that controls movement in some planes while allowing movement or joint flexion.

Haematoma block – a local anaesthetic technique that involves injecting lignocaine (or a lignocaine derivative) directly into the fracture haematoma.

High dose narcotics – use of narcotics (often in association with other drugs) to achieve a level of sedation which verges on unconscious (while still retaining a patient response)

Hospital admission – over night stay in an inpatient facility.

Internal fixation – a technique for holding a fracture in alignment, which involves making an incision and inserting screws, plates, wires, or pins across the fracture.

Ischaemic arm block – regional anaesthetic technique involving use of a tourniquet above the elbow, and injection of large doses of local anaesthetic into the forearm, allowing 'pain free' manipulation.

Local anaesthetic – anaesthetic agents injected locally into a specific nerve.

Manipulation – realignment of the fracture, generally achieved through pulling.

Metacarpal nerve block – similar to digital blocks, but injection into the nerve as it crosses the metacarpal / phalangeal joint.

Metaphysis – part of a long bone where the shaft (diaphysis) widens; proximal to the articular surface.

Neurovascular compromise – impairment of the nerve or blood supply to a limb, often associated with soft tissue swelling.

Percutaneous pinning – a technique for holding a fracture in alignment which involves inserting pins or wires through the skin, into the bone.

Radio-carpal joint – wrist joint, where the distal end of the radius articulates with the carpal bones.

Reduction (closed) – manipulation to reduce, or realign the fracture.

Regional anaesthetic – anaesthetic agents injected into a specific nerve group for the purpose of anaesthetising a limb, or region.

Shortening – a fracture pattern where there is loss of length of the long bone.

Traumatic amputation – amputation of a limb or digit as a result of direct trauma, as opposed to surgical removal.

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