



Interdisciplinary health team's experience in mobilising postoperative orthopaedic patients with altered mental status in a private hospital setting: a phenomenological study

Submitted by

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Authorship Declaration

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

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Jovie Ann Decoyna

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Abstract

Achievement of patients' pre-morbid functional level or improvement of their functional ability is a major postoperative goal for orthopaedic surgical patients. A change in a patient's mental state has a multifactorial aetiology which can impact patient outcomes and influence the delivery of care. Patient mobilisation is a role shared by both nurses and physiotherapists. Mobilising orthopaedic patients with altered mental status require both professional groups to work in close collaboration.

The study aims to enhance the understanding of the experience of nurses and physiotherapists in mobilising postoperative orthopaedic patients who have altered mental status using the hermeneutic phenomenological research methodology. It also seeks to explore the differences/similarities of their experience, describe any challenges encountered, interpret and give meaning to their experience, contribute to literature, and impact health practices. Three nurses and three physiotherapists were recruited through purposive sampling. Data was analysed using Burnard's 14 stages of thematic content analysis. Four main categories emerged from the study: altruism, interprofessional specialist practice, patient dynamics and challenges.

The findings of this study demonstrated that nurses and physiotherapists experience numerous challenges from both patient and resources related factors that influence the mobilisation of this patient group with the potential to impact the relationship between the two professional groups. Nurses and physiotherapists maintain a symbiotic relationship; their interprofessional collaboration enables achievement of mobilisation goals and their experience of the phenomenon is comparable. Patient and staff safety takes precedence over mobilisation. Participants believe that safety risks can be mitigated by having adequate resources, competence, and teamwork. The study recommends an evaluation of the resources and strategies required to ensure that this patient group are mobilised optimally to improve patient outcomes and experience.

CHAPTER 1 INTRODUCTION

Introduction

In an orthopaedic setting, nurses and physiotherapists work collaboratively to provide care to orthopaedic patients. Mobilisation is predominantly the physiotherapists' area of expertise while for nurses it is one of their many nursing activities. This thesis investigates the experience of nurses and physiotherapists in mobilising orthopaedic patients admitted in acute private hospital setting with altered mental status after surgery using the hermeneutic phenomenological research methodology. This methodology allows an in-depth exploration of the participants' experience of mobilising this patient group and their interaction in their work environment to reveal the meaning, differences and similarities between the nurses and physiotherapists' experience of the same phenomenon.

Context of the study

Throughout an individual's lifetime, musculoskeletal issues may arise that will require an orthopaedic procedure. An injury to the musculoskeletal system which is involved in locomotion can limit an individual's ability to perform the most basic activity of daily living. The orthopaedic specialty in general has developed over the years and many of these orthopaedic advances are products of war time experiences (Carter 2000; Demaio et al. 2012; Ramasamy et al. 2016; Schoenfeld 2011; Scotland 2014).

In an acute hospital setting where orthopaedic surgical procedures are performed, a return to patient's pre-morbid functional level or improvement of their functional ability is one of the major postoperative goals for this patient group aside from pain management. Achievement of postoperative orthopaedic patient's goals often require a collaboration of the multidisciplinary team which include but are not limited to orthopaedic surgeon, anaesthetist, orthogeriatrician,

nurses, physiotherapists, case managers, social workers and occupational therapists. Each performing a role during the orthopaedic patient's surgical journey.

A change in patient's mental state after surgery has a multifactorial aetiology which includes physiological causes, environmental factors, and side effects of medications including pre-existing cognitive impairment that may predispose or exacerbate a change in their mental status. An altered mental state can have an impact on patient outcomes and delivery of care such as during postoperative mobilisation in terms of increasing length of stay and safety risks as presented in more detail in Chapter 2 review of literature.

Mobilising a patient postoperatively is a role shared by both nurses and physiotherapists. Although mobilisation is physiotherapists' area of expertise, nurses who are at the bedside 24 hours a day often spend more time mobilising a patient since mobilisation is almost always needed to perform activities of daily living such as toileting, showering, dressing, eating, and moving from one place to another. Having a patient with an altered mental state makes the delivery of this care challenging because of the change in the patient's behaviour, perception, level of consciousness, or lack of insight.

The researcher has been working in the study setting, the orthopaedic ward, for four years and currently the clinical nurse specialist in the short stay orthopaedic ward for over a year. During this time, the researcher also lived the phenomenon of the study. What prompted the researcher's interest in conducting this study are the researcher's observation and experience of mobilising orthopaedic patients with altered mental status. The researcher's observation that this patient group are not mobilised often enthused the researcher to delve further into the experience of the health professionals involved in the patient's care. The researcher's particular experience where a physiotherapist refused to mobilise a patient having postoperative delirium because the physiotherapist thought the patient will not be able to follow instruction provoked a disagreement when the researcher who was looking after the patient at that time insisted the physiotherapist still needed to assess the patient first. This experience generated the researcher's interest in trying to understand what it is like for nurses and physiotherapists to mobilise this patient group.

Statement of the research problem

Providing care to patients with altered mental status can be challenging especially in the orthopaedic setting where the main goal is to help the patient achieve their functional goals. Various studies has been conducted to show that mobilisation is vital and different strategies were implemented to achieve this (Chong, Savige & Lim 2010; Egol & Strauss 2009; Jackman & Watson 2010; Klein et al. 2015; Ota et al. 2015). Nurses and physiotherapists work closely together in the orthopaedic setting to achieve patient goals but their experience in mobilising postoperative orthopaedic patients with altered mental status is yet to be explored. Exploring the meaning of their experience can help improve the delivery of care to this patient group and reveal a better understanding of the interaction of different disciplines in achieving patient care goals.

Purpose of the study, aims and objectives

The aim of the study is to enhance the understanding of the experience of nurses and physiotherapists in mobilising postoperative orthopaedic patients who have altered mental status in order to:

- Explore the differences and similarities of the experience of nurses versus physiotherapist on the phenomenon being studied.
- Describe the challenges faced by the participants.
- Interpret and give meaning to their experience.

Statement of the research question

What are the experiences of nurses and physiotherapists in mobilising postoperative orthopaedic patients with altered mental status in a private hospital setting?

The phenomenon identified in the study is the mobilisation of postoperative orthopaedic patients with altered mental status. The interdisciplinary health team may include other health professionals such as physicians, surgeons, occupational therapists, case managers, speech pathologists and dietitians but for this study it specifically pertains to nurses and

physiotherapists. Mobilising includes all aspect of mobilising from turning to performing pressure area care, sitting at the side of the bed, sitting out of bed, standing to walking with or without the aid of equipment. Altered mental status in this study is inclusive of patients with dementia, delirium, and other cognitive impairment such as patients with Alzheimer's and Parkinson's disease and other cognitive impairment from congenital causes. This study was conducted in a private hospital setting where the researcher is employed.

Significance of the study

Postoperative delirium is common in orthopaedic patients who belong to the elderly population (Thannhauser et al. 2009), however, no study was conducted exploring the experience of nurses and/or physiotherapists in mobilising patients with altered mental status. This will be the first study conducted on this topic. This study will contribute to literature by providing information on the challenges if any and insight of the interdisciplinary health team in mobilising this patient group since there is a limited literature available on this particular subject. It will shed light on the professional interaction between nurses and physiotherapists in the orthopaedic setting. It may also encourage further research that will focus on developing strategies or programs to better equip nurses and physiotherapists in addressing the mobility needs of postoperative patients with delirium, dementia or cognitive impairment, thus, impacting health education and practices.

Researcher's pre-understanding

An important part of the hermeneutic phenomenological method is for the researcher to become aware and to identify their pre-understanding of the phenomenon. This pertains to the pre-existing knowledge, opinion or beliefs of the researcher regarding the subject area and the phenomenon which were identified prior to data collection. This will ensure that the researcher's own pre-understanding is not imposed on the participants and influence the outcome of the study.

- Mobilising postoperative orthopaedic patients with altered mental status is challenging.
- There is a need to increase physiotherapy services in the ward.

- Patient safety is a major concern with this patient group because of the risk of falling due to patient's impulsiveness, lack of insight and inability to follow instructions.
- This patient group are not mobilised as often as they should be. This assumption is based on the researcher's observation only, no data was collected to quantify the time spent by nurses and physiotherapists mobilising this patient group or the time spent by patient mobilising or lying in bed prior to the study.
- Looking after this patient group requires additional time.
- Orthopaedic nurses works closely with a multidisciplinary team.

Definition of terms

Altered mental status- an abnormal change in mental state that can occur suddenly or over a prolonged period of time and can cause a change in behaviour, awareness, responsiveness and cognition (American College of Emergency Physicians 1999). This study includes patient with delirium, dementia and other cognitive impairment.

Interdisciplinary health team- comprise of two or more disciplines working together to provide patient care. It pertains to nurses and physiotherapists in this study.

Mobilise- includes sitting patient at the edge of the bed with feet on the floor, sitting in the chair, walking with or without assistance/ walking aid, transferring from bed to commode chair with or without the use of lifting machine.

Phenomenon – define as a fact or event that can be observed and studied (Merriam-Webster Online Dictionary 2016). The phenomenon in the study is the mobilisation of postoperative orthopaedic patients with altered mental status.

Summary of the thesis

Chapter 1 is the introduction of the study which describes the context of the study, research question, significance, aims and objectives of the study. This is followed by Chapter 2 which presents the available literature relevant to this study. Methodology employed in this study is discussed in Chapter 3 while the research method encompassing the research design, setting, recruitment of participants, data collection, data analysis, evaluating the quality of the study and ethical considerations are revealed in Chapter 4. Chapter 5 discloses the analysis of data and findings of the study and Chapter 6 is devoted to the discussion and interpretation of major findings, its significance to clinical practice and education, recommendations, limitations of the study and conclusion.

Summary of the chapter

This chapter outlined the context of the study, research problem statement, objectives, definition of terms and significance of undertaking this study. It also gives an overview of the study and provides a summary of the succeeding chapters.

CHAPTER 2 LITERATURE REVIEW

Introduction

This chapter presents the published literature available regarding the study. Multiple electronic databases have been utilised including PubMed, Cochrane Library, Cumulative Index to Nursing and Allied Health Literature (CINAHL), Joanna Briggs Institute EBP Database, Scopus as well as the World Wide Web.

The initial stage of the search consisted of finding the MeSH terms, CINAHL headings, key and alternative terms. The following are the terms that resulted from the initial search which were utilised to conduct a more extensive search of the databases: interdisciplinary health teams; multidisciplinary health teams; interprofessional collaboration; allied health; physiotherapists; nurses; altered mental status; mental status; delirium; dementia; cognition disorders; cognitive impairment; postoperative care; postoperative period; postoperative, surgical procedures; postoperative; orthopaedic procedures; mobilisations; ambulatory care; mobilising; walking; experience; and phenomenology. The terms were then combined using the Boolean operators AND and OR to enhance the search and obtain relevant articles. The search was narrowed down by perusing the title and abstract of each article. The last stage of the search involved examining the list of references of the selected papers to find articles that may have been missed. All published papers regardless of type of publication, publication date and language were included.

Published papers on the topics of hospitalised patients with delirium and/or dementia and the impact of mobilisation of patients in acute hospital settings abound in the literature. Several authors also published articles on the role of nurses and physiotherapists and their interprofessional collaboration in mobilising patients. The literature are further explored in this chapter. There are, however, limited papers exploring the experience of nurses and

physiotherapists in mobilising hospitalised patients and no studies found specifically on the experience of nurses and physiotherapists in mobilising postoperative orthopaedic patients with altered mental status when this review of literature was conducted.

Altered Mental Status

Change in mental status can be acute such as in delirium or chronic as seen in patients with dementia. It can vary in terms of severity and can be life threatening. Altered mental status is multifactorial aetiology (Han & Wilber 2013). In postoperative orthopaedic patients, patient's cognitive level is important since their participation is essential to achieve functional goals. A major postoperative activity is mobilisation to increase the patient's independence in performing activities of daily living safely and comfortably.

Delirium

According to the Diagnostic and Statistical Manual of Mental Disorders by the American Psychiatric Association (2013), delirium is a neurocognitive disorder characterised by disturbance in attention and awareness that develops over a short period of time and fluctuates during the day accompanied by disturbance in cognition.

Delirium is a frequent occurrence in medical and surgical patients admitted in various hospital settings impacting mortality, patient outcomes and length of stay (Siddiqi, House & Holmes 2006). A study conducted revealed a prevalence rate of delirium in an inpatient adult population in acute hospital at 25% (Meagher et al. 2014). It can occur up to 53 % postoperatively in the older population (American Psychiatric Association 2013).

Cognitive impairment

Cognitive impairment can be mild or major and is caused by various aetiologies. A major neurocognitive disorder can be generated by Alzheimer's disease, traumatic brain injury,

infection, Parkinson's disease, Huntington's disease, vascular disease and other multiple aetiologies (American Psychiatric Association 2013). Mild neurocognitive impairment have the same aetiologies as major neurocognitive disorders but symptoms are less severe with cognitive decline and deficits that do not interfere in the individual's independence to perform activities of daily living (American Psychiatric Association 2013).

The prevalence of mild and major cognitive impairment is up to 25 % and 30 % respectively by 85 years of age with dementia comprising the majority of major cognitive impairment (American Psychiatric Association 2013)

Interrelatedness of Postoperative Delirium and Early Mobilisation

The risks of postoperative delirium is higher in the elderly population undergoing orthopaedic surgery (Bin Abd Razak & Yung 2015; Mazzola et al. 2015; Muangpaisan et al. 2015; Thannhauser et al. 2009; Ushida et al. 2009; Zywiell et al. 2015). Postoperative delirium significantly impacts patient outcomes and health economics in terms of resources, length of stay, mortality, morbidity, and cost of hospitalisation (Gleason et al. 2015; Maniar et al. 2016; Raats et al. 2015).

Early mobilisation of hospitalised patient is recommended because of its numerous benefits in preventing delirium, reducing incidence of morbidity and decreasing the cost and length of hospitalisation (Chong, Savige & Lim 2010; Egol & Strauss 2009; Jackman & Watson 2010; Klein et al. 2015; Ota et al. 2015). In a randomised controlled trial conducted in patients in the intensive care unit (ICU), early mobilisation was effective in decreasing the duration of ICU associated delirium (Banerjee, Girard & Pandharipande 2011; Schweickert et al.2009). It is also essential in improving psychological and social outcomes of patients aside from its physical benefits (Kalisch, Lee & Dabney 2014). Early mobilisation also prevents other postoperative complications such as thromboembolism, pneumonia, urinary tract infection, sarcopenia, and pressure injuries (Singler et al. 2013). These studies demonstrate that early mobilisation improves patient outcomes and prevent postoperative complications.

A systematic review conducted on nonpharmacological interventions to prevent or mitigate delirium in acutely ill patients included early mobilisation as one of the main aspects of care that should be incorporated in any protocol created to manage delirium (Rivosecchi et al. 2015). Selected studies for this systematic review that included some form of mobilisation and creation of an environment and routine to promote sleep showed a benefit in reducing delirium (Rivosecchi et al. 2015). Other systematic reviews and meta-analyses on preventing delirium using multicomponent interventions which included physical or occupational therapy claimed that this approach is an effective preventative measure against delirium (Martinez, Tobar & Hill 2015).

Nurses and Physiotherapists Role in Mobilising Orthopaedic

Based on the researcher's observation in her current practice, patients who have altered mental status are not mobilised as often because of their decreased ability to follow instructions and increased risk of falling. There are no studies found that specifically provide evidence to support this personal observation involving this specific patient group. However, a qualitative study on nurses' perception in mobilising hospitalised older adults revealed fear of patient falling as one of the sub-themes identified that may hinder promotion of mobilisation (Boltz, Capezuti & Shabbat 2011).

Studies also show an increased incidence of reduced mobility in hospitalised patients that contributes to their functional decline (Brown, Friedkin & Inouye 2004; Callen et al. 2004; Sourdet et al. 2015). In an observational study which involved measuring the amount of time spent by hospitalised patients lying, sitting, walking or standing, even without an altered mental status, older people generally have decreased mobility when hospitalised despite their ability to mobilise independently prior to admission (Brown et al. 2009). Another observational study on the frequency and duration of nursing care devoted to mobilising elderly patients showed that limited amount of time was dedicated to ambulating patient apart from standing and transferring (Doherty- King et al. 2014). A grounded theory study by Kneafsey, Clifford & Greenfield (2013) identified a category called 'care to keep safe' where nurses primarily focused on keeping the patient safe such as mobilising patient to prevent pressure area injuries and falls more than the rehabilitation goals for the patient.

A study that investigated the role of orthopaedic nurses in postoperative ambulation of orthopaedic patients (patients with dementia and Parkinson's disease were excluded in the study) revealed that majority of patients were first mobilised by nurses as compared to physiotherapists and also stated that courses on rehabilitation are not included in most nursing curricula, thus, nurses lack training and preparation to implement rehabilitation for orthopaedic patients (Lin et al. 2013). In the absence of other health professionals to provide the needed service, nurses usually undertake the roles or part of the role without the formal education and training required for these professions such as physiotherapists and occupational therapists (Santy 1999). A nurse-driven mobility protocol implemented to provide strengthening exercises and ambulation to hospitalised patients highlighted the important role of nurses in maintaining patients' functional status and reducing falls (Padula et al. 2011).

Physiotherapists are experts in optimising physical function and they perform a primary and crucial role in achieving rehabilitation goals of postoperative orthopaedic patients. A national survey conducted in Australia revealed that overall the physiotherapy services outside business hours are limited in both public and private setting; comparison between the private and public sector and between the acute and subacute facilities revealed that private hospitals and acute metropolitan hospitals offer more physiotherapy services outside business hours as compared to public hospitals and sub-acute facilities (Shaw, Taylor & Brusco 2013).

Orthopaedic patient outliers who are treated in other wards resulted in a longer length of stay as compared to those in the orthopaedic wards which reveals the importance of the collaborative role of orthopaedic nurses and physiotherapists in treating this patient group (Hommel et al. 2008).

Interprofessional collaboration between nurses and physiotherapists

Interprofessional collaboration entails understanding of the role, language and ideology of the other to form a cohesive partnership that is needed in delivering patient care. This is

undoubtedly a must between nurses and physiotherapists in the orthopaedic setting. Nurses recognise the need for specialist service provided by physiotherapists to achieve patient's rehabilitation goals (Yamano, Matsunaga & Akiyama 2009).

Interprofessional collaboration between nurses and physiotherapists has many benefits in terms of decreasing length of stay in hip surgery patients (Pape et al. 2013). Multidisciplinary collaborative approach for hip fracture patients have improved communication between the members of the team, enhanced the collaboration experience and improved patient care (Christie et al. 2015).

Earlier studies suggest a blurring of the interprofessional boundaries between physiotherapists and nurses in the orthopaedic setting with physiotherapist playing a major role in pain management of musculoskeletal injuries and nurses performing practices that are deemed within the physiotherapy domain (Santy 1999). Whatever the differences between the two professions, both are committed to the care of patients with musculoskeletal disorders in the orthopaedic specialty and only through collaboration can they deliver safe quality patient care.

Summary

Patient's mental state and interprofessional relationship between nurses and physiotherapists impact the delivery of care to the postoperative orthopaedic patients. Early mobilisation of postoperative orthopaedic patients is paramount as demonstrated by the extensive research conducted on its benefits and various mobilisation strategies developed (Handoll, Sherrington & Mak 2011), however, qualitative studies on the experience of nurses and physiotherapists in mobilising postoperative orthopaedic patients with altered mental status in any health care settings were not found when this review of literature was conducted.

CHAPTER 3 METHODOLOGY

Introduction

The methodology used in this study is grounded on the philosophy of hermeneutic phenomenology. The background of phenomenology, the hermeneutic phenomenological approach and the appropriateness of this methodology for the study are presented in this chapter.

Background of phenomenology

Phenomenology has evolved over the centuries. It originated from Plato's allegory of the cave, 5th century, which posits that what an individual perceives as the reality is only a shadow of the phenomenon of the actual reality (Converse 2012). Phenomenon is any occurrence, situation or thing that can be observed or experienced. Immanuel Kant described phenomenon in the 18th century as something that occurs only in the mind, thus, it cannot be observed (Converse 2012). In the 19th century, Georg Wilhelm Friedrich Hegel viewed phenomenon as a way to study how human consciousness translates into knowledge that can be revealed (Converse 2012). Franz Brentano, a psychologist, developed the concept of phenomenon to include the principle of intentionality which asserts that thoughts are connected to objects and inner perceptions have meaning (Dowling 2007). This principle of intentionality was in turn used by Edmund Husserl to develop phenomenology as a form of scientific inquiry.

Phenomenology is both a philosophy and research methodology that aims to explore and give meaning to a lived experience (Dowling, 2007; Sloan & Bowe 2014). A lived experience is considered a phenomenon that can be investigated to reveal its attached meaning by the individual living the experience. Although Edmund Husserl is considered the founder of phenomenology, other authors also shaped the philosophy of phenomenology.

The works of Franz Brentano and Carl Stumpf were considered the Preparatory phase which marks the development of the concept of intentionality which is the ability of the mind to form a representation; Edmund Husserl's and Martin Heidegger's works constitute the German Phase which highlights the concept of phenomenology as a philosophical method, essences, bracketing, existential and hermeneutics to study the meaning of lived experiences (Jones 2001). The contributions of Gabriel Marcel, Jean-Paul Sartre and Maurice Merleau-Ponty formed the French Phase that saw the application of phenomenology as a methodology in understanding the human experience in various disciplines such as in sociology, philosophy, politics, nursing and anthropology (Jones 2001).

Phenomenology has three main school of thoughts: Husserlian (descriptive), Heideggerian (interpretive or hermeneutic) and Dutch or Utrecht School (descriptive and interpretive) (Mapp 2008). Husserl's descriptive phenomenology is epistemological in nature and requires the researcher to separate thoughts, emotions and preconceptions called bracketing to be able to focus on the pure essence of the phenomenon and with the goal of understanding the experience by describing the phenomenon (Converse 2012). On the other hand, Heidegger's interpretive phenomenology also called hermeneutics phenomenology (Tuohy et al. 2013) follows the ontological approach (Smythe et al. 2008). This approach focuses on the meaning of 'being' and considers the world as an essential part of our understanding of the meaning of being (Schneider et al. 2013). The Dutch school of phenomenology combines both descriptive and interpretive approach applied mainly in social science and was developed by Buytendijk, Van Lennep, Van den Berg, Strasser and Linschoten (Mapp 2008).

Alternatively, these three main school of thoughts are also grouped under Transcendental, Hermeneutic, and Existential phenomenology (Kafle 2011). Transcendental refers to the work of Husserl where one's personal opinion can be suspended (bracketing) to discover the essence of an experience and arrive with a pure description of a phenomenon (Kafle 2011). Hermeneutic refers to the work of Heidegger, Gadamer, Ricoeur and van Manen where the focus is unveiling the meaning of a subjective experience through life world stories and considers the description process itself is an interpretive process which is achieved using the hermeneutic cycle (Kafle 2011). Existential pertains to the movement in the 20th century and

developed by Pascal, Kierkegaard, Marcel, Sartre, Merleau-Ponty which rejects Husserl's notion of complete reduction and believes that the meaning of an experience can only be revealed by the individual who is involved in the phenomenon and described as perceived by the person's own consciousness (Mapp 2008; Kafle 2011).

Hermeneutic phenomenological approach

Hermeneutic phenomenology is the phenomenological approach used in this study. The term hermeneutics is derived from the Greek word 'hermeusin' which means to understand or interpret (McConnell-Henry, Chapman & Francis 2009). Hermeneutic phenomenology was introduced by Heidegger and was further developed by Hans-Georg Gadamer, Paul Ricoeur and Max van Manen (Kafle 2011).

The philosophical concepts of dasein, fore-structure, time, and space was expounded by Heidegger. For Heidegger, the dasein, a German verb meaning 'to exist' or "being-in-the-world" is embedded in the context of the situation (Schneider et al 2013; Tuohy et al. 2013). He developed the concept of hermeneutics to take into consideration the researcher's preconception of 'being-in-the-world'. Heidegger claimed that the nature of being is a never-ending circular process, thus, the pattern of understanding the meaning of being is also circular which he conceptualized as the 'hermeneutic circle' (Converse 2012). The researcher is therefore required to be aware of their own pre-understanding of the phenomenon before entering the hermeneutic circle. Fore-structure also referred to as pre-understanding already exists and is revealed through interpretation; this pertains to the awareness and experiences that both the researcher and the participants already have prior to the study (Mackey 2005). To develop an understanding of the experience, time is an important concept to consider. The person is situated temporally in a particular time in line with the concept of past, present and future; a rich description of how time relates to the person's experience is required in the study (Mackey 2005). Space pertains to how the person situates self in space, not in geographical sense but what concerns or experiences are brought to the fore and those that are not obvious because it is situated far from the person's awareness (Mackey 2005).

Hans-Georg Gadamer in the 1990s contributed to the development of the concept of hermeneutic circle (Converse 2012). Gadamer, just like Heidegger claims that understanding stems from and through our pre-understanding of the lifeworld (Earle 2010). He also agrees with Heidegger's concept of *dasein* and the need for hermeneutic circle to interpret lived experiences (Earle 2010). However, he further proposes that within the hermeneutic circle, there is a 'fusion of horizons' between the interpreter and the phenomenon (Dowling 2007). Every individual possess a horizon that's influenced by his/her historical background. Fusion of horizons occur when the horizon of the narrator fuses with the interpreter's vantage point and influences and expands the interpreter's range of vision (Walsh 1996).

Paul Ricoeur, a French Philosopher and one of the major contributors to hermeneutic phenomenology in the 1990s claims that the interpretation of the text does not only include understanding the narrator's intention but also the meaning of the text itself (Charalambous, Papadopoulos & Beadsmoore 2008). According to him, interpretation allows actualization of the meaning of the text in a process he calls "appropriation" through which the narrator can begin to understand himself which can also expand the interpreter's horizon (Charalambous, Papadopoulos & Beadsmoore 2008). Ricoeur acknowledges that values, beliefs and culture of the narrator and the interpreter can influence the interpretation of the text (Charalambous, Papadopoulos & Beadsmoore 2008). Ricoeur identified narrative as the form in which a human experience can be presented and that this should be integrated into the wider interpretive understanding (Charalambous, Papadopoulos & Beadsmoore 2008).

Max van Manen who is largely involved in phenomenological and pedagogy inquiry asserts that hermeneutic phenomenology does not have a prescribed set of rules or fixed steps to follow in conducting this type of research (van Manen 1997). However, it generally involves an interplay of the following research activities: commitment to the phenomenon of interest, oriented stance toward the phenomenon, reflecting on the derived themes, investigating the experience as it is lived, describing the phenomenon through writing and rewriting, and consideration of parts and whole (Earle 2010; Kafle 2011). 'Description' is a term used by van Manen to include both interpretive and descriptive process of understanding a phenomenon since for him an experience is interpreted using text or other symbolic forms (Earle 2010). He suggests that "bracketing" prior knowledge of the phenomenon is not necessary but stresses

the importance of making the prior knowledge explicit (Earle 2010). He also highlights the use of anecdotal narrative to bring about the participants' lifeworld stories (Kafle 2011).

The methodology employed in this study has taken into consideration the above description and interpretation of hermeneutic phenomenology. This methodology fits the research question and the objectives of the study of exploring the differences and similarities, interpreting and giving meaning to the nurses' and physiotherapists' experience of the same phenomenon. The researcher works in the study setting and has previous and ongoing experience of mobilising postoperative orthopaedic patients who have altered mental status, hence, pre-understanding of the phenomenon already exist. This is explored by the researcher prior to interviewing participants and made explicit in the data analysis. In hermeneutic phenomenology, language in the form of text or other symbolic form is given emphasis since it is through language that the meaning of 'being' is understood. With hermeneutic phenomenology, interviewing nurses and physiotherapists who are living the phenomenon and transcribing those conversations into text are initial steps in the interpretation of the phenomenon. As the researcher immerses themselves into the hermeneutic circle of interpreting the meaning of the experience, writing and rewriting themes that arise from the text and drawing back to look at the parts in relation to the whole and vice versa, "fusion of horizons" and "appropriation" occur and subsequently, an understanding of the phenomenon being studied.

Establishing the trustworthiness of the study

In qualitative studies, the basic principle for assessing the quality of the research is trustworthiness which is parallel to rigour in quantitative research, hence, the terms reliability and validity are not used when assessing the quality of this study (Schneider et al. 2013). Instead, several authors have proposed different criteria to evaluate the trustworthiness of qualitative research. Guba and Lincoln (cited in Kafle 2011) initially suggested four criteria for qualitative research: credibility, auditability, fittingness and confirmability; authenticity was later added as the fifth criterion in 1994 (Elo et al. 2014). De Witt and Ploeg (2006) proposed five criteria for interpretive phenomenological research: balanced integration, openness, concreteness, resonance and actualization.

van Manen (cited in Kafle 2011) enlisted criteria specific for hermeneutic phenomenological research: orientation, strength, richness and depth while Langdridge (2007) proposed analytical rigor, persuasive account and participant feedback. Max van Manen's criteria (cited in Kafle 2011) was used by the researcher in establishing the trustworthiness of this study as it is more specific to hermeneutic phenomenology:

Orientation

According to van Manen (cited in Kafle 2011), the researcher will need to be involved in the world and stories of the participants. The researcher is deeply immersed in the research participants' world as the researcher herself is living a similar phenomenon. The familiarity of the researcher with the study setting and the words or terms used by the participants in the account of their experience helped in understanding what the participants are referring to in their stories. The researcher decided not to write notes during the interview to avoid distracting the participants and for the researcher to focus on listening intently to the participants. Notes were written right after each interview session to account for the researcher's experience of the interview, reflections, non-verbal cues from the participants and a general description of the interview session. The researcher spent time listening to the audio recordings and reading the interview transcripts numerous times to draw out the meaning that the participants want to reveal behind their words.

Strength

Strength is shown in the persuasive ability of the text to represent the intended meaning of the experience as expressed by the participants in their stories (Kafle 2011). The transcript of the audio recordings were returned to the participants for review to ensure that the account of their experience is accurate and were also given the opportunity to add whatever they failed to say in the interview that is relevant to their lived experience of the phenomenon. The strength of this study was ensured by validating the categories and evaluating the categorization method first by the researcher's two supervisors and then by two participants. The researcher also consulted a qualitative researcher with background in phenomenology who was not involved in the conduct of the research study during the data analysis who provided feedback on the way the chapters are written and the presentation of the results. Transcripts were read again to ensure congruence of the final list of categories with the transcript.

Richness

Richness relates to the aesthetic quality of the text that articulates the meaning of the experience based on the participant's perspective (Kafle 2011). Two university research supervisors have given their feedback constantly during every step of the research process particularly during the data analysis, interpretation and thesis writing. The thesis writing involved a series of writing and rewriting after each feedback until words were exhausted and the intended meaning of the participants were expressed in the text in a clear and succinct manner.

Depth

Depth refers to the ability of the text to create an impression and illustrate the participants' best intentions (Kafle 2011). The researcher went through an extensive process of rereading and rewriting, immersing herself in the hermeneutic circle and following Burnard's 14 stages of thematic content analysis which is outlined in the succeeding sections to ascertain the most appropriate and precise words that will convey the meaning of the participants' lived experience based on their stories. The hermeneutic phenomenological methodology was applied faithfully in the data collection using hermeneutic interviewing and use of hermeneutic circle during the data analysis and interpretation.

Summary

In summary, the philosophy and methodology utilised in this study is a hermeneutic phenomenological approach which was refined by Heidegger, Gadamer, Ricoeur and van Manen. This methodology seeks to understand and interpret the participants' lived experience of the phenomenon through the interpretation of words or texts that are collected from the rich description of the experience. It acknowledges the pre-understanding of both the participants and the researcher that are considered in the interpretation of the phenomenon.

CHAPTER 4 METHOD

Introduction

This chapter outlines the methods used in the study. The methods adhere to the tenets of hermeneutic phenomenological approach in interpreting and understanding the experience of nurses and physiotherapists in mobilising postoperative orthopaedic patients with altered mental status. The details of methods used are described in the succeeding texts.

Research design

This study follows the qualitative paradigm and the interpretive approach which occurs within the naturalistic concept. Phenomenology is an interpretive research approach that has several schools of thought and hermeneutic phenomenology has been derived from this. The hermeneutic phenomenological approach used in this study entails the interpretation of a phenomenon through a rich description of the experience by the participants. The nurse and physiotherapist participants who were recruited through purposive sampling were interviewed about their experience of the phenomenon. The audio recording from the interviews were transcribed in text and analysed using Burnard's thematic content analysis and hermeneutics approach to bring about the meaning and understanding of the phenomenon (Burnard 1991).

Study setting

The study was conducted at an acute metropolitan private hospital in Australia. The hospital has two separate orthopaedic wards (short-stay and long-stay) which provides care for both orthopaedic and neurosurgery patients. There is no exact data on the ratio of orthopaedic and neurosurgery patients admitted on the ward but most orthopaedic patients who are older and have major orthopaedic surgeries such as joint arthroplasty, revision joint arthroplasty, open reduction internal fixation for fractured neck of femur, etc. are allocated in the long stay ward.

The short-stay ward accommodates orthopaedic patients who have longer length of hospitalisation only if the long stay ward is filled to capacity. Nurses from the short-stay ward are rostered in the long-stay ward when the short-stay ward is temporarily closed during holiday periods. Although nurses on both wards encounter and live the phenomenon, nurses in the long-stay ward encounter more postoperative orthopaedic patients who experience delirium and/or have a pre-existing cognitive impairment as compared to the short-stay ward nurses. Physiotherapists are rostered to provide service in both long stay and short stay wards, hence, the invitation to participate in the study was extended to all physiotherapists rostered in both orthopaedic wards who meet the inclusion criteria.

Participants

The sample size was determined based on the different sample size suggested by various qualitative researchers (Schneider et al. 2013) and also considered the limited academic timeframe given for this research. A total of six participants were included in the study, three physiotherapists and three nurses. Participants with different years of work experience ranging from novice to expert (Ulrich 2011) were selected to ensure a broad range of experience was included. A participant with less years of practice may experience the phenomenon differently and attach a different meaning to their experience as compared to a participant who had lived the phenomenon longer, thus, including participants with a wide range of experience is important to better develop an understanding of the phenomenon. There were more females than males in both populations, which matched the gender distribution of the study. Equal proportion of male and female participants was not included in the criteria as this did not represent the population. The participant's experience in the actual study setting was specifically considered in the recruitment since different health settings (public or private, acute hospital or rehabilitation facility), staffing and nurse-patient ratio may affect participant's experience of the phenomenon.

Inclusion Criteria

- Registered or Enrolled Nurses/ Registered Physiotherapists
- have mobilised postoperative orthopaedic patients with altered mental status at least twice and worked at least 1 year in the study hospital's orthopaedic wards

Exclusion Criteria

- managers of both wards and physiotherapy department
- student nurses/physiotherapists
- newly employed nurses/physiotherapists who are still supernumerary

Recruitment strategies

The selection of participants was conducted through purposive sampling. Nurse participants who met the criteria were recruited initially from the long-stay orthopaedic wards where most orthopaedic patients with altered mental status are admitted. The researcher is the clinical nurse specialist in the short-stay orthopaedic ward; if additional participants from the short-stay ward were needed, the recruitment of these group of participants would have been conducted by another colleague from a different ward specialty. One group of physiotherapists provide service to both wards, thus, participants were selected from those physiotherapists.

A letter was sent to the ward and physiotherapy managers informing them of the research project (Appendix 1) which also included a request to distribute the participant information sheet (Appendix 2) to prospective participants with the details of the research project indicating that participation is voluntary and participants can withdraw anytime during the research process without repercussions. The letter to the managers indicated the participant inclusion criteria to assist them in distributing the patient information sheet to eligible participants. A flyer was also posted in the ward's handover room and the allied health office about the recruitment of participants and an invitation to participate if inclusion criteria are met. Eligible participants were given a week to consider the invitation. After one week, the researcher personally approached those who contacted her to express their interest to participate via email or in person and verified that all the inclusion criteria were met before the participant signed the written informed consent (Appendix 3). The participants who expressed their interest have experiences ranging from expert to novice which was appropriate for the researcher's objective of obtaining data from a wide range of experience. The interview session was arranged after signing the consent. In an instance where more than one prospective participants in either group with the same years of experience expressed interest to participate, names were written on a piece of paper and drawn to ensure that they were all given an equal chance to be selected.

The interviews were conducted outside of the participants' work hours. Date and time of interview was arranged based on the participant's most convenient time. Venue was pre-booked by the researcher using one of the hospital's meeting rooms but participants were given the option to have the interview at their preferred venue. A reminder of the interview session was sent to the participant's work email address a day prior to the interview date as well as a reminder that they can withdraw their participation anytime.

Data Collection

To maintain congruence with the philosophy and methodology underlying this study, hermeneutic based interviews were used to collect the data. This involves conversation between the researcher and participant, active listening and questions and answers to seek clarification. Clarification questions were used not to seek the meaning of the experience but to seek the meaning in the language (Geanellos 1999). For this study, semi-structured interviews were utilised to collect data over a two-month period. The pre-determined questions asked from each participants were broad and non-leading questions which prevented the researcher from imposing her own pre-understanding of the phenomenon. Follow up questions were also asked based on the participants initial answer to obtain a more detailed description of their experience of the phenomenon. The participants were also asked if they have anything else to add aside from what has already been said in keeping with Gadamer's concept where 'the essence of the question is the opening up and keeping open possibilities' (Gadamer 1979, p, 266).

The researcher and the participant met at an agreed date and time in one of the conference rooms in the hospital that was booked in advance (Appendix 4) which prevented interruption and ensured a quiet environment conducive for the interview. The interview started with this question: Tell me about your experience of mobilising a postoperative orthopaedic patient with altered mental status such as those with delirium, dementia, confusion or cognitive impairment. The interviews took between 27-43 minutes and the conversation was audiotaped by two separate recording devices. The other recording device served as a backup in case of device malfunction. Data saturation was evident during the sixth interview of the participant. There were no new themes that were revealed that were not present in the previous five interviews.

The interview recordings were transcribed by an academic research transcriptionist. A copy of the transcribed interview was emailed to the participant's work email address for validation, addition of thoughts or reflections and to ensure trustworthiness. The transcribed interviews were labelled with the date, time and with the assigned letters for each participants to maintain anonymity.

Data Analysis

There are several philosophical ideas that influenced the researcher's analysis of data. The researcher's own experience, knowledge and realities cannot be completely detached when interpreting the meaning of the experience or finding the 'essence' behind the written words (Langdridge 2007; Smith, Flowers & Larkin 2009.) The concept of hermeneutics was utilised since language is used in the study to understand and reveal the "being" (Sloan & Bowe 2014). The process of data analysis involves the use of the hermeneutic circle (Debesay, Nåden, & Slettebo 2008). Heidegger's four philosophical concepts was taken into account, not only during the data collection, but also during the data analysis to maintain the precepts of hermeneutic phenomenology.

Burnard's 14 stages of thematic content analysis guided the steps of data analysis. The steps were performed electronically instead of paper-based but still followed the stages sequentially: (1) notes written down after each interview with the participant which helped in the process of categorizing; (2) transcripts were read and general themes were identified; (3) transcripts were read again and categories were assigned that describe the content in a process called open coding; (4) list of categories were reviewed and grouped together under major headings; (5) the new list of categories and sub-categories were re-evaluated to eliminate similar categories; (6) two of the researcher's colleagues were invited to create their own list of categories without sighting the researcher's list; modifications were made after discussion to enhance validity of the process of categorizing; (7) transcripts were read again to ensure congruence with the final list of categories and alterations were made as necessary; (8) parts of the transcript that has been allocated a category or subcategory were highlighted in various corresponding colours; (9) copies of transcripts were saved electronically, one copy will be kept for reference and also to ensure that the context is not lost; highlighted parts of the transcripts were copied from the

text; (10) the highlighted transcripts were pasted under the appropriate categories; (11) two participants (one nurse and one physiotherapist) were asked to evaluate the categorizing method to ensure validity and adjustments were made as needed; an external qualitative researcher with phenomenological background was also consulted regarding the categorisation method and presentation of data (12) all sections were saved; copies of the original transcription and the audio recordings were made available when writing was commenced; (13) writing commenced for one section after the other; (14) the researcher wrote the findings using the original transcript as examples to illuminate the themes and also wrote a separate section that links the findings to relevant literature (Burnard 1991).

The process undertaken during the data analysis is presented in diagram 1 designed by the researcher using Burnard's stages of thematic content analysis. The following diagram demonstrates a repetitive reading of the transcript during the data analysis to ensure that categories represent the transcript. Before coming up with the final list of categories, the researcher went through a process of re-evaluating the themes, subcategories, and categories. Four individuals (two university research supervisors, one physiotherapist participant, and one nurse participant) validated the categories and the categorisation method. A researcher with phenomenology background and experience of supervising researchers was also consulted before the categories were finalised.

The process which the researcher used to arrive at the final list of themes is called "funneling" (Burnard 1991). During the identification of categories and subcategories, any theme that stands out from the data collected from nurses and physiotherapist that differentiates their experience of the phenomenon with the other was indicated in the data analysis and interpretation. This ensured that differences, aside from similarities of the experience, were explored for comparison.

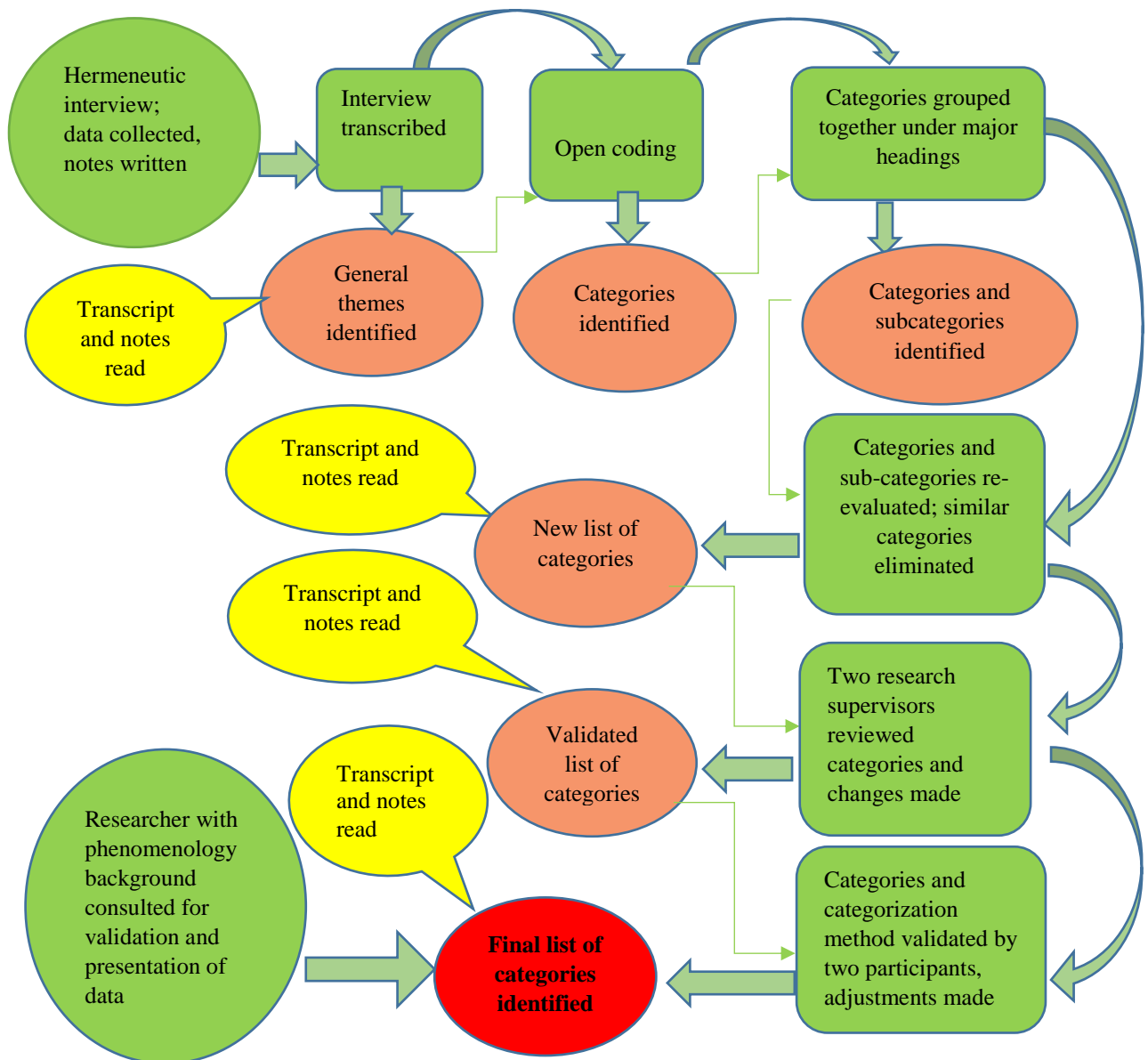


Diagram 1: Process of data collection and analysis

Ethical considerations

Research ethics approval to conduct this study was obtained from the hospital’s research ethics committee with approval number CHREC 04-09-11-15 (Appendix 5). The University of Adelaide Research Ethics Committee was notified of the approval obtained from the hospital’s research ethics committee and acknowledgement of receipt was received by the researcher, separate ethics approval from the university was not required since the hospital’s ethics

committee is a participant of the National Mutual Acceptance for multi-centre research projects across Australia.

Informed consent

Written informed consent was obtained by the researcher after ensuring that the participants received the participant information sheet and expressed full understanding of all the information about the study, satisfied with the answers to their queries, competent to consent and all elements of informed consent were met.

Privacy and Confidentiality

The researcher upheld the principle of confidentiality as stipulated by law and/or ethical principles. Words or any other identifying data that can be traced back to the participants or any other individual or the organisation were deleted when the interviews were transcribed. Letters/ numbers were assigned to each participant to maintain anonymity, privacy and confidentiality.

Storage of Information

During the research project, the identifiable data including the audio recordings were saved in a password protected external hard drive and stored in the hospital's locked facility. De-identified information were stored in the principal investigator's password protected laptop which was only accessed by the principal investigator for easy accessibility during data analysis and was stored in a locked drawer in the principal investigator's residence when not being used. A copy of all de-identified data was stored in a separate password protected external hard drive for back up and all written or printed data locked in the same drawer. During the data analysis, two of the researcher's colleagues and two participants had access to the de-identified data to validate the themes. Access to the data was permitted until validation was completed.

After the project, all written/printed data were scanned and saved on the hard drive. Written/printed data were disposed in the secured confidential bin in the hospital to be shredded. Copies of data in the principal investigator's laptop were permanently deleted except for the final thesis paper which will be submitted to the University of Adelaide. The hard drive with all the electronic data was stored in the hospital's locked facility by the research department at the end of the study. Data will be destroyed permanently after five years from date of publication or data collection if paper has been published from this project, otherwise, data can be permanently destroyed after 12 months after completion of project as recommended by the Australian code for the responsible conduct of research (National Health and Medical Research Council 2007).

Participant harm

Participants' emotional and psychological distress were considered when participants were narrating an experience that might cause distress. Before the start of the interview, the participants were reminded that they can stop the interview session for any reason without ramifications, reschedule the interview or completely withdraw from the study if they find the interview psychologically disturbing in keeping with the principle of beneficence and respect for autonomy. Although psychological stress that will require intervention during the interview session is very unlikely, if required, the researcher had planned to make a referral to pastoral services offered in the hospital by contacting the pastoral practitioners rostered on that day if participant consents to the referral. None of the previously mentioned services needed to be activated during the data collection.

Withdrawal from study

Ability to withdraw participation without penalty or repercussion at any time was reiterated in the participant's information sheet, when confirming the interview venue, date and time and prior to the interview.

Conflicts of interest

No conflicts of interest are identified in this study.

Summary

In this chapter, the researcher presented the research design, ethical considerations, study setting, types of participants, recruitment strategies, data collection, issues of trustworthiness and how the data was analysed.

CHAPTER 5 RESULTS AND ANALYSIS

Introduction

This chapter presents the findings of the study. The data was analysed using Burnard's 14 stages of thematic analysis as presented in the previous chapter.

Table 1 shows the years of experience of each participant. Both nurse and physiotherapist participants have a wide range of experience in their respective profession ranging from 2- 37 years and 1-7 years of experience in the study setting and orthopaedic specialty. All nurse participants were recruited from the long stay orthopaedic ward. Some participants may be considered novice based on their years of experience in orthopaedics, however, they have demonstrated an understanding of their profession and care needs of orthopaedic patients during the interview session. The years of experience of the participants is an important aspect to consider because this can affect their experience of the phenomenon and influence the description of their experience. The names allocated to the participants are pseudonyms.

Table 1: Participants' years of professional experience.

Participant	Total years of experience in the profession	Years of experience working in the study hospital's orthopaedic wards
Nurse Alex	12	6
Nurse Cady	5	3
Nurse Brianna	8	1
Physiotherapist Alisha	37	7
Physiotherapist Brix	6	2
Physiotherapist Cerys	2	1

Results

Four categories similar to both nurses and physiotherapist were revealed during the analysis of the data obtained from the six participants. The differences in size in the figures in diagrams 2 and 3 for each category does not imply that one category is more important than the other. Instead, diagrams 2 and 3 visually represent the difference between the focus and scope of the nursing and physiotherapy professions based on the experience as described by the participants.

Reflection is integral to the experience of both participant groups which was evident in their description of their experience of the phenomenon. This was identified during the data analysis as a subcategory called reflective practice, wherein reflection is used to change practice. Diagram 2 and 3 show that reflection is central to nurse and physiotherapist participants' performance of their role and also in the description of their experience during the interview sessions.

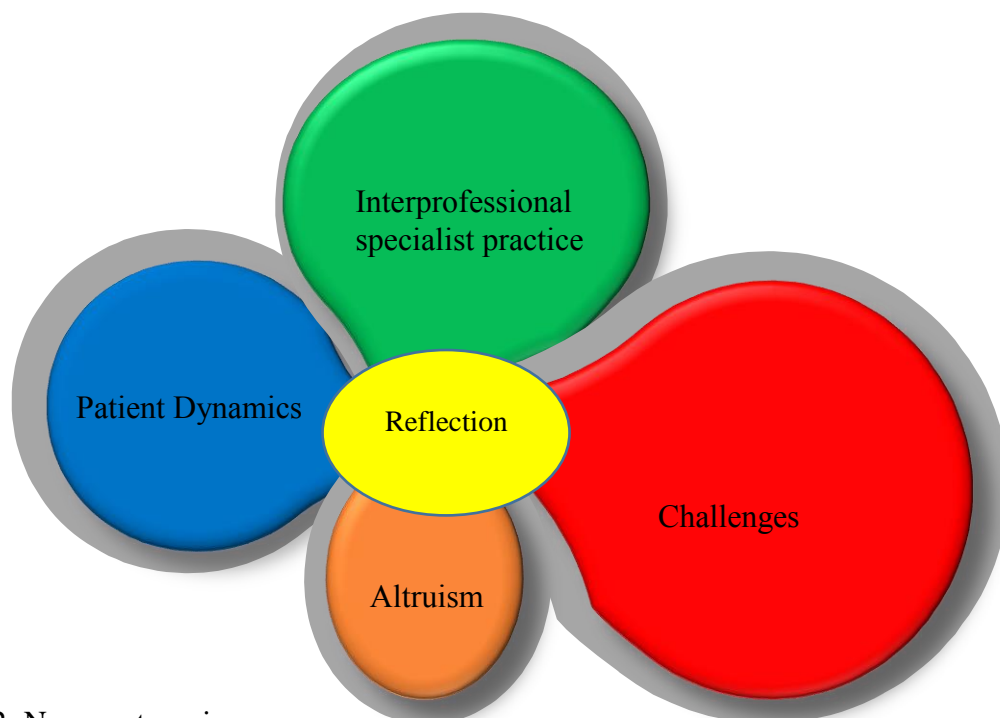


Diagram 2: Nurse categories

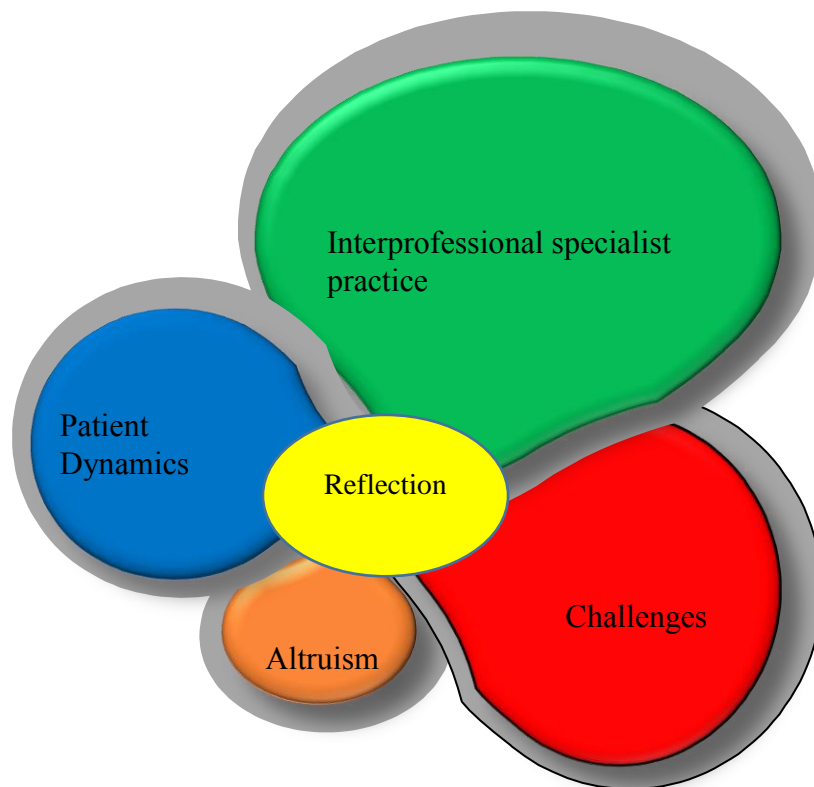


Diagram 3: Physiotherapist categories

A summary of subcategories for both nurses and physiotherapists are presented in diagram 4. The subcategories for both participant groups are similar except for the subcategory Sacrifice under Altruism which was revealed by the nurse participants. The nurse participant validated the categorisation process and the terms used for the categories and subcategories. The physiotherapist participant who performed the validation was uncertain about the meaning of altruism which was initially labelled as altruistic response prior to the validation. The participant was unsure if altruism means looking for the best in the situation. The category Altruism pertains to selflessness or desire to help others in this study and it is further explained by other participants' description of their experience in the following section.

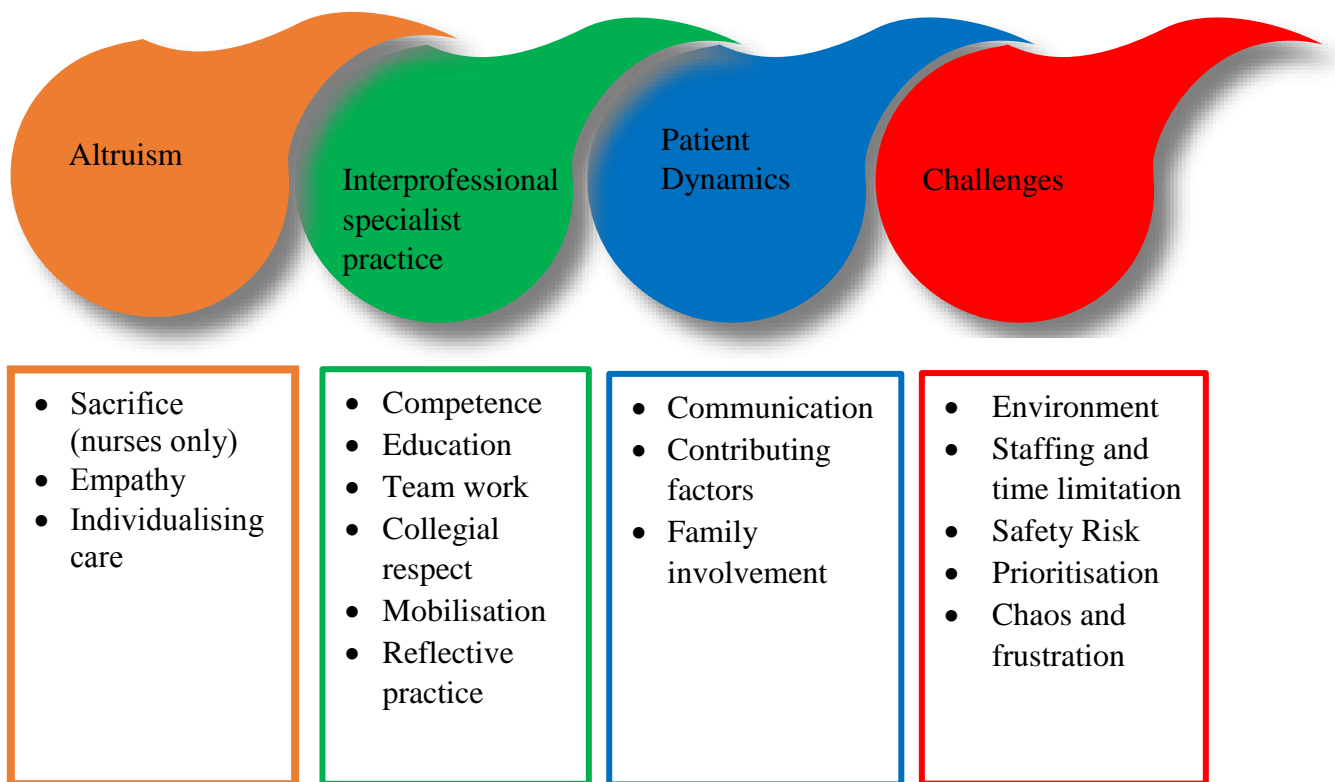


Diagram 4: List of categories and subcategories

The categories and subcategories are presented with the corresponding transcript that best represent the category. Several transcripts from different participants may express the same category but not all transcripts are included to ensure that participants are equally represented.

Category 1: Altruism

The Merriam-Webster Online (2016) dictionary defines altruism as “feelings and behaviour that show a desire to help other people and a lack of selfishness, unselfish regard for or devotion to the welfare of others”. Altruism can also be identified as kindness, selflessness and benevolence. Doing what’s best for the patient sometimes to the point of sacrificing ones needs and providing care with empathy were part of the participants’ experience. Subcategories under altruism are: sacrifice, empathy and individualising care. The differences between the nurses

and physiotherapists under this category are further described in the description of each subcategory.

Sacrifice

Sacrifice was revealed as part of the nurse participants' experience where the nurses' own needs are sacrificed and they consider this act as a part of their role as nurses in ensuring that patients received the care that they needed. Patients with altered mental status may require more of the nurses' time to attend to their basic needs. Leaving patients unattended may increase their risk of falling if they are impulsive or lack insight. Nurses put the needs of the patients first as nurse Brianna has expressed in this statement:

You don't eat, you don't drink, you don't have much time! (laughs)... you do have to sacrifice your own sort of ability to eat and drink and pass urine (laughs) to care for the patients but I feel that that's my role as a nurse. That if I have to miss my break or something, I need to make sure that my patients are safe.

Nurse Brianna

Empathy

Nurse participants revealed a feeling of empathy towards the patients who may, because of their altered mental status, exhibit challenging behaviour.

You've got to try and put yourself in their shoes, in their position as well. If you were in their position, how are you going to react? If you were confused and quite scared then you can empathise with that.

Nurse Cady

... sometimes you think I don't really come to work to be hit or spat at, or whatever, but I just try and make myself think at this moment in time this patient more than likely is not usually like this, so they probably will be upset if they knew what they were doing, so just to be patient with them...

Nurse Brianna

Empathy was also noted not only directed towards the patients but to other health professionals. Physiotherapist and nurse participants demonstrated an understanding of the roles that each of them fulfils and empathised with the challenges that come with that role.

I know that the nurses are really busy, they look after four or five patients by themselves and often everyone wants everything at the same time...you guys (nurses) have other things that you need to take care of as well. So mobility is only a small part of your overall role, whereas for us it's our specialty.

Physio Cerys

I think from a physio point of view that must be quite frustrating for them that they don't have enough people to get around to...there's absolutely no way that one physio can get around all those people to get them up in the morning and potentially as we'd like to get them out for their breakfast, there's no way that they're going to.

Nurse Brianna

Individualising care

Providing care that addresses the specific needs of patients with altered mental status and making sure that the care is individualised is evident in both nurses and physiotherapists descriptions of their experience.

... I guess trying to pick the moment for the patient. Some patients are better first thing in the morning, some patients take a little while to come around...even through delirious state their routine will still stick...they might wait until 10 or 11 o'clock or something before they really want to get up and start moving around.

Nurse Cady

A quote from a physiotherapist participant shows the importance of knowing what patients are capable of doing because it impacts on how the patient is treated:

So if that patient has been walking around and has been independent that's going to change the way you treat that patient. If the patient comes in and they've been bed ridden or they've been in high level care and they've had a fall and they've got delirium... that's going to be different from someone who has got delirium who is actually pre-morbidly been walking around...

Physio Alisha

Category 2: Interprofessional Specialist Practice

This category uncovers both interprofessional dynamics between nurses and physiotherapists and the practices that are related to the orthopaedic specialty. It includes the following subcategories: competence, education, teamwork, collegial respect, mobilisation and reflective practice.

Competence

Both participant groups confirm competence as an essential part in providing care to this patient group. Competence does not only involve the ability to mobilise a patient but also the knowledge on the various factors that can affect mobilisation such as preparation, assessment of patient's ability to successfully participate in the activity and insight on patient's pain behaviour. Participants expressed the need for assessment prior to mobilising a patient and ensuring that patients are medically stable to mobilise.

Before mobilising...I have to make sure that patient is medically stable and I would check pre-morbidly how the patient was mobilising, what kind of aids they use, whether the patient has any visual or hearing impairment. If hearing impairment make sure they have a hearing aid, glasses...

Nurse Alex

It's always important to check your obs (Observation/vital signs) before you mobilise them...then checking with the patients what pain they're in as well.

Physio Cerys

Understanding what hinders mobility, how to manage it and making the necessary preparations are seen as necessary steps to take to achieve mobilisation goals:

I try and get a better idea about what might be leading them to behave like that. For other people it's a fear of pain and sometimes...you can encourage and convince somebody to get up and walk with you...You can test out before actually getting the patient up...you can sort of

prepare the environment a lot more once you've got a clear idea about where the patient's mental status is at that point in time.

Physio Brix

Nurse Alex also recognise that years of experience does not always equate to competence or confidence in mobilising postoperative patients:

Even some of our staff who have been here for more than 30 years are not confident enough to mobilise a post op patient for the first time.

Nurse Alex

Education

Four participants indicated the need for continuing education for both participant groups specifically in mobilising postoperative orthopaedic patients to ensure safety of the nurses/physiotherapists and the patient.

Nurse Alex recognises this need because of a high turnover of nursing staff:

In-service...about mobilising your post-op patient...there are lots of new staff coming in and ...some are leaving...some of them are not comfortable with mobilising a post-op patient. I can't push a new staff ... who doesn't know what to do with the patient and has no proper education about how to mobilise a new patient.

Nurse Alex

Nurse Brianna expressed the risks to patients when staff are not adequately trained on patient mobilisation:

...the risk of dislocations and things like that if you're not mobilising your patients appropriately, that's a risk that not doing any specific training, it's a risk that you take.

Nurse Brianna

Physio Brix identified an opportunity for bedside education on patient mobilisation with physiotherapists imparting their knowledge and skills to nursing staff when they are working together:

I think it is useful having the nursing staff involved with physiotherapy mobilisations because then you can reiterate and show nursing staff what might work with this particular patient... Once they've seen how a physio can do certain things...the nursing staff will pick up those tips ... and they can implement into a lot of their practice... ..

Physio Brix

Physio Brix also gave suggestions on how this continuing education can be conducted to achieve patient goals of mobilisation while ensuring safety for the staff:

... shadowing or buddy system does work, or having access to some sort of more orthopaedic specific manual handling in the area...confused specific strategies might be useful. And I think staff training to know these self-protective strategies and how to position themselves and how to help the patient achieve their goals in a safe manner is important.

Physio Brix

Physio Alisha emphasised the importance of intervening when someone sees another staff member mobilising patients incorrectly and providing them with further education of what will work best in certain circumstances:

...I see one of the other physios, the junior physios or the AHA (allied health assistant) walking a patient terribly...So I just have to go and intervene...teach that physio perhaps some of the skills about walking with crutches or whatever it might be.

Physio Alisha

Teamwork

Teamwork is a subcategory under the interprofessional specialist practice which was repeatedly emphasised by the participants. This was recognised by both participant groups as an integral part of delivering care to orthopaedic patients. Nurse Cady describes a good working relationship with physiotherapists and other ward staff:

I like working quite closely with the physios. So my focus is...quite steered towards the early mobilisation ethos and the way of thinking...I'm pretty much used to now, I've been trained to work with the physios straight off.

Nurse Cady

...the ward assistants that we have in particular, most of the time they're pretty good...if you need to get them up out of bed, to get them into the chair...working with your nurse buddy next to you as well. Or even the cleaners...say, hey, I'm going to be in this room over here for at least half an hour, I need you to keep an eye on my other ones for me.

Nurse Cady

Physiotherapist participants pointed out that physiotherapists can achieve patient care goals better with the help of nurses. Overlapping of roles may also occur when trying to achieve mobilisation goals. Establishing a time suitable for both to mobilise a patient is essential to ensure that mobilisation goals are achieved.

...with these potentially difficult patients, mobility can sometimes require multiple people to assist them walking, and I know with our current structure and resourcing, physiotherapy can't do that by themselves... I find that the multidisciplinary team works quite well, particularly in regards to combining physiotherapy goals which might include mobilising x distance with x gate aid and nursing care, personal care goals...

Physio Brix

So it's much better for us to liaise or to work with the nursing staff...I often would toilet the patient... I'm not going to call someone just to go the toilet... helping with a bed (making beds) just quickly...

Physio Alisha

Physiotherapist Cerys also added the importance of working with the nurses to ensure that patients had adequate analgesia before mobilising them.

...we seem to get along very well because we work so closely with the nurses and we try and tee up times for patients to go showers or patients to have analgesia before they're mobilised or we try to work in with the nurse's schedules and the nurses try to work with us.

Physio Cerys

Nurse Brianna describes how nurses work as a team and expressed an understanding of the need for the physiotherapy expertise despite nurses' knowledge and experience in mobilisation.

... the staff that I work with are very good and they will come to your aid ...If it's the first time that somebody is getting out of bed I feel that there should be a physiotherapist there because it is their role to make sure that people are getting out of bed, they know their exercises and things like that... personally...I am able to do that safely, correctly and as a physiotherapist would, but that doesn't take away that they should be there.

Nurse Brianna

Collegial respect

Respect for each other is clear in both nurses and physiotherapists description of their experience. Nurse Brianna reinforces this:

Our physios are pretty good, the day one post-surgery and they will always come whether it's Saturday or Sunday, obviously there's less of them on a Saturday and Sunday than there is Monday to Friday, but they will always see the patient.

Nurse Brianna

Respecting each other's clinical judgement, appreciating and understanding the role of another is apparent.

...that particular nurse ... is a fantastic nurse and so I always...go along with her judgment. So I would wait until she's absolutely ready because I know that she's not fobbing me off or trying to not do it. She's a really good nurse, she's fantastic and she has mobility in her mind...

Physio Alisha

Physiotherapist Brix also described how nurses' dedication in promoting mobilisation complements their practice.

I know I find the nursing staff very proactive... very supportive in helping that patient achieve their mobility goals for the next 24 hours when the physio's not in....you really appreciate the orthopedically trained nursing staff. They might instigate and anticipate what recommendations will come in for standard procedures before the physio gets in there.

Physio Brix

Physio Cerys also recognises and appreciates the benefits of having orthopaedic trained nurses looking after orthopaedic patients.

... You can get them to give you a hand when you need and they always know what's going on with the patient and they're all orthopaedically trained as well. Whereas you find that sometimes if the patients head downstairs or upstairs (orthopaedic patients as outliers in other wards in the hospital)...So often the nurses won't really know what to do with them and that can make it quite difficult.

Physio Cerys

Mobilisation

Mobilisation is another subcategory under interprofessional specialist practice that participants consider as a common ethos of their specialty. Preparation is a vital part of the mobilisation process aside from the act of mobilising and techniques used especially for this patient group. The mobilisation strategy for patients with altered mental status may differ with patients who are cognitively intact. While it is a common category for both participant groups, this was particularly evident in the physiotherapists' account of their experience.

Physiotherapist Alisha describes proper techniques to reassure patient of their safety when mobilising:

...I'd call it physical confidence. You know, the way you handle a patient will give someone confidence...If you don't put your hands in the right place, the patient is not going to feel confident... So it's just a matter of using your body weight and putting your legs in the right position and your hands in the right position so that they feel confident with your touch or with your support.

Physio Alisha

Physiotherapist Brix describes the techniques that can be used to mobilise patients whose altered mental status can make communication challenging:

...even repeating simple single stage instructions isn't clear enough. So sometimes I'll use different things to help me. It might be tactile, it might be tapping his leg, it might be physically lifting and moving and once we get up and start moving you might sort of start realising what's going on...

Physio Brix

Physiotherapist Cerys also expressed difficulty in achieving mobility goals when patients don't follow instructions:

But no matter how many times you say, "Straighten your legs, straighten your hips, stand up tall", they do it maybe for a second and then slump down again.

Physio Cerys

Preparation prior to mobilisation such as establishing physiotherapy goals prior to treating a patient, ensuring adequate analgesia, organising equipment needed and having access to other staff when assistance is required is expressed by the participants. Establishing physiotherapy goals for the patient that can be achieved within the allocated time to treat the patient is important:

...each day you go into that patient you need to have in your head some basic goals of what you want to achieve.... I think that's important that you actually achieve a different outcome each time you see that patient from a physio point of view...I'm only seeing them for 20 minutes, half an hour so I need to make sure that each time I see the patient that I'm going to get an outcome that's different from the day before.

Physio Alisha

Understanding how pain can affect mobilisation and thus ensuring adequate analgesia prior to mobilising a patient is part of preparation:

...So timing analgesia, making sure they've had ice, making sure they understand what movements might be pain relieving for them...before we try and mobilise... which again if you've got difficult pain behaviours, gives them the power and the control and then they know it's going to be more comfortable and more likely to ... achieve the physical goals that they're setting.

Physio Brix

Mobilising patients with altered mental status require staff to be more prepared. More equipment may be needed if they are not cooperating or unable to use certain equipment because of their inability to follow instructions. Organising equipment needed for mobilisation can help save time as physiotherapist Alisha pointed out:

A lot of people ... think the hoist is going to take too long or it's too hard to use... I know I'm a bit like that too. You sort of think it's going to take another 10 minutes to get it organised, so let's just try without it first. So maybe with patients that are larger, that should be considered as an option at the very beginning...if you can't get that patient up because often you've spent 20 minutes, 30 minutes trying to get the patient up and then you think, well I can't do it, let's get the hoist now. But then you have to wait another 20 minutes organising all that.

Physio Alisha

Preparing the environment and making plans if assistance of other staff are needed, in case of aggressive or uncooperative confused patients, are all part of the preparation:

So just making sure the environment is set up for the patient...because I don't know what they're going to be like especially their first day up...whether they're going to need help or whether I'll like have an extra pair of hands to set up the environment.

Physio Cerys

Positive reinforcement to patients and emphasising the goals that they already achieved are essential component of mobilisation as physiotherapist Alisha expressed clearly in this statement:

...you really have to sort of give them a lot of positive encouragement, 'that's fantastic' ... 'you've really done well today', 'look how much further it is than yesterday' or whatever...lots of positive reinforcement makes the patient feel better about their injury or their condition and it makes them much better to perform later on.

Physio Alisha

Nurse Cady reveals that early mobilisation in the postoperative period is an integral part of care for orthopaedic patients:

... three hours after they get back to the ward, regardless of whether they've had their knee or their hip done... bang get them up, get them moving...I'm completely on board with that, I think it's a really, really good approach.

Nurse Cady

Reflective Practice

Participants reflected on their practice as they were describing their experience during the interview but some have explicitly expressed how reflection made an impact on their current practice. Nurse Cady states how communication techniques can be very effective when trying to mobilise patients with altered mental status:

Yeah, so that has really changed my practice and I try and do that with most of my patients, whether they've got delirium or any other cognitive impairment. I think since then I've noticed a bit of verbal feedback from my patients to say that, okay, the way that you give instructions is very easy to follow.

Nurse Cady

Physiotherapist Alisha highlighted the value of having self-awareness such as knowing one's own biases and beliefs to avoid discriminating against patients.

They might be saying to you "I don't want to get up because I want to die" and you hear that every time you go in, you sort of think, well I won't bother today getting you up, I'll just let you die... We need to make sure that we identify that in our practice and not discriminate against those patients... I mean everyone should be treated the same way... that's just my personal opinion.

Physio Alisha

Physiotherapist Brix stated that experience and knowing different ways of communicating assisted in managing patient's challenging behaviours.

...there's a line where they're not participating and the more you prompt the more they resist... it takes experience to identify when you're crossing that line. Sort of understanding when you're provoking or inflaming the patient response and other times when you can actually calm that down and de-escalate it... it's the newer physios that haven't dealt with these types of patients before, that don't quite know how to tackle a challenging patient behaviour....

Physio Brix

Category 3: Patient Dynamics

This category reveals the different patient-related factors that affect mobilisation and participants' experience of the phenomenon. This includes communication, contributing factors and family involvement.

Communication

Communication is one of the major subcategory under patient dynamics that can greatly affect patient care. The altered mental state of patients can make communication difficult in terms of patients understanding and following instructions and also affects the ability of patients in communicating their own needs, concerns and discomfort. Both participant groups have similar experience in this regard.

The other problem would be language. So if someone is not – they can't speak English, you haven't got an interpreter with you, even though they've got delirium, but they've got delirium in another language too. So it's a very difficult thing to come and get them to cooperate.

Physio Alisha

Nurse Brianna also describes the challenge of communicating with patients with altered mental status with this statement which may affect how often this patient groups are mobilised:

Sometimes it's very difficult to mobilise the patient because they don't understand the instructions that you're giving to them...what operation...why they're in the environment that they're in... With short term memory loss and things like that they're not going to retain the information that you're giving...They're going to need to have it explained to them 16 times before they know how they're going to get into the chair, so...I think they're probably not mobilised as much...

Nurse Brianna

Despite these hurdles in communication, participants have developed a way of getting the message across to the patients and ensuring that they are mobilised such as giving the right prompts:

...we're always trying to push towards independence, it's important that you actually give the... right prompts with the patient because often the patients are actually quite capable but

the nurses aren't sure that they are...so it's giving them the correct prompts to move across the bed or to sit up or whatever it might be.

Physio Alisha

Nurse Cady also recognises that patient can get overwhelmed with several people giving instructions all at once or when giving simultaneous instructions:

...I was like, all right, "I'm going to be the one who is going to give the directions, she's my patient". So everyone zipped their lips and then just one direction at a time because I found that even if I give her two or three directions, then she wouldn't be able to follow it...what I found as well is that sometimes if I gave her say two directions, I say do this, then do that. She would only focus on the second one.

Nurse Cady

Participants stresses the effectiveness of using simple and clear instructions, giving reassurance as well as giving non-verbal cues:

But I do find if you're calm with them, sometimes small simple instructions, even if you just say "stand", rather than "can we get you to push up from the chair and stand up". Or even just popping a frame in front of them because it's going to be an automatic response from them to stand up, they may not necessarily understand what you're asking of them, but if they see the frame and they use a frame normally at home, they will automatically stand up and do what you ask...

Nurse Brianna

Contributing factors

This subcategory shows the patients' attributes that impact the experience of participants in mobilisation this patient group. This includes the patient's behaviour, weight, level of pain, short term memory loss because of pre-existing dementia, and response to medications. Aggressive patient behaviour because of delirium can affect the delivery of care:

We've had a few recently in the last couple of weeks who have been quite confronting and unfortunately their delirium has caused them to be aggressive...as a nurse, I want to encourage people to try and do things all themselves and obviously help to get people better by getting

them up, getting them mobilised, but sometimes with these types of patients, you have to let them get over their delirium before they're moving on to the next step.

Nurse Brianna

Patient's weight is a factor to consider when mobilising patients. Participants commented on the effect of patient's weight:

...I mean not hurt my back seriously, but thought at the end of my day – I've thought, gee, that's... the hardest patients are the bigger patients... if they're big and they're not cooperating physically then it's very difficult, very difficult... just moving them around the bed, just doing everything...

Physio Alisha

... if the patients are obese, it makes it more difficult and also their post-op requirements, some of the patients, although they can be lifted with the lifting hoist or stand, some of the patients with peri prosthetic fracture, above the knee fracture, we need to support their leg.

Nurse Alex

A patient's response to pain can vary and when not controlled, it can hinder mobilisation. Consequently the inability of patients with altered mental status to verbally express their discomfort can affect pain management.

... sometimes assist of 3 and they often push back a lot against you as well and refuse to put weight on that leg because that makes it more sore...it's quite difficult in the initial few days to mobilise the patients.

Physio Cerys

... even if they've got some pain control, it's very hard for the nursing staff to know because they can't talk to the patient, how much pain they've got...

Physio Alisha

This patient group may have difficulty retaining and understanding information due to memory loss and effect of medications. Physiotherapist Cerys stated:

...there's no point telling them. I mean you can tell them but then they won't remember again. ...A lot of them respond poorly as well to the anaesthetic initially so they'll be quite delirious or confused, not know where they are or who you are and just mobilising them is quite difficult in general...no matter how many times you repeat it to them they don't understand it.

Physio Cerys

Family involvement

In a patient-centred care approach, family involvement in patient care is important. Family is a source of support for most people and sometimes when patients are not able to express their needs and preferences, family can be a resource for such information and at times able to assist with patient care. Communicating with family members and keeping them up to date with the patient's condition can improve delivery of care.

I think you don't get family members ringing the buzzer or coming out to ask if you... speak to them whilst they're there... explain to them what's been happening, what they can do to help, and I think a lot of family members are willing to help...because they recognise the family members, they feel safe...I usually find that that's a pretty good resource...in my experience I've found that using family members has made the patient a lot calmer and more willing to participate in tasks on mobilisation....

Nurse Brianna

Physiotherapist Brix recognises the presence of family as either a source of support or distraction but acknowledges that communication with family members can help gain their support and avoid misunderstanding.

... with long term cognitive conditions, families almost always understand how to communicate with the patient better...sometimes if the family's not on board and understanding the goals of physiotherapy or mobility...they're not always conducive and supportive and productive with the physiotherapy session...it's absolutely a huge help to have the family present, particularly if there's language barriers...But other times family can be quite inflammatory to the situation. So they're not used to seeing their family member quite as agitated or in pain...they can sometimes be a bit abrasive with staff...

Physio Brix

Category 4: Challenges

Challenges is one of categories for both participant groups that is interconnect to other factors that affect patient care and that has a significant impact on the participants' experience. The challenges that were observed in their experience were environment, staffing and time limitation, safety risk, prioritisation, and chaos and frustration.

Environment

The environment related challenges as described by participants were the clutter in the area, limited space necessitating movement of furniture and equipment, noise or distractions and issues of privacy. Under this subcategory, space is viewed as either the physical/ environmental space or the personal space around each individual that is perceived as theirs. A physiotherapist participant described how this personal space impact the delivery of care to a confused patient.

...a patient... was acutely confused and the patient was really unsure about what people were doing... quite disoriented.... All they could sort of understand is there's people getting up close and into their personal space. And they were lashing out physically and verbally because they felt people are invading his personal space.

Physio Brix

Limited environmental space is a recurrent description of the participant's experience that is also considered as a safety risk for both nurses/ physiotherapists and patients.

So if we've got somebody who is potentially bariatric patient and you've got the commode chair, the hoist, the bed – there's definitely not enough room. The bathrooms here are nowhere near big enough for, sort of even if you've just got somebody who is using a toilet chair and a frame it's quite difficult to move around, the rooms are definitely not big enough.

Nurse Brianna

...The rooms with four bedders are a little bit tight especially when you have a patient who's on PCA, epidural, IV fluids... and a frame as well and they're pushing against you and trying to fight against you to get up...

Physio Cerys

Nurse Brianna also stresses the importance of preparing the environment to remove safety hazards:

There's falls risks if you've got too much clutter, nurses tripping over wires, tripping over tables and things like that...But you try and eliminate the risk or reduce the risk by if you know that you're going to hoist somebody out of bed, making sure that all the other things that are not required in the tasks that you're doing are out of the way before you engage in doing the task.

Nurse Brianna

Physiotherapist participants mentioned the difficulty of maintaining personal privacy when patients are in a four-bed room and how eliminating distractions in the environment could help a patient with an altered mental status to concentrate.

... just for privacy it's very difficult. If a patient with delirium is in a four bed ward, you've got three other patients to consider, they're often agitated, they're screaming. You know, it's not ideal for that, it's terrible. And the other patient is complaining about the patient who doesn't sleep and who is yelling out and... and then when you're treating them it's difficult too...

Physio Alisha

One of the things that I always try and do there is really try and get their attention, so I try and make it a very quiet environment. Sort of closing doors and shutting curtains and turning off TVs and limiting how many people are in the room so that you can just sort of have their attention, and trying to explain to them what's going on.

Physio Brix

Staffing and time limitation

Staffing and time limitations are resource-related challenges that both participants shared in their experiences. Orthopaedic postoperative patients need assistance to mobilise but their needs are magnified when they are confused or cognitively impaired because they would require more resources in terms of time and personnel.

A physiotherapist participant talks about needing more time for documentation and liaising with other members of the team and comparing it with the time for patient care.

...now the time with the patient is less because you've got to do notes, you've got to do statistics, you've got to document everything you do and it's got to be in a certain way...I've got the same amount of patients but I've got less time to do...the actual work...there's more transfer letters and...talking to case managers... it does hold you up in other ways...

Physio Alisha

Nurse participants describe their experience with limited staff and time constraints and how it affects their other nursing activities:

Sometimes we feel pressurised (pressured) because the physio is after us to mobilise and of course we have to help them...Like we may be doing something with the other patients, suddenly this physio turns up and says, "I need your help to mobilise the other patient now", when I'm here stuck with this patient, so I'm...compelled to go with the physio...then I'm running behind with all the other work.

Nurse Alex

...ward assistant cover on weekends and on late shifts is less than in the mornings. So sometimes if the other nurses are busy it's difficult. But most of the physios that I've come into contact with here have been willing to come back if you have had an issue, but there's definitely not enough of them to be able to do that...

Nurse Brianna

Participants describe the possibility of discriminating patients because of limited time or prioritising one patient over the other. This also affects the amount of time dedicated to mobilising patients.

But I would not say everybody is mobilising a patient with confusion or delirium...because basically we don't have time...someone with delirium or confusion takes more time...especially when you're looking after five patients, out of that five, two can be confused. So a lot of time is taken away for those two who are confused, just to...settle them.

Nurse Alex

...the big problem here is that if you are short staffed then you will subconsciously discriminate against those patients and that's not right. And I have definitely done that today, not the quality of practice, I've definitely discriminated against a patient today because I didn't have time...

Physio Alisha

Physiotherapist Brix talks about nursing staff trying to get things done as quickly as possible to save time to do other nursing tasks but may put themselves and/or the patient at risk.

...in my experience I've seen a whole different strategies of how to...make it more time efficient. So sometimes nursing staff might commode a patient when they probably should walk for their own benefit, or they'll use an unsafe technique to rearrange the patient position in bed. So they might not use slide sheets when they probably should or those sorts of things, just because it's faster.

Physio Brix

Physiotherapist Brix also recognises the time that physiotherapists have to mobilise a patient as compared to nurses:

Physiotherapy has the luxury of mobility often being one of our main goals, so we will take longer for teaching the right technique or helping the patient walk that distance...Whereas, obviously the nurses have so much else to do within their shift that they can't always dedicate that same time period to walk from the bed to the toilet or whatever it might be for some of the slower paced patients.

Physio Brix

Safety Risk

Safety risk to patients and staff is linked with limited resources, patient's condition and behaviour. This subcategory under challenges is further articulated by the participants.

Limited range of equipment can increase risk of falling and risk of infection when sharing the same walking aid between several patients.

... there's not a lot of access to different ranges of heights and bariatric equipment and other types of equipment... If we don't have enough frames for there to be one next to the bedside they might try and mobilise without it...If they mobilise with a different gait aid they might

have an increased risk of falling... You've also got the potential infection risk if you've got patients sharing frames and nobody is cleaning it appropriately in between.

Physio Brix

...if you've got a little frail old lady who's got dementia and her feet can't even touch the floor...it just can be a bit of nightmare...it can be quite tricky to get her back into bed quickly. And then you've got issues about low-low beds, they don't fit the bed pole, it just doesn't clamp.

Physio Cerys

A change in patient's cognitive status can increase their risk of harm to self and staff:

...I want to try and get everyone walking. But sometimes it's just not possible and sometimes it's also very physically heavy on the nurses and on the physios as well and there have been more than one occasion that, you know, physios and nurses have done discs and stuff like that just by trying to move someone who's too heavy or just too mentally confused, plus heavy.

Physio Cerys

We had one gentleman ...post-op delirium...and he was really quite aggressive. We had to call security a couple of times to restrain him from causing himself more harm...he was trying to climb through the end of the bedrails and get his leg stuck through there every now and again... he was very mistrustful, he was verbally and physically combative and he was really quite difficult to assist with... I found a lot of those patients will just automatically reach out to grab you... if you cause them pain... then they might strike out at you.

Nurse Cady

Nurse Cady further commented that having adequate support will minimise the risk of harm to staff:

We've had a couple of patients recently who have wanted to hit us, kick us and things like that...but if you have the correct support that lowers the dangerous sort of confrontation with the patient...

Nurse Cady

Patients with altered mental status have higher risk of falling because they may not follow instructions. Leaving them alone can increase the risk because they can become impulsive and try to mobilise without aid. This may limit mobilisation for these patients.

If they are mobilised in the morning, sometimes we would leave them in bed in the afternoon...it's a high risk for us to leave them in a chair unattended and there's always a risk of falling ...The patient couldn't follow the instruction...with the standing hoist, there's always the risk of slipping the belt if the patients are not holding correctly. With this particular patient they've used the standing hoist, so as soon as the lifter was on, the patient let go of the holder, so he was on the floor.

Nurse Alex

Patients who are confused but not aggressive and agitated can mobilise safely with staff:

Although some patients who are confused...they have no idea where they are but they can get up and have a walk with you, absolutely I will mobilise them. But ...significantly confused... aggressive, agitated, trying to climb out of bed...I wouldn't mobilise them. I would leave them in bed because there are risks to get them up and having a fall is higher when they are up.

Nurse Alex

Physiotherapist Alisha says safety for the staff and the patient is the priority:

...Safety for yourself and for the person who is helping you or persons, so if it's not going to be safe to get them up, then that's your priority because you don't want to hurt your back. A lot of these patients are small and frail and so you think that's not going to be too hard, but sometimes you stand them up and they pull away from you...

Physio Alisha

Prioritisation

Prioritisation is a common aspect of the participants experience when looking after this group of patients particularly when time, staffing and equipment are limited. Patient's altered mental state can also be a factor when prioritising patients where patient's unwillingness to participate can limit their mobilisation time:

...you have to prioritise the patients and if you know that that patient is not going to participate or cooperate for whatever reason, and you've tried many times, then you are going to leave

them to either be hoisted or dealt with by the nursing staff...because you know that...they're not willing to participate— you don't spend as much time with them because you don't have the time to spend with them. And you're going to give it to other people and that is definitely a big a problem in orthopaedics.

Physio Alisha

Nurse Brianna also observes that patients who are physically aggressive may not be mobilised and recognises this as a concern especially when there's not enough time or staff available to help.

They do tend to get left especially if they're physically aggressive...they say, oh, shall we try a bit later on or shall I leave them till tomorrow, and then it is left to the nurses to get them up...You try not to, but if you've got lots on and it's going to take a long time, unfortunately, yes...I have seen that people can be left and probably I might have been guilty a few times myself if I'm really busy at the moment I can't get to this patient because I'm going to need three members of staff.

Nurse Brianna

Nurse Brianna also expresses the concern that because more time is required for patients needing more assistance that other patients may feel neglected.

It is difficult to manage the time sometimes when you have difficult patients because you do have to spend more time with them and sometimes you do feel that the patients who can do things for themselves do get left a little bit.

Nurse Brianna

Nurse Alex notices that patients who are day one postoperative are prioritised by physiotherapists over confused patients:

I think they try to go to the post-op patients first...those who need them more than the confused patients...But most of the time...I think they tend to leave them in bed if they are very confused. I think they do try to mobilise them maybe the first day or the second day and if they think can't mobilise because they're too confused, they tend to leave them in bed and leave it to the nurses...I think mainly because they are unable to follow any directions.

Nurse Alex

Participants describe how a decision is made to prioritise certain patients over the other:

If I had two patients that were the same... one was elective and cognitively intact, and the other was a NOF and not cognitively intact, I would still probably do the intact one first, simply because they're faster and then that would give me more time to go onto the one with the NOF...If the elective patient is doing fine...then the elective usually will be allocated to an AHA (allied health assistant) to mobilise ... and then the physios will go and see the cognitively not intact patient.

Physio Cerys

I generally get the patients who take a little less care up first and get them sorted out because I figure that they're in a position where they'll be able to do it quicker. You know, I might have two or three patients that are fully lucid and I'll just get that done as soon as possible. But I'll also let all of them know that I do have patients that need a little more attention...

Nurse Cady

Chaos and frustration

Chaos and frustration are part of the challenges that participants described in their experience when dealing with patients who are agitated, and physically and verbally abusive that can be aggravated by difficulty in communication as well as patients requiring assistance all at once.

...they will not stand for whatever reason, they either sit back and they don't get their bottom off the bed. They slide forward, they're pulling on you or pushing you away or grabbing you or screaming at you, for whatever reason. Or hitting you and saying "I can't do this". You sort of ... saying "I can't do this"...

Physio Alisha

Sometimes...if you tried all the different approaches then you might feel like you're getting a little frustrated and you're not going to find that key way of communicating with them...that can bring a bit of frustration...

Nurse Cady

Summary

In summary, this chapter revealed the multifaceted experience of nurses and physiotherapists in mobilising postoperative orthopaedic patients with altered mental status. There were more similarities than differences in the experience of both participant groups. The categories are supported by a rich description of their experiences.

CHAPTER 6 INTERPRETATION

Introduction

This chapter delves into the interpretation of the categories that evolved from the analysis of the data. The categories are specific to the participants who are living the phenomenon in this particular study setting, thus, the interpretation may not be as applicable to other populations in similar settings; however, similarities of themes may occur. The interpretation was generated from the participants' description of their experience influenced by their pre-understanding and the researchers own pre-understanding of the phenomenon. This merging of the participants and the researcher's viewpoint is revealed in four categories: altruism, interprofessional specialist practice, patient dynamics and challenges.

Altruism

The concept of altruism has a historical locus in nursing. Florence Nightingale has incorporated her Christian values into professional nursing practice by considering nursing as a calling and sees it as giving the best of what a person has to the "work of God's world" (Straughair 2012).

Altruism involves a feeling or behaviour that reflects the human impulse to care for others, sometimes at the expense of one's own needs. It is derived from the Latin word *alter* which means "other" (Merriam-Webster Online Dictionary 2016). In nursing, addressing the needs or caring for others is central to the profession but altruism has the tendency of causing burnout to the carer (Hem, Halvorsen & Nortvedt 2014) especially when this is exploited and when nurses do not practice self-care. A desire to care for others maybe a motivating factor for those entering the nursing profession but this is not the case for everyone (Straughair 2012). Nevertheless, altruism is a theme that frequently emerges in other studies involving nurses and other health professionals in regard to their practice (Alavi et al. 2015; Moyo et al. 2016; Tsou, Shih & Ho 2015; Zarea et al. 2013).

Some argue that altruism in the health profession is seen as unviable with the current changes in health care and because of its propensity to affect the health professionals work-life balance and cause dissatisfaction in their role; however, there is a drive to promote other humanistic qualities such as empathy in the clinical setting since this increases trust between the patient and the health professional and improves patient outcomes (Burks & Kobus 2012).

For the nurse participants, promoting the patient's wellbeing sometimes to the extent of sacrificing one's needs for the care of the patients is seen as a part of their role. This shows how nurses experience the universal theme of life, lived self-other or relationality, which according to van Manen (2014) explores how the self relates to the other person; this can be experienced through "sacrifice, total dedication, or service" (p. 302-303). Nurses' empathy for patients who have altered mental status is demonstrated in their role in providing patient care to this patient group who require more of their time, effort and expertise.

On the other hand, the physiotherapists feeling of empathy is directed towards the nurses rather than the patients. This mutual empathy helps them to foster a good working relationship. While it may not have been explicitly expressed during the interviews it does not mean that physiotherapist participants do not have empathy towards their patients. Their description of their experience certainly show an understanding of the needs of patients with altered mental status. A study on the patient's experience receiving physiotherapy in an inpatient rehabilitation facility showed that patients in the study valued their personal interaction with the physiotherapists more than the amount of time or content of the physiotherapy itself (Peiris, Taylor & Shields 2012). The short amount of time spent by the physiotherapist participants on patients in the acute care setting may not provide them with the opportunity to have more personal interactions with patients as compared to patients in an inpatient rehabilitation facility.

Understanding the needs of this patient group aids nurses and physiotherapists in providing individualised care for each patient. These humanistic characteristics may be affected by the values and cultural background of the participants (pre-understanding or fore-structures) which can affect the meaning or interpretation of their experience. The feeling of empathy relates to

how the body is experienced in the phenomenon which correlates to the theme of corporeality/lived body (van Manen 2014). In the participants' experience, although the body is not physically touched by the other person to elicit a response, the understanding of the other's condition or situation evoked an emotional response from the participants in terms of feeling of empathy which was directed to either the patients or towards each other.

Interprofessional Specialist Practice

Interprofessional specialist practice is a major category for both participant groups. This includes competence, education, teamwork, collegial respect, mobilisation and reflective practice. The value of interprofessional collaboration between nurses and physiotherapists has previously been established to improve health outcomes for patients (Christie et al. 2015; Pape et al. 2013). Competence, education and experience can affect patient care particularly in mobilising patients. It also influence how participants reflect on their experience and how they use reflection to improve their practice.

It is noted that a senior nurse participant mentioned that years of experience does not equate to competence based on personal experience with colleagues in the study setting. This recognition of the ability of the members of the team allows one of the participants, to know when help may be required by other staff members. For most participants, education is seen to improve competence. Because mobilisation is recognised by both participant groups as a shared role, physiotherapists see sharing of knowledge and skills with nurses on how to mobilise postoperative orthopaedic patients, particularly those with altered mental status who may require specific techniques, as a necessity. Nurses who believe they have sufficient knowledge and skills still value the physiotherapists' expertise in mobilisation. Nurse participants have a desire to expand their knowledge in mobilising patients and consider physiotherapists as the experts who can teach them the theory and show them the practice or strategies of mobilising patients. A bedside education is considered by both participant groups as an effective method of sharing knowledge and skills.

A gap in the medical undergraduate and other undergraduate health professionals' curricula was identified particularly in the safe handling and moving of patients; an interprofessional eLearning resource was developed by a multidisciplinary team to address this learning need and medical and nursing students who piloted this resource found it very helpful (Anderson et al. 2014). A systematic review of instruments that would help assess the nurses' skill in mobilising patients showed that no instrument measured all aspect of effective patient mobilisation and authors also suggested that there was no consensus on how nurses should perform patient mobilisation (Gattinger et al. 2015), hence, education focused on patient mobilisation would seem to be imperative especially for those who care for orthopaedic patients with altered mental status who may require different strategies.

In the orthopaedic setting where nurses and physiotherapists work together closely, collaborating with each other to achieve patient's mobilisation goals is vital. Teamwork fosters collegial respect and vice versa. Physiotherapists recognise the important role of nurses in continuing the mobilisation plan for the patient and consider nurses as their partner in achieving positive patient outcomes. This is particularly the case with patients who have altered mental status who require additional staff and time to mobilise as well as working with the nurses to manage the patient's pain before and after mobilisation. Similarly, nurses appreciate the significance of the physiotherapists' expertise and the benefits that the patients receive from the physiotherapy services. A qualitative study on the nurses' perception of physiotherapists in the critical care environment revealed positive nurse perception in terms of efficacy of physiotherapy treatment, importance of teamwork and interprofessional relations (Gupte & Swaminathan 2016). A senior nurse participant expressed a strain in this collaborative effort because of time and staffing limitation. A feeling of being pressured to assist physiotherapists to mobilise a patient when they are too busy with other tasks has been voiced. Nurse participants, however, recognise that there is not enough physiotherapists and that their assistance is sometimes needed especially with a patient with altered mental status who may require more staff to assist to ensure safety.

Physiotherapists see mobilisation as their primary role while nurses view patient mobilisation as part of their role. However, nurses recognise this as a major patient care requirement in the orthopaedic specialty to help patients achieve their functional goals. Physiotherapists who

attend to postoperative orthopaedic patients admitted to other non-orthopaedic wards realise the benefits of working with orthopaedic nurses because of a shared understanding of the patients' needs and care goals.

Nurse and physiotherapist participants with more years of experience in the profession demonstrated a degree of reflective practice. The reflection of their experience goes beyond what went wrong or what was effective in their practice. It went further to include looking at their inner self, understanding their response to certain situations and how this self-awareness can affect their delivery of care. The result of their reflection took a concrete form and was translated into their practice.

All of these aspects of the interprofessional practice category show how the participants experience relationality or "how the self and the others are experienced with respect to the phenomenon" (van Manen 2014, p. 303). It is clear from the description of their experience that nurse and physiotherapist participants interact closely in their work environment. Providing care to patients with altered mental status made this collaboration even more essential. They share the same ethos of patient mobilisation and collegial respect.

Patient Dynamics

Patient related factors are undoubtedly a significant part of the participants' experience of the phenomenon since the patients are the centre of care. This category includes communication, contributing factors and family involvement.

For patients with altered mental status, the ability to express themselves or to understand and process the information they receive may be restricted (Bélanger & Ducharme 2011), therefore influencing how nurses and physiotherapists can effectively deliver patient care. The participants found this experience frustrating when they have to repeat instructions multiple times. Patient's decreased ability to understand and follow instructions were perceived by participants as a contributing risk factor to falling which may affect how often patients are mobilised. Nevertheless, participants found techniques to address these communication

barriers through verbal communication using simple and clear instructions or non-verbal cues such as tactile and visual cues when mobilising patients.

Contributing factors that are patient related include the weight, pain behaviour, aggressive behaviour because of underlying delirium, and pre-existing cognitive impairment. The patient's weight affects the resources needed to mobilise a patient. A postoperative orthopaedic patient with high body mass index (BMI) and altered mental status will require more staff members to assist in mobilisation to ensure safety for the patient and the staff. It also requires mobilisation/walking aids that are appropriate to the patient's size. With the increase in obesity, the staff face challenges with regards to mobilisation such as threats to occupational health and safety, using state of the art techniques and technology, and utilising interprofessional team are vital in achieving mobilisation goals for this patient group and keeping the staff safe (Klarmann & Klocke 2016).

Change in patient's behaviour because of delirium, pain and cognitive impairment are factors that need to be considered by the participants when mobilising this patient group. Patients with dementia may show behavioural changes such as aggression in response to pain (Bradford et al. 2012). Physically aggressive patients affect mobilisation goals. Participants see this as a risk not only to the patients themselves but also to the staff. Participants also conveyed awareness that this is only a temporary state unless related to severe dementia and when the delirium resolves, mobilisation will become easier to facilitate. Some nurse participants expressed an understanding of the complications of immobility but when there is a high risk of harm to staff and patient, safety takes precedence over mobilisation, this is particularly true for physically aggressive patients.

It is noted by the researcher that although mobilisation is an important strategy to improve delirium, none of the participants explicitly stated this in the account of their experience. Both participant groups showed understanding of the importance of managing pain to facilitate mobilisation and revealed collaborative efforts to address this aspect of care. Patient's response to pain may vary and some may exhibit aggressive behaviour when they are in pain. Their altered mental status may also affect their ability to express their need for analgesia and instead

exhibit the existence of pain in an aggressive behaviour. Some of the more experienced participants expressed an understanding of different pain behaviour and how to manage it.

Patient's pre-existing cognitive impairment particularly those with short-term memory loss can increase their risks of falling. Patients may not remember instructions and may attempt to mobilise without using the proper walking aid and won't remember to call for assistance. This is a patient related factor that can only be mitigated by staff's vigilance. Nurse participants mentioned that often times this patient group are admitted in shared rooms for easier access and observation.

Family involvement was viewed by most participants as beneficial and helpful in delivering patient care. Although, the presence of family members can be disruptive at times, participants also claimed that when adequate information is given to the family regarding patient's plan of care that family members tend to be supportive. Family members are particularly helpful when there is a language barrier. They can be a source of encouragement or motivation for patients to achieve their mobilisation goals. The presence of family members may also help calm a restless or aggressive patient. Involvement of family or caregivers in the care of patients having delirium is a crucial element in patient recovery, hence, providing family education on managing their loved ones having delirium is also important (Carbone & Gugliucci 2015).

The participants experience of patient dynamics relates to two universal themes of life, that of relationality/ lived relation/ lived self-other and corporeality/lived body. Participants' experience of communication with patients evoked a feeling of frustration because of the patient's altered mental status and/or cognitive impairment that interferes with communication. Patients with a high BMI are perceived with safety risks to staff and the patients themselves. Participants are aware of their own and the patient bodies' limitation and understood the risks involved in not having appropriate equipment and staffing. Participants view interaction with patient's family members as a part of providing care to patients by maintaining communication channels with the family.

Challenges

The participants experienced challenges in relation to environment, staffing and time limitations, safety risk to patient and staff, prioritisation, and chaos and frustration. Both participant groups experienced challenges when working with patients with altered mental status but these challenges can be compounded by other external factors. The environment impacts on the delivery of care. Issues such as noisy environment that distracts patients when nurses or physiotherapists are trying to give instructions or educate a patient, difficulty in maintaining privacy especially in a shared room where information that patients say can be overheard by other patients, clutter in the environment because of furniture and medical equipment, and limited space in shared rooms. A study of nursing perceptions on the physical functions of patients in hospital revealed similar themes which included resources, fear of patient falling, staffing and time, and environmental constraints (Boltz, Capezuti & Shabbat 2011).

Clutter and limited space can pose a safety risk to patients and staff. Limited space can prevent staff from performing proper body mechanics when handling patients, there can be times when twisting or using improper manual handling can be unavoidable because of limited space to manoeuvre. A physiotherapist participant also viewed space as the personal space that each individual maintains. Awareness of patient's personal space and how a patient with altered mental status may react when they feel like the staff is invading their personal space is important to understand especially in mobilisation where most of the time nurses and physiotherapists need to have close physical contact to patient to ensure safety.

Participants regarded safety risk to patients and staff as closely related to a limited range of resources, patient's condition and patient's behaviour. The limited range of resources pertains to scarcity of appropriate equipment for patients with high BMI and those vertically challenged patients who may require lower beds and shorter height or length of equipment. This also included limited equipment which necessitates sharing of equipment between patients where transfer of pathogens can be a risk. Patients with altered mental status who are physically aggressive or impulsive present a risk to themselves and staff such as falling (Healey & Darowski 2012) and causing bodily injury to staff. Work-related musculoskeletal disorders or

injury sustained from physical interventions are a common occupational hazards in nursing especially when handling aggressive patients (Stubbs 2009). The participants identified that this patient group are more likely to be mobilised less often since nurses and physiotherapists prioritise safety which can be counterproductive because it can increase the risks of complications associated with a lack of mobilisation. A nurse participant expressed an observation that a physically aggressive patient will not be seen by the physiotherapist and felt that mobilisation then rested upon the nursing staff who have to mobilise them to perform other nursing tasks such as providing hygiene and toileting. A nurse participant stated that having adequate support to mobilise a patient can lower the risk. A physiotherapist participant also mentioned that having previous experience in managing this patient group can mitigate any risk involved.

This category relates to the universal theme of corporeality (lived body), spatiality (lived space) and materiality (lived things) (van Manen 2014). The participants experienced how their body reacted and how it can be affected by the other's body (patient), by the limitation in space, by the environment around them and the equipment that they use in their workplace. They also revealed how these factors affect the delivery of care to this patient group.

Staffing and time limitation relates to the theme of temporality (lived time) (van Manen 2014). The staffing limitation is closely interlinked with the limitation of time. There are certain times during the shift and certain days of the week where the relationship of staffing and time limitations experienced by participants are notable. During meal times when patients need to sit out of bed are times when a nurse may need help to mobilise the patient or assist with meals especially for confused patients who may not eat and drink without assistance. There are also times such as weekends and afternoon shifts where staffing may be less and this is experienced by the participants as a difficult time. Nurses are at the patient's bedside 24 hours a day while physiotherapists see patients for 10-20 minutes during daytime. Physiotherapists spend time giving patient education on specific exercises but nurses have more opportunity to assist or encourage patient to mobilise throughout the day. However, with the other nursing activities involved in the overall care of a patient, time for mobilising patients may not always be enough.

Both participant groups described the time they spent mobilising patients with altered mental status as compared to those alert and orientated patients as longer or more demanding. They are aware that this patient group requires more time to mobilise because of the time it takes to explain what the patient needs to do or because of resistance from patients. Nurses also describe their patient mobilisation time as a part of achieving other patient care goals such as hygiene and nutrition, and for preventing complications from immobilisation. Physiotherapists view the time they spent mobilising a patient as the main part of their service, thus, time spent is focused on increasing the patients functional or rehabilitation goals. A senior physiotherapist made an observation that because of this time limitation, nurses may use techniques to achieve their patient care goals with less amount of time and manpower sacrificing opportunity to increase patient's mobility or using inappropriate manual handling techniques.

Staffing and time limitation also affects prioritisation of patient care. If not enough staff are available to help mobilise a patient, nurses may not mobilise patients as often. This situation evokes a feeling of guilt from both nurse and physiotherapist participants. Participants sometimes felt the need to spend more time mobilising a patient with altered mental status and often time is not enough. Nurses may prioritise mobilising patients who are alert and orientated and may require less time to care over patients who have altered mental status. The lengthy time spent with this patient group is also seen by some nurse participants as taking time away from other patients. Patients who are resistive or uncooperative with mobilisation may not be mobilised often. This presents as an ethical dilemma to the participants. A senior physiotherapist participant questions this practice which according to the participant borders on patient discrimination due to patients condition or behaviour and time limitation.

The combination of the environmental challenges, patients altered mental state, communication barriers, staffing and time limitation are experienced by some participants as chaotic and frustrating

Summary

This chapter presented the interpretation of categories reinforced by the available literature and the hermeneutic phenomenological inquiry. The nurses and physiotherapists experience of the phenomenon may be interpreted in more ways than one. It may have raised more questions which would require further exploration. The categories that emerged are significant since it provides an insight on how both health professionals experience the same phenomenon and the meanings attached to such experience.

CHAPTER 7 DISCUSSION

Introduction

This thesis has described the lived experiences of nurses and physiotherapists who are involved in mobilising postoperative orthopaedic patients with altered mental status. The themes that emerged from the analysis of their experience have been explored and demonstrated in four categories: altruism, interprofessional specialist practice, patient dynamics and challenges.

This final chapter presents the overview of the study, the major findings and their significance to clinical practice and education, limitations of the study, recommendations for practice and further investigation, and the concluding statement.

Restatement of the problem

This study explored the experiences of nurses and physiotherapists in mobilising postoperative orthopaedic patients with altered mental status in a private hospital setting using the hermeneutic phenomenological inquiry.

Summary description of procedures

The study commenced after the approval was received from the ethics committee. Hermeneutic phenomenology was the appropriate methodology chosen to guide the study to obtain answers to the research inquiry. Six participants (three nurses and three physiotherapists) who met the inclusion criteria were recruited through voluntary participation. Interview sessions were scheduled after written informed consents were signed by the participants. The description of the lived experiences of participants were obtained through hermeneutic interviewing which was audio recorded. Data saturation was achieved after the sixth participant's interview. The

recordings were transcribed and validated by all participants. The notes taken during the interview that described other verbal or non-verbal cues shown by the participants during the interview and the reflection of the researcher after each interview session were perused together with the transcript of the interviews.

The data was analysed using Burnard's 14 steps of content thematic analysis. The categories and subcategories that emerged from the transcripts were validated by two research supervisors and two research participants, one from each participant groups. An external qualitative researcher who was not involved in the study was also consulted before the categories and subcategories were finalised. The result of the data analysis was presented visually using diagrams and narratively. The categories and subcategories were supported by original transcripts from the interviews. Participants were all represented in the presentation of data. These categories were further explored in the interpretation and discussion of results.

Major findings and their significance to clinical practice and education

Four major categories emerged from this study: altruism, interprofessional specialist practice, patient dynamics and challenges. It was evident from the study that the experience of nurses and physiotherapists of the phenomenon has more similarities than differences.

Altruism expressed in terms of sacrifice, empathy and individualised care are humanistic part of patient care that can impact patient outcomes particularly in patients with altered mental status. Nurses and physiotherapists having empathy towards each other is important in maintaining a symbiotic relationship. The caring aspect of nursing is evident in the nurse participants' empathy towards patients and their willingness to sacrifice their own needs for the patients' welfare. However, nurses who sacrifice their own basic needs to attend to patient's needs and view this as part of their role run the risk of caregiver fatigue or burnout when this continues for a considerable time. The inability to express this altruistic tendencies because of inadequate time during the shift may lead to nurses feeling guilt for not being able to do things for the patient such as mobilising patient more frequently during their shift. Exploring the factors that promote this practice such as heavy workload, inadequate staffing, and time management; and strategies to mitigate it would help in preventing staff burnout.

Interprofessional specialist practice was revealed by the participants with regards to competence, education, teamwork, collegial respect, mobilisation and reflective practice. Interprofessional collaboration between nurses and physiotherapists is imperative especially when patient needs are greater such as in patients with altered mental status. Physiotherapists emphasised the benefit of having orthopaedic trained nurses looking after orthopaedic patients because of a shared understanding of patient care goals. There is a flow of knowledge regarding patient mobilisation from physiotherapists to nurses. Nurses know the benefits of having in-service and bedside education on mobilisation and consider physiotherapists as having the expertise to share their knowledge and skills. Although there is an acknowledgement of a shared role in mobilising patients from both nurses and physiotherapists, nurses still perceive mobilisation as the physiotherapists' domain and they consider mobilisation as only a part of their overall role in patient care.

Reflecting on ones' professional practice can change clinical practice and improve patient outcomes. Nurse and physiotherapist participants have indicated that reflecting on their practice have made them more aware of their own feelings and how it affect their practice. Reflection has also enabled them to identify effective practices and helped them in dealing with challenges presented by patients with altered mental status. Longer years of experience in orthopaedics does not equate to competence according to a nurse participant, hence, some senior nurses may still need assistance and guidance in patient mobilisation. This is not a general statement and may be applicable to certain nurses who lack the confidence to facilitate mobilisation of patients despite being in the specialty for many years. In this situation, identifying these nurses and conducting bedside education with physiotherapists may be beneficial.

Patients are the centre of care, thus, patient dynamics is a great consideration. Participants identified communication, contributing factors and family involvement as part of patient dynamics. Mobilisation involves giving instructions particularly for postoperative orthopaedic patients who may need specific mobilisation techniques. Giving instructions to patients with altered mental status and getting them to participate in mobilisation can be difficult. Changes in their cognition, awareness, concentration and behaviour may hinder the achievement of

mobilisation goals. Patients' ability to verbalise their needs may be limited, pain assessment and management in this patient group is vital since pain can deter patients from mobilising. Nurses and physiotherapists use various strategies to facilitate mobilisation such as using non-verbal cues and giving simple and clear step by step instructions. The presence of family can help calm an aggressive patient and encourage them to participate in mobilisation. Communicating with the family and informing them of care plans usually help alleviate their anxiety or concerns of seeing their family member in delirious or aggressive state. Another patient related contributing factor is their weight. Patients with high BMI impact the resources needed for their care particularly the equipment and staffing required to mobilise the patient. An increase of obesity in the general population affect health care resources in general not only because of its associated medical conditions but also on the medical equipment and facilities required to cater to their needs. In orthopaedics, these may require special mobilisation equipment for patients with high BMI and will need additional staff education and training on the use of these equipment. Patient dynamics is interrelated to safety risks, staffing and resources.

Challenges such as environment, staffing and time limitation, safety risk, prioritisation, and chaos and frustration were experienced similarly by nurses and physiotherapists. Mobilising postoperative orthopaedic patients with altered mental status puts more demand on nurses, physiotherapists and other resources. It is at times experienced by the participants as frustrating and chaotic. Nurses experience feeling pressured to assist physiotherapists in mobilising patients despite being occupied with other nursing tasks. This appears to be related to limited staffing; this could be a potential source of conflict between the two professional groups if not addressed. The mobilisation of confused and aggressive patients, who are potentially not reviewed by physiotherapists, rest upon nurses who have to mobilise the patients to perform other nursing tasks. Patient's altered mental status increases safety risk to themselves and the staff and has the potential to affect mobilisation goals. Having patients with altered mental status affect how participants prioritise the care of their patients. Safety takes precedence over mobilisation. Needs of patients with altered mental status may be attended last over patients with intact mental status because of the longer time and number of staff required to attend to their needs. The other nursing tasks that nurses need to perform in a shift may result in patients with altered mental status being mobilise less optimally.

Study limitations

The lived experience of the participants is specific to the particular patient group and study setting, hence, the themes that emerged from this study cannot be generalised to a similar phenomenon in a different study setting. A different study setting may have different staffing mix and resource availability which can influence the nurses and physiotherapists' experience. Several limitations should be considered regarding the research participants. Because the participant population is predominantly female, majority of the research participants are also females. A predominantly male participants' experience of the phenomenon may or may not change the result of the study. None of the participants who volunteered for the study are enrolled nurses although they were included in the inclusion criteria. An enrolled nurse's experience may be different with a registered nurse because of the difference in knowledge base.

Recommendations for practice and further investigation

This study has presented the experience of nurses and physiotherapists and issues regarding the care of postoperative orthopaedic patients with altered mental status that may serve to inform nursing/allied health managers and hospital administrators. The care of this patient group impacts the amount of time, staffing and equipment required for their needs as well as having increased safety risks. The result of this study suggests that an evaluation of the strategies and resources available is required to ensure that this patient group are mobilised optimally with adequate staffing and appropriate resources to mitigate safety risks. Nurses and physiotherapists will be able to provide the best quality care for patients when given adequate resources which will also improve patient outcomes. Nurses entering the orthopaedic specialty may benefit from attending an orientation/further education regarding the mobilisation of orthopaedic patients followed by bedside interprofessional mentoring with physiotherapists since this is a crucial skill required for effective orthopaedic nursing. Mobilising speciality orthopaedic patients with altered mental status may have been addressed at a theoretical level in the nurses' undergraduate education but not all would have the practical training/experience possibly due to limited clinical placement opportunities. The physiotherapists' interprofessional collaboration with nurses show that having orthopaedic trained nurses

looking after orthopaedic patients helps in achieving patient mobilisation goals. This indicates the need for orthopaedic patients to be allocated in a dedicated orthopaedic ward for patients to receive optimal care.

A quantitative study on the time and staffing required to mobilise postoperative orthopaedic patients with altered mental status will provide additional basis for the evaluation of nurse-patient ratio or allied health staffing when caring for this patient group. Further investigation on the length of stay, complications and measurement of patient outcomes for this patient group may also help in developing strategies to improve their care. A qualitative study on the patient and family's experience of patient mobilisation in the acute care setting may help health practitioners understand how to best address their needs.

Conclusion

The findings of this study demonstrated that nurses and physiotherapists experience numerous challenges from both patient and resources related factors that affect the mobilisation of postoperative orthopaedic patients with altered mental status and can potentially impact the relationship between the two professional groups. Interprofessional collaboration of both professional groups enables achievement of mobilisation goals; their experience of the phenomenon is comparable. Nurses understand that patient mobilisation is an essential part of their role but it is deemed to be a part of their overall nursing role while physiotherapists consider mobilisation as the core of their practice. Patient and staff safety takes precedence over mobilisation. Safety risks involved in mobilising this patient group can be mitigated by having adequate resources, competence, and teamwork. Although the findings of this study is unique to the experience of nurses and physiotherapists in the study setting, the themes may reflect the experience of other nurses and physiotherapists caring for this patient population.

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APPENDICES

Appendix 1 Letter to the Manager



Date _____

Project Title: Interdisciplinary health team's experience in mobilising postoperative orthopaedic patients with altered mental status in a private hospital setting: a phenomenological study.

Dear _____

My name is Jovie Ann Decoyna, currently employed as a clinical nurse specialist in a full time capacity at 2 Central Cabrini Malvern and a student at the University of Adelaide enrolled in Master of Nursing Science (Orthopaedics). One of the requirements of the course is to conduct a research dissertation which I am undertaking under the supervision of Mr Paul McLiesh and Ms Yvette Salamon from the said university. Ethics approval to conduct this research was obtained from Cabrini Human Research Ethics Committee (CHREC) with approval number: CHREC 04-09-11-15. A letter of support from Cabrini Malvern nursing services was also secured for the use of meeting/ conference rooms to conduct the interviews.

The aim of my research is to explore the experiences of nurses and physiotherapists in mobilising postoperative orthopaedic patients with altered mental status. The selection of participants will be done through purposive sampling. A total of six participants will be included in the study, three physiotherapists and three nurses. Participants with different years of work experience ranging from novice to expert will be selected. Inclusion Criteria:

- Registered or enrolled nurses/ registered physiotherapists
- At least 18 years of age
- Has mobilised postoperative orthopaedic patients with altered mental status at least twice and worked at least 1 year in Cabrini Malvern orthopaedic wards
- Able to understand and communicate in English.

Exclusion Criteria are managers of the wards and allied health department, student nurses/physiotherapists, newly employed nurses/physiotherapists who are still supernumerary, and less than 18 years of age.

A time commitment will be required from each participant of approximately 30-45 minutes for an interview which will be conducted outside of their work hours. Date and time of interview will be arranged based on the participant's most convenient time. Venue will be pre-booked by

the researcher using one of the hospital's meeting rooms unless participant prefers another venue for interview.

In line with this, I would like to kindly request your assistance in the research process by distributing the Patient Information Sheet (PIS) to your staff who meet the inclusion criteria. CHREC does not allow me to distribute the PIS directly to the prospective participants and prefers the managers to do it. I recognize that this is a demand on your time so I greatly appreciate and value your assistance. Participation in this study is entirely voluntary and participants can withdraw their participation at any time without ramifications. Moreover, I would like to ask permission to post a notice of invitation to participate in the research project on your ward/ department. Participants will be given a week to consider the invitation after the distribution of PIS. After one week, I will approach the prospective participants to get their written informed consent and arrange interview sessions for those who are willing to participate.

The data collected in this study will be de-identified to maintain anonymity, privacy and confidentiality. The findings from this study will contribute to nursing knowledge, understanding health practices, improvement of patient care and will encourage further research in this area of practice.

If you have any complaint concerning the manner in which this research is conducted, please do not hesitate to contact the Cabrini Human Research Ethics Committee on the following:

Jennifer Burden
Manager
Cabrini Human Research Ethics Committee
Cabrini Education and Research Precinct
154 Wattletree Road, Malvern, Victoria 3144
Telephone: 0395083440
Facsimile: 03 9508 3406
Email: jburden@cabrini.com.au

If you have any questions regarding the research project, you can contact me or one of my supervisors:

Mr Paul McLiesh
Telephone: 08 8313 6286
Email: paul.mcliesh@adelaide.edu.au

Your support and assistance in the accomplishment of this research project is highly appreciated.

Yours sincerely,

Jovie Ann Decoyna
Telephone: 0413784963/ 03 95097682
Email: jdecoyna@cabrini.com.au
jovieann_amethyst@yahoo.com

Appendix 2 Participant Information Sheet



PARTICIPANT INFORMATION SHEET

Date _____

Project Title: Interdisciplinary health team's experience in mobilising postoperative orthopaedic patients with altered mental status in a private hospital setting: a phenomenological study.

Dear Prospective Participant,

My name is Jovie Ann Decoyna and I am studying for my Master of Nursing Science (Orthopaedics) at the University of Adelaide. A research project is a requirement of the course which I am undertaking under the supervision of Mr Paul McLiesh and Ms Yvette Salamon from the University of Adelaide.

The aim of my research is to explore the experiences of nurses and physiotherapists in mobilising postoperative orthopaedic patients with altered mental status. The findings from this study will contribute to nursing knowledge, understanding health practices, improvement of patient care and will encourage further research in this area of practice.

As you are involved in mobilising this patient group, I would like to interview you about your experience. The interview will take between 30-45 mins and will be conducted in one of the meetings rooms in the hospital which will be pre-booked or at a venue of your preference at your most convenient time. This interview will be audio recorded. During the interview, I will be asking open-ended questions that will help elicit reflection of your experience in mobilising postoperative orthopaedic patients who are confused or cognitively impaired

All data collected will be de-identified so no information can be traced back to an individual participant. Privacy and confidentiality is assured and access to data is restricted to myself and my supervisors. Coded data are stored for five years and then destroyed as prescribed by the Australian Code for Responsible Conduct of Research. Ethics approval for this research project is obtained from Cabrini Human Research Ethics Committee.

Participation in this research is entirely voluntary. If you agree to participate, you will be asked to sign a written informed consent, however, you can withdraw your consent anytime without repercussions. The data collected will be destroyed if you decided to withdraw. If you have any complaint concerning the manner in which this research is conducted, please do not hesitate to contact the Cabrini Human Research Ethics Committee on the following:

Jennifer Burden
Manager
Cabrini Human Research Ethics Committee
Cabrini Education and Research Precinct
154Wattletree Road, Malvern, Victoria 3144
Telephone: 0395083440
Facsimile: 03 9508 3406
Email: jburden@cabrini.com.au

If you have any questions regarding the research project, you can contact me or one of my supervisors:

Mr Paul McLiesh
paul.mcliesh@adelaide.edu.au
(08) 8313 6286

I will be approaching you after a week to organise a suitable time for the interview should you wish to participate or you can contact me sooner to express your interest.

Thank you.

Sincerely,

Jovie Ann Decoyna
[jdecoyna@cabrini.com.au/](mailto:jdecoyna@cabrini.com.au)
jovieann_amethyst@yahoo.com
0413784963/ 03 95097682

Appendix 3 Informed Consent Form



INFORMED CONSENT

Project Title: Interdisciplinary health team’s experience in mobilising postoperative orthopaedic patients with altered mental status in a private hospital setting: a phenomenological study.

I have had the above research project explained to me and I have read the Participant Information Sheet which I retain for my records. I had the opportunity to ask questions about the project and any questions I have asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study.

I understand that any information I provide is confidential and no information that could lead to the identification of any individual will be disclosed in any reports on the project. I also understand that my participation is entirely voluntary and I can withdraw my participation anytime at any stage of the project without repercussions.

Name (please print): _____

Signature: _____ **Date:** _____

Appendix 4 Interview Schedule of Participants

Interview schedule

Participant (Pseudonyms)	Date	Time	Venue	Length of Interview
Nurse Alex	27 November 2015	1325-1352	Level 2 Meeting room 2	27mins 55 seconds
Nurse Brianna	27 November 2015	1450-1532	Level 2 Meeting room 2	42 mins 26 seconds
Physio Alisha	19 December 2015	1218-1300	Level 2 Meeting room 2	42 mins 26 seconds
Nurse Cady	21 December 2015	1446-1519	Level 2 Meeting room 2	33 mins 28 seconds
Physio Brix	12 January 2016	1612-1645	Level 2 Meeting room 2	33 mins 6 seconds
Physio Cerys	23 January 2016	1312-1339	Level 2 Meeting room 2	27 mins 40 seconds

Appendix 5 Research Ethics Approval

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6 October 2015

Jovie Ann Decoyna
1/47 Tooronga Rd,
Glen Iris Vic 3146

Dear Jovie

CHREC 04-09-11-15

Interdisciplinary health team's experience in mobilising postoperative orthopaedic patients with altered mental status in a private hospital setting: a phenomenological study

Thank you for requesting approval to conduct this study.

This study is now approved. This project was approved under our expedited approval process for projects assessed as being of low or negligible risk.

If the study does not commence before the anniversary of approval, approval will lapse. Approval is ongoing for the life of the project, subject to satisfactory compliance and reporting.

In accordance with section 5.5 on monitoring of the NHMRC's *National Statement on Ethical Conduct in Human Research* (2007), you are obliged to:

- provide the CHREC with annual reports on the anniversary of this approval;
- provide the CHREC with a final report on study completion;
- be available for audits/site visits/interviews as requested.

In addition, you are obliged to inform the CHREC of:

- any change to the protocol, participant information or consent form;
- any adverse events that occur during the process of this trial as per CHREC guidelines;
- any changes to the research team;
- study completion;
- any change in the financial arrangements regarding the study.

Cabrini should be acknowledged in all papers developed from this study.

We wish you well with your project.

Yours sincerely

Jennifer Burden
Manager
Cabrini Human Research Ethics Committee
Research Governance

Cabrini Health Limited
ABN 33 370 684 005